



Nackawic High School

Course Registration Guide

Grades 11 and 12

2017-2018

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

Guide also available at www.nhs.nbed.nb.ca

Enrollment Guidelines



All courses are subject to limited enrollment and may be cancelled if numbers do not warrant a place in the timetable.

Student course selections in spring of 2017 and staffing allocations ultimately determine the availability of sections/courses.

Administration reserves the right to review course sections/numbers each semester and adjust accordingly.

Once a timetable is built, students are not permitted to make changes to their course selection with the exception of adjusting for course failures or changes in post-secondary paths and requirements.

Nackawic High School

Introduction

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

Advisors and guidance will provide you with direction and information, and 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 counselor. Course descriptions can be found on pages 9-19

We are here to help you!

General Information

Types of Courses

There are two types of courses, Compulsory and Elective. Compulsory courses are required for graduation (see Graduation Requirements page 7) Elective courses are available to support your interests and future learning and career plans.

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 at one level only;

ex: Entrepreneurship 110, Calculus 120

Level 2 courses are academic/university/college preparatory.

ex: Music 112, Biology 122

Level 3 courses are general/college preparatory.

ex: Modern History 113, English 123

Prerequisites

Many courses have prerequisites, co-requisites or recommended prerequisites. 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.

Recommended prerequisite: A course strongly suggested to 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.

Course Load/Course Completion

Students are required to enroll in a full course load (5 periods) in each semester of high school. In grades 11-12, students must attempt 20 credits and complete four semesters in order to be eligible for graduation. A student requiring an additional semester to meet graduation requirements may take the minimum number of courses needed. A final course mark of 60% is the minimum passing mark for all courses.

Nackawic High School

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 of 17 credits.

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

A number of 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 are made by administration. For further information go to <http://www.gnb.ca/0000/as/dl-e.asp> or see Guidance.

External Credits

Any credits, or course completions, not issued by a New Brunswick high school must be reviewed and evaluated prior to a confirmation of use for graduation purposes. This includes correspondence courses, home schooling and private agency instruction. In all cases, prior permission must be obtained to enroll in external credits if they are to be considered for graduation purposes.

Course Changes

Students, with the help of parents, are encouraged to consider carefully 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 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. 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.

Nackawic High School

Resource Program

The Resource Department at NHS serves students that require accommodations, modifications or individualized programming within the high school setting and assists these students with course selection as well as transition planning for life beyond high school.

Special Programs

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 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 and reflect a range of potential career related directions. **Placements in trades related areas may be used as hours credited towards apprenticeship.** See guidance for more information.

French Immersion Program

A **Certificate of Oral Proficiency** will be issued by the Department of Education and Early Childhood Development to all students who take a Grade 12 course in French (Immersion or Core Program) upon being interviewed by a professionally trained interviewer at the end of the semester. This certificate will indicate the student's level of proficiency in French.

A **Certificate of Immersion** will be issued by Anglophone School District-West to all students that complete the Grade 9-10 and Grade 11-12 French Immersion Program as specified below:

- Grades 9-10: Completion of five FI courses per year (50% FI course load over two years)
- Grades 11-12: Completion of any five FI courses (25% course load over two years)

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**

All courses are subject to limited enrollment and may be cancelled if numbers do not warrant a place in the timetable. Staffing allocations ultimately determine availability of sections/courses.

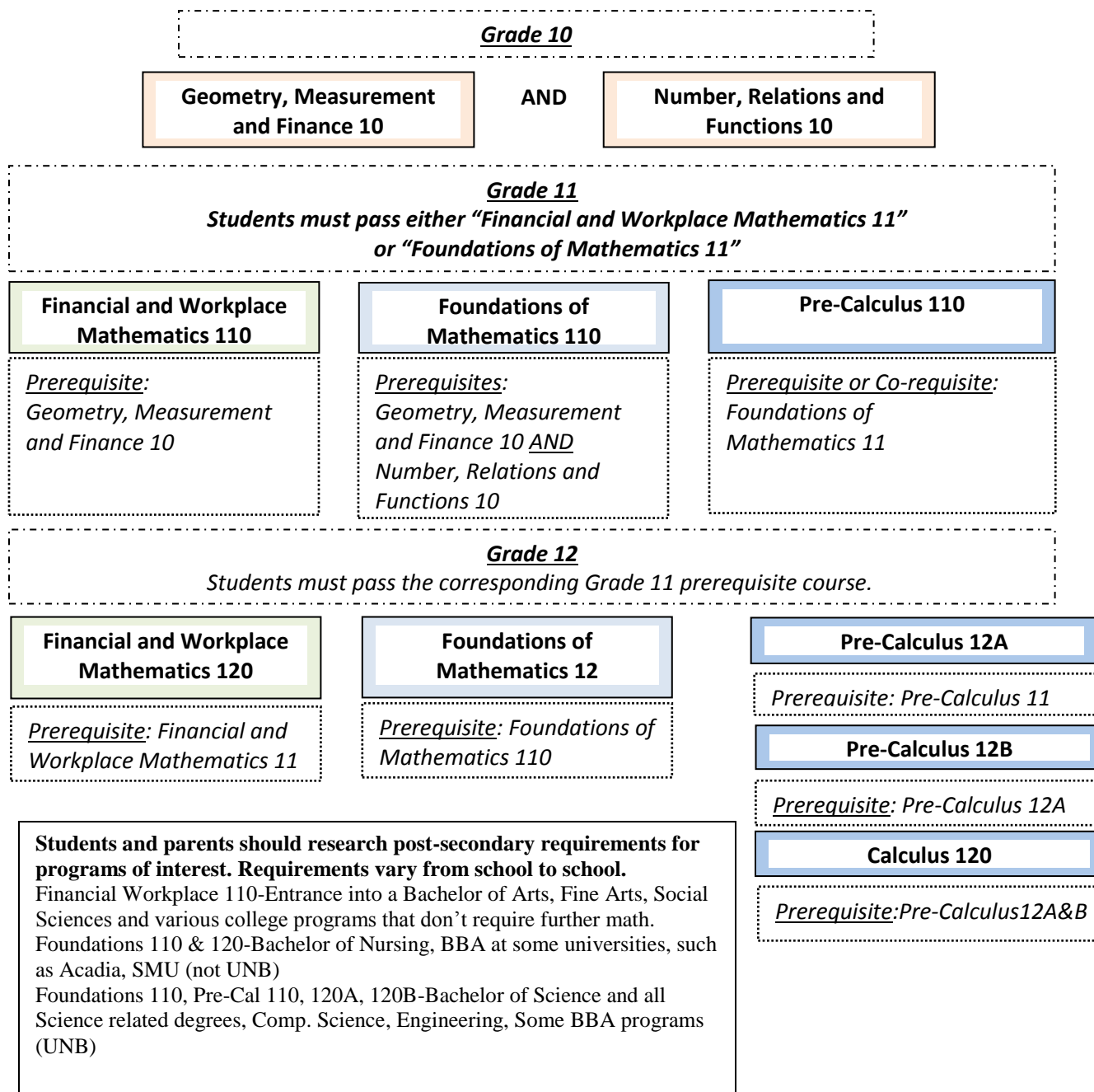
- Choose your courses carefully. The classes offered in any given subject is dependent upon the number of students choosing that course at the time of course registration.
- When selecting courses, ensure that you have completed the prerequisites required.
- Once registered for a course, a commitment to regular attendance and course completion is expected.

Nackawic High School

Mathematics Program Pathways

The NB mathematics curriculum requires grade 10 students to successfully complete two grade 10 math courses as part of the grade 10 compulsory program. Upon entering grade 11, students have the option of following one of three mathematics pathways. Students must successfully complete **one** of two prescribed grade 11 mathematics courses to meet minimum graduation requirements. Students should seek advice from their grade 10 math teacher regarding the pathway that best suits their ability.

The below chart outlines the math program, the three pathways, the prerequisites required for each and the mathematics graduation requirement. Should further information be required, Guidance and/or Math teachers may be contacted.



Nackawic High School

Entering Grade 11

Unlike subject areas studied in Grades 9 and 10, courses taken in Grades 11 and 12 are called credit courses. Each course successfully completed counts as credits toward graduation. The completion of the Grade 10 program is a prerequisite for enrollment in the corresponding grade 11 and 12 credit courses. If a Grade 10 subject has not been passed, it will have to be repeated and passed in Summer School or in Grade 11. The pass mark for all courses is 60%. Enrollment in any grade 10 course requires successful completion of the corresponding grade 9 course. Summer school eligibility requires completion of all components of a course, as well as, obtaining a final mark of at least 50%.

Grade 10 Compulsory Program

English 10 (full year course)
Mathematics 10 (two courses – GMF and NRF)
French 10
Personal Development and Career Planning 10
Science 10
Social Studies 10

and any 2 of the following:

Broad Based Technology 10
Visual Arts 10
Music 10
Health and Physical Education 10

High School Graduation Requirements

In order to graduate, you must complete the Grade 9-10 program and pass 17 out of 20 credits in Grades 11-12. Five of these credits must be Grade 12 courses including English. Of the 17 credits, seven are compulsory courses that you must take. The remaining ten are elective credits. The pass mark for all courses is 60%. You must also pass the English Language Proficiency Assessment.

Compulsory Courses

English 11 (**full-year course, 2 credits**)
Financial and Workplace Mathematics 11 **OR** Foundations of Mathematics 11 (**1credit**)
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**)

Science Options

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

Fine Arts and Life/Role Development Options

Career Exploration 110
Cooperative Education 120
Entrepreneurship 110
Individual & Family Dynamics 120
Fine Arts 110
Theatre Arts 120
Physical Education Leadership 120
Music 112, 122
Outdoor Pursuits 110
Visual Arts 110, 120
Wellness Through Physical Education 110

Nackawic High School

Course Planning

Now you can take the next step and plan your courses for next year.

Refer to the Graduation Requirements (page 7) to insure you have taken, or will take, all compulsory courses.

Use the appropriate Grade 11 or Grade 12 Course Selection Form to record the courses/credits you have successfully completed and to list the courses you wish to take next year. If going into Grade 12, see Graduation Requirement Checklist (page 17) to verify graduation requirements.

Choose all courses with care and accuracy (see course descriptions). Be sure to:

- ***Verify that you have completed the prerequisites required***
- ***Complete any course applications required and submit to Guidance***

Although you may have all the credits required to graduate, you may not have all the right courses to meet your post-secondary education or training requirements.

It is very important that you review the admission requirements of the post-secondary education or training institutions you are considering applying to.

Changing courses once course selection and scheduling is completed is not always possible. Choose your courses carefully.



COURSE DESCRIPTIONS

ARRANGED BY COURSE CLUSTERS



BUSINESS & RELATED COURSES

BUSINESS ORGANIZATION AND MANAGEMENT 120

This is an introductory course in the understanding of business operations as practiced in Canada. The major objective of the course is to expose students to effective present day and historically proven management theories applied to how businesses operate. No prerequisite required. The main areas of study include:

- Business Trends: Competing in a Global Environment; Social Responsibility and Ethical Effects on the consumer, community and environment; Forms of Business.
- Leadership & Management: current trends, production & operations.
- Management of Human Resources: Motivation, Employees Issues & Relations.

ENTREPRENEURSHIP 110

This course is designed for Grade 11 or Grade 12 students interested in developing the skills essential for starting a small business or pursuing careers in marketing, business or finance. Through a combination of classroom theory, group tasks, and individual work, students will develop their own comprehensive business plan, based on an original idea. Entrepreneurship 110 meets the Fine Arts/Life Role Development graduation requirement.

TOURISM 110

Looking for a fun, interesting, and dynamic career option? Tourism 110 may be for you! In this introductory course, you will learn about one of the fastest growing industries in North America and its many social and economic benefits. You will also learn about the abundance of world-wide job opportunities available in Tourism and how you can pursue them. Some of the potential career choices are chef, pilot, flight attendant, ski/snow board instructor, travel agent, hotel manager, party planner, and the list goes on. Come discover the world of Tourism and all its possibilities.

CAREER & TRANSITION PREPARATION

CO-OPERATIVE EDUCATION 120

Do you want to learn more about a specific area of career interest, experience what working in that area or related area might be like, develop workplace skills and earn 2 or 3 credits while still in school? Cooperative Education will allow you to explore your career interest through an extensive workplace component during which you will learn more about your career field and the skills and learning required for success.

Co-Op will help you to formulate more specific learning and career goals. Trades related placement hours can be credited towards Apprenticeship Certification. Due to the out-of-school workplace component of this course, an application is required that will consider teacher recommendations, attendance patterns, commitment to learning and the ability to represent the school in a mature and responsible manner. Course meets the Fine Arts/Life Role Development graduation requirement. **Application required-see Guidance.**

ENGLISH & RELATED COURSES

ENGLISH 112

Prerequisite: English 10

This is a year-long course worth two credits and is designed for those students who wish to pursue a post-secondary education. As a result, you will notice an increase in the volume of independent reading and expected depth of understanding. Formal and informal speaking and listening presentations (including a formal speech) will be conducted throughout the year. Writing assignments will include a formal literary essay, research writing, creative writing, poetry analysis, etc. Close reading of a variety of literary genres (ie. short stories, fiction, poetry, drama etc.) including opportunities for personal choice will be the focus of your reading and viewing experiences.

Nackawic High School

ENGLISH 113

Prerequisite: English 10

This full-year course (2 credits) is designed to prepare you for college entry or the world of work. The communication skills you will need to be successful after high school are the focus of this course. In English 113 you will be required to read novels of your choosing as well as class novels. Other topics include short stories, poetry, drama and many different forms of writing (literature response, journals, personal responses, etc). In addition to this, you will participate in formal and informal presentations, complete hands on assignments and work collaboratively with your peers.

ENGLISH 122

Prerequisite: English 112

This semester course is designed for students who plan to pursue a post-secondary education. Areas of study include short stories, essays, poetry, novels, an Shakespearean play, formal and informal presentations, a formal essay and various forms of written composition are required.

ENGLISH 123

Prerequisite: English 113

This semester course is designed to prepare students for some community colleges and/or direct employment after completion of high school. Areas of study include short stories, modern plays, poetry, essays, and novels. Formal and informal presentations and various forms of written composition are required. This course may only be offered Semester 1 so choose carefully.

JOURNALISM 120

An elective course for students in their graduating year, Journalism 120 is intended for those who wish to explore journalism as a career or field of study following high school. Participants will be involved in the intensive practice of writing stories and articles in various journalistic styles. This course is for writers, not just critics of writing. Thus students must commit to practical outcomes and work towards

publication of their work. Some extracurricular effort will be required also.

WRITING 110

Do you enjoy writing poetry? Have you ever thought you might have a great idea that you could turn into a best-seller? Writing 110 is an elective that could help you get started on the path toward achieving your writing goals. It is designed for highly creative, proficient, and articulate students who want to find an outlet for their literary talents. The course focuses on the writing process and consists of journal writing, and other forms of narrative writing, as well as expository and persuasive writing. Students will share their work with peers, as well as conference with the teacher. Within this course structure, opportunity exists for creative, individual expression.

MEDIA STUDIES 120

Media Studies centers on learning how to analyze the messages that inform, entertain and sell to us every day. We'll use critical thinking skills on all media—from music videos and Web environments to product placement in films and virtual displays billboards. We'll develop your instinct to question what lies behind media productions – the motives, the money, the values and ownership. The course also depends upon lots of group collaboration and your work on many multimedia projects. Students will present a seminar and major term project.

LANGUAGES

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: mysteries, injustices and the power of photography.

**Note also that if a student achieves a level of Intermediate at the end of grade 10, they may select to enroll in French immersion courses (including online options) in addition to or in*

Nackawic High School

place of Post-Intensive French courses in grades 11 and 12.

POST-INTENSIVE FRENCH 120

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, they 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.*

FINE ARTS

THEATRE ARTS 120

Theatre Arts 120 is an elective course for students in grade 11 and 12 who are interested in participating in stage performance. In this **performance based class** students are introduced to all aspects of theatrical performance including acting technique, scene creation, history of drama, physical theatre and technical theatre. The course will capitalize on the individuality, confidence and creativity of the students. Excellent attendance is essential to be successful in the course. Theatre Arts 120 meets the Fine Arts/Life Role Development graduation requirement. **Students will be required to attend the NB Drama festival as an overnight trip.**

FRENCH IMMERSION COURSES

All French Immersion courses require the use of French both as the language of instruction and communications in the classroom.

F.I. INDIVIDUAL AND FAMILY DYNAMICS 120

This course follows the same themes as the English version. The main theme of this course is the individual in relation to the family, friends and society. Students will explore their own

development through a study of themselves and their relationships with others. Topics covered include personal development, relationships and the importance of family. Students will learn strategies on how to cope with the ever-changing issues that impact our lives. This course is an excellent introduction to further studies in psychology, sociology, teaching social work and family life education. Student projects are an integral part of this course. This course meets the Fine Arts/Life Role Development graduation requirement.

F.I. Modern HISTORY 112

Prerequisite: F.I. Language Arts and Social Studies 10

This course continues the student's progress through the French Immersion option at the high school level. FI History 112 presents a study of the principal historical developments that have occurred on the world scene in modern times. In addition, it assists students to understand and use several of the skills used in historical research and writing; such as the recognition of a frame of reference, asking questions, forming a hypothesis, and evaluating an hypothesis. Students must write one major research paper and present independent and group seminar findings.

F.I. LANGUAGE ARTS 110

This course is the second compulsory of a three-course sequence of French Immersion Language Arts course in the French Immersion option. Students will continue to expand their facility in oral and written French to ensure the maintenance and progression of the linguistic skills and increase students' cultural knowledge and experiences. Students will be present a debate and participate in group role play scenarios.

F.I. LANGUAGE ARTS 120

Students who have successfully completed F.I. Language Arts 110 will continue to expand their facility in oral and written French. To realize the main objectives of the course, there will be exposure to various texts, activities, and novels,

Nackawic High School

in the final preparation for the interview to determine students' level of competency in French second language.

LIFE STUDIES

CHILD STUDIES 120

This intensive theory course is designed for students who have a professional interest in child development, and therefore are interested in post-secondary education in such fields as early childhood education, nursing, child psychology or social work. Topics covered: heredity, conception, prenatal developments, pregnancy and childbirth, child growth and development.

INDIVIDUAL AND FAMILY DYNAMICS 120

The main theme of this course is the individual in relation to the family, friends and society. Students will explore their own development through a study of themselves and their relationships with others. Topics covered include personal development, relationships and the importance of family. Students will learn strategies on how to cope with the ever-changing issues that impact our lives. This course is an excellent introduction to further studies in psychology, sociology, teaching social work and family life education. Student projects are an integral part of this course. This course meets the Fine Arts/Life Role Development graduation requirement.

NUTRITION FOR HEALTHY LIVING 120

This course is designed to introduce students to making healthy food choices, maintaining a balance between eating habits and physical activity and the use of preventative strategies that contribute to overall wellness. Current health trends and issues relating to chronic diseases, lifestyles, and food technologies will be explored and students will be encouraged to use research and reliable information to examine their own eating habits and lifestyle choices. This course will be of interest to students concerned with personal wellness and those interested in

pursuing a career in science and nutrition or other health related fields.

MATHEMATICS

FINANCIAL & WORKPLACE MATHEMATICS 110

Prerequisite: Geometry, Measurement & Finance 10

This course is the first course in the Financial and Workplace pathway which is designed for entry into Bachelor of Arts, many college courses, the majority of trades and for direct entry into the work force. Topics include financial mathematics, algebra, geometry, measurement, number, and statistics. ***This course fulfills graduation requirements for mathematics.***

This course is required for programs, such as:

College: Early Childhood Education, Firefighting, Drafting, Welding, Plumbing, Carpentry and Cosmetology

Bachelor Degrees: Arts or Fine Arts at Saint Thomas University (ONLY).

FINANCIAL & WORKPLACE MATHEMATICS 120

Prerequisite: Financial and Workplace 110

This course is a continuation of Financial and Workplace 11. This course is recommended to those entering trade related courses. Topics include financial mathematics, algebra, geometry, measurement, number, and statistics.

Required for programs, such as: Culinary Arts, Graphic Design

Recommended for: Art and design programs, Forest technology

FOUNDATIONS OF MATHEMATICS 110

Prerequisite: Numbers, Relations & Functions 10 and Geometry, Measurement & Finance 10

This course is the first course in the Foundations pathway and the prerequisite for the Pre-Calculus pathway. The Foundations pathway is designed for entry into non-math based degrees and technical courses at the college level.

Nackawic High School

Students must pass this course to enter into the Pre-Calculus courses and/or to take Foundations 12. Topics include financial mathematics, geometry, measurement, number, logical reasoning, and relations and functions. Students entering this pathway should have a 70% or higher in Numbers, Relations and Functions 10. ***This course fulfills graduation requirements for mathematics.***

This course is required for programs, such as:

College: medical laboratory technology, business administration, practical nursing

Bachelor Degrees: Arts and Fine Arts

FOUNDATIONS OF MATHEMATICS 120

Prerequisite: Foundations of Mathematics 110

This course is the second course in the Foundations pathway. The Foundations pathway is designed for entry into non-math based degrees and technical courses at the college level. Topics include statistics, probability, relations and functions.

Required for programs, such as:

College: engineering technology, computer technician, pharmacy technology

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

PRE-CALCULUS 110

Prerequisite: Foundations of Mathematics 110

This course is the first course in the Pre-Calculus pathway which is designed for entry into post-secondary programs that require the study of theoretical calculus. Topics include algebra and number, relations and functions, and trigonometry. Students entering this pathway should have a 70% or higher in the Foundations 11 course.

Required for programs, such as:

College engineering (i.e.: Power Engineering), environmental technology and other programs requiring theoretical mathematics.

PRE-CALCULUS 120A

Prerequisite: Pre-Calculus 110

The Pre-Calculus pathway is designed for entry into post-secondary programs that require the study of theoretical calculus. Topics include in-depth study of trigonometry and various functions both graphically and algebraically. Students entering this pathway should have a 70% or higher in the Pre-Calculus 11 course.

Required for programs, such as:

Bachelor Degrees in Science, Engineering, Mathematics, Computer Science. Most programs that require Pre-Calculus A, also require Pre-Calculus B

PRE-CALCULUS 120B

Prerequisite: Pre-Calculus 120A

The Pre-Calculus pathway is designed for entry into post-secondary programs that require the study of theoretical calculus. Topics include sequences and series, radical, polynomial, rational and reciprocal functions. Students entering this pathway should have a 70% or higher in the Pre-Calculus 120A course.

Required for programs, such as: Bachelor Degrees in Science, Engineering, Mathematics, Computer Science

CALCULUS 120

Prerequisite: Pre-Calculus 120A & 120B

This course will extend students' knowledge in the area of Calculus by studying the following topics: limits (continued), derivatives, applications of derivatives, curve sketching, and an introduction to anti-derivatives. This course is recommended for higher ability math students (entering university Math/Science based fields of study). At the completion of this course students will be prepared for and have the option to write the "Calculus Challenge Exam". Please visit www.math.unb.ca for more details.

Nackawic High School

PHYSICAL EDUCATION AND HEALTH

PHYSICAL EDUCATION LEADERSHIP 120

Prerequisite: Grade 10 Phys. Ed.

Health and Physical Education 120 is an elective course for students who wish to develop leadership skills. The purpose of the course is to prepare students to become skilled and knowledgeable in order to become involved and assume leadership in community and school sport and recreation programs. The course will involve both theoretical and practical aspects. The theory will deal with the concept of leadership; characteristics of leaders and those led; sport and recreation in contemporary society; and health concerns of leaders. The practical aspects will deal with managing, teaching, coaching, and officiating, athletic injuries. This course meets the Fine Arts/Life Role Development graduation requirement.

OUTDOOR PURSUITS 110

Prerequisite: Grade 10 Health & Phys. Educ.

This course will develop personal outdoor recreation skills based on environmental ethics. Students must satisfy a requirement to complete a series of out-trips that may be day-trips, overnight excursions or extended trips. The course will take advantage of local outdoor access and could include camping, hiking, canoeing and other outdoor adventure activities. Students must be prepared to plan, lead and evaluate out-trip experiences from personal and group dynamics perspectives. This course meets the Fine Arts/Life Role Development graduation requirement.

WELLNESS THROUGH PHYSICAL EDUCATION 110

This course is designed to promote healthy active living for life. It is intended to encourage the broad-based exploration of non-traditional approaches to fitness and wellness such as yoga, hiking, ultimate Frisbee, personal training, Tai chi, etc. This course studies holistic wellness, and requires a wellness action plan within the community and personal active living exit plan to

complete the course. Course meets the Fine Arts/Life Role Development graduation requirement.

SCIENCES

BIOLOGY 112

Prerequisite: Science 10

This course is designed for students who plan to proceed to university or community college. Topics include: microscopy, cellular organics, principles of taxonomy, microorganisms, kingdoms of life and human physiology. Students will take part in laboratory sessions and will be assigned projects based on curriculum components.

HUMAN PHYSIOLOGY 110

Prerequisite: Science 10

This course is designed to appeal to a wide range of learners, including students for whom this will serve to fulfill their science graduation requirement. The goal of this course is to build an understanding of the physiology of the human body. Throughout the course students will build their scientific literacy skills as they learn to navigate the extensive volumes of information on human health now available - in particular on the Internet. By the end of the course students will have developed a holistic personal wellness plan, demonstrating their understanding of overall health, human physiology, and the effect of disease and lifestyle choices.

BIOLOGY 122

Prerequisite: Science 10

This course is designed for students who plan to proceed to university or community college. Topics include Human reproduction, genetic, inheritance patterns, DNA replication, protein synthesis, cellular function and population dynamics will be investigated by students taking this course, in lecture and lab sessions.

Nackawic High School

CHEMISTRY 112

Prerequisites: Science 10; NRF & GMF Math 10

Pre/Co-requisite: Foundations Math 110

Chemistry 112 is recommended for students who may be pursuing science, engineering or a related field at the university level. This course is the first of two sequential Chemistry courses and exposes students to the development of atomic theory, the classification and structure of matter, elements and compounds, bonding, molecular shape, the mole, chemical changes, stoichiometry and gases. Students will be expected to complete several lab activities.

CHEMISTRY 122

Prerequisite: Chemistry 112; Foundations Math 110

Chemistry 122 is recommended for students who are interested in pursuing science, engineering or related field at the post-secondary level. Students must have previously completed Chemistry 11 and Math Foundations 11 as previous concepts will be applied to new topics including thermochemistry, kinetics & equilibrium, acids & bases and organic chemistry. Students will be expected to complete several lab reports.

INTRODUCTION TO ENVIRONMENTAL SCIENCE 120

Prerequisite: Science 10

The objective of this introductory course is for students to develop the knowledge base and skills for investigating and analyzing environmental issues and for communicating their knowledge and analysis to others. Students will investigate population growth and resource limitations, ecology of natural systems, historical and current approaches to the environment from various world views, and sustainability of natural environments. They will explore the interconnectedness of natural ecosystems and human dependence and impact on these systems. They will recognize the importance of considering environmental, social, cultural and economic aspects of an issue to find solutions. Students will complete a research project on a current issue and present their findings, and will

further explore this and other environmental issues through various methods of inquiry.

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 who are interested in pursuing a science degree in astronomy, oceanography, geology, meteorology, mapping, or urban and rural planning. The course presents an introduction to skills and methods that are basic to further study of survey engineering. This course meets the science credit graduation requirement.

PHYSICS 112

Prerequisites: Science 10; NRF & GMF Math 10

Pre/Co-Requisite: Foundations Math 110

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. Topics covered are: measurement, vectors, kinematics, including uniform motion and accelerated motion, Newton's laws of motion, forces and dynamics, introduction to momentum, work, power, energy, conservation of energy, wave motion, sound waves and light.

PHYSICS 122

Prerequisites: Physics 112, Foundations Math 110

This is the second of two sequential Physics courses and is designed for students who have successfully completed Physics 112 or equivalent. Topics covered are: vectors, dynamics II, Newton's laws', applications, momentum and energy conservation, projectile motion, circular motion, universal gravitation,

Nackawic High School

Kepler's Laws, field theory, electrostatics, and electricity.

SOCIAL STUDIES

LAW 120

This elective course provides the student with a basic knowledge of the Canadian legal system. It increases awareness of the impact of law on one's life. Students will learn how laws are created in Canada through theoretical and practical examples. Major topics of the course include: The origins of law; Civil Law (a practice moot may be done in this section); Criminal Law; Youth & the Law and other topics if time permits.

MODERN HISTORY 112

Prerequisite: Social Studies 10

History 112 presents a study of the principal historical events that have occurred in modern times. It is an overview of the major changes in political, social, and economic institutions beginning with absolutism. Topics presented are the French Revolution, Napoleon, Industrial Revolution, Nationalism, the rise of Germany and Italy, World War I, post-World War 1 era, World War II, Russian Revolution, Fascism, Marxism, post-World War II period, and current problems in Southeast Asia and Middle East. 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 an hypothesis, and evaluating an hypothesis. This course is accepted for university entrance.

MODERN HISTORY 113

Prerequisite: Social Studies 10

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, Industrialization, life in the 1920's and 1930's World War 1, World War II, Cold War and United Nations with a focus on the 20th Century.

WORLD ISSUES 120

World Issues 120 begins with an exploration of concepts that are relevant to our world today. This research is done through the critical assessment of contemporary literature and documentaries. These critical concept areas include bias, media, globalization, demographics, and consumption. Students are assessed through the application of these newfound concepts by the development and presentation of a seminar and the initiation, development, and completion of a community service program where they will have a positive impact on the world.

POLITICAL SCIENCE 120

What is power? How does government function? Who is responsible for making the rules and what must they consider? This course will look at the most common theories in political discussion and help the student understand why our leaders take such different approaches to making laws and shaping our world. Students will learn to evaluate political ideas, understand political debate and speak clearly about their political beliefs. Topics covered will include liberalism/conservatism/socialism/communism, the structure of Canadian government and the complexities of international relations.

TRADES

MILL AND CABINET WORK 120

Do you like building projects with your hands? You will learn how to effectively and safely use a variety of wood working tools, both large and small. Topics will include, dressing stock, joinery, moldings, traditional cabinet making, European cabinet making, and concealed hardware. You will first undergo safety training on the machinery required to complete your projects.

FRAMING AND SHEATHING 110

Students in this course will participate in the planning and construction of wooden structures. Students will learn the safe operation of carpentry tools and equipment. Emphasis will be placed on the interpretation of the National

Nackawic High School

Building Code, blueprint reading, estimating and material layout. This course will be of interest to students exploring career opportunities in the building construction industry.

RESIDENTIAL FINISH AND INSULATION 120

This advanced building construction course enables students to acquire knowledge and skills in the installation interior and of insulation, wall and ceiling cladding and the installation of trim, doors and windows. This course will be of interest to students exploring career opportunities in the building construction industry.

INTERNAL COMBUSTION ENGINES 110

This course content includes the theory of operation and function of the engine systems. Students learn the safe operation of tools and equipment used to disassemble, diagnose, service and repair engine components and systems. Emphasis is placed on the development of skills essential for persons entering the automotive, aircraft or marine service industries.

POWER TRAIN CHASSIS 110

Course is designed to develop skill and knowledge in the service and maintenance of the automobile chassis and power train. Emphasis is placed on the function, repair and replacement of components. Topics include spring and shock assemblies, brakes, steering, wheel bearings, tires, transmissions, differential and drive lines.

AUTOMOTIVE ELECTRICAL SYSTEMS 120

This course introduces the student to the theory and operation of automotive electrical systems. Students will study the principles of electricity, including electron theory, magnetism and electrical symbols. Course content progresses to components of the charging, ignition and starting systems. Study also includes engine management systems, scanning on-board computers and diagnostics. This course may be used as a science credit for graduation purposes.

Pre-requisite: Internal Combustion Eng. 110

METALS FABRICATION (WELDING) 110

Students in this welding course develop basic skills in the safe use of arc and MIG welding equipment. Instruction will also be given in oxygen-acetylene and plasma cutting equipment as well as machines and equipment used to cut and form metals. Students work in a well-equipped, modern welding shop to construct or repair products such as furniture and cargo trailers. This course will appeal to students interested in exploring opportunities in welding metal working and mechanical servicing and many other skilled trades.

HOUSING AND INTERIOR DESIGN 120

Housing and Interior Design is intended for students who are interested in learning more about the housing environment in the past, present and future. You will learn about housing decisions as this may account for the single largest expenditure for the majority of people. This course also requires creativity and individuality in designing a living environment with a focus on interior décor.

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 preparation. Students will study the theory of each skill and then practice those skills under supervised lab activities. The activities include preparation of the following foods- quick breads, yeast bread and rolls, cakes and cookies, pies and pastry, and beverages. Catering events are also part of this course and are completed outside of class time.

CULINARY TECHNOLOGY 120

Prerequisite: *Culinary Technology 110*

This course continues to develop the skills learned in Culinary Technology 110. Topics of study include food preparation-soups, grilling, broiling, sandwiches, salads, salad dressing,

Nackawic High School

fruits, vegetables; job search skills; large equipment operation and food borne illnesses. This course will require students to participate in school-based catering opportunities and other events outside of class time during noon hours and evenings.

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.

INFORMATION TECH AND DESIGN

COMPUTER AIDED DESIGN 110 (CAD 110)

CAD 110 offers students an opportunity to learn about and create architectural/technical drawings using Auto Cad software. Students will learn how to create orthographic technical views as well as become competent in a comprehensive software package, Auto Cad 2004 LT. This course offers a lot of hands-on assignments and will develop students' reasoning abilities as well as their eye for detail. CAD 110 is recognized as an entrance credit for Engineering at UNB. If you plan to enter

Engineering or a Technical program at another college you should seriously consider taking CAD.

COMPUTER SCIENCE 110 (Introduction to Gaming)

Interested in creating your own computer programs? In this course for beginners, you will learn the fundamentals of programming using Visual Basic. Activities include the creation of programs to solve problems and the creation of simple games. Computer Science 110 is recognized as an entrance credit at UNB.

COMPUTER SCIENCE 120

Recommended Prerequisite: Computer Sci. 110

This is an advanced course intended for students who have prior programming experience and will benefit students who will be entering Engineering or Computer Science post-secondary programs. The software used in this course is Java.

Nackawic High School

GRADE 11 & 12 COURSE SELECTION PLANNING FORM 2017-2018

Name: _____ Advisor: _____

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.

- Geometry, Measurement & Finance 10
 - Numbers, Relations and Functions 10
 - English 10
 - Social Studies 10
 - Science 10
 - French 10
 - PDCP 10
 - Broad Based Technology 10
 - Music 10
 - Phys. Ed. 10
 - Art 10
 - English Language Proficiency Assessment
- (Any 2 of the above)**

GRADE 11

ENTERING GRADE 12

- 1. English 111 112 113 (full-year, 2 credits)
- 2. Financial & Workplace Mathematics

1. English 12 _____

2. _____

OR Foundations of Mathematics 11

3. _____

3. Modern History 112 113

4. _____

FI Mod History 112

5. _____

4. Science (see below) _____

6. _____

5. Fine Arts & Life Role (see below) _____

7. _____

6. _____

8. _____

7. _____

9. _____

8. _____

10. _____

9. _____

Alternate #1: _____

Alternate #1: _____

Alternate #2: _____

Alternate #2: _____

SCIENCE OPTIONS

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

FINE ARTS AND LIFE ROLE

DEVELOPMENT OPTIONS

- Theatre Arts 120
- Cooperative Education 120
- Entrepreneurship 110
- Individual & Family Dynamics 120
- Outdoor Pursuits 110
- Fine Arts 110
- Physical Education Leadership 120
- Music 112, 122
- Wellness through Physical Education 110

**Grade 12's:
5 grade 12 credits
must be picked.**

Parent Signature _____