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Leo Hayes 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.

- |   |                                     |
|---|-------------------------------------|
| <b>Open or "0" courses</b> are offered to all at one level only;    | ex: Entrepreneurship 110            |
| <b>Level 2 courses</b> are academic/university/college preparatory. | ex: Music 112, Biology 122          |
| <b>Level 3 courses</b> are general/college preparatory.             | ex: Modern History 113, English 123 |
| <b>Level 1 courses</b> are enriched university preparatory.         | ex: English 111, Physics 121        |

**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. **See page 27 for a listing of courses requiring prerequisites.**

**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.

**Course Fees and Applications:**

Please note that some courses require additional supplies and/or payment of lab, studio or other fees. Some courses require applications **-due April 6<sup>th</sup> to the guidance department- See page 27.**

**Student Timetables:**

Timetables are computer-generated to best match the maximum number of student requests and therefore courses fall by chance into either semester.

When all timetables are deemed ready and the school schedule and staffing are settled, timetables will be distributed for the upcoming school year to all students at the same time typically the first day of school.

***We are unable to entertain requests for early access to your timetable.***

## Leo Hayes High School 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 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.

### **Trades Course Option at FHS**

This program provides the opportunity to enroll in two trades related courses per semester held at FHS in the afternoon while attending LHHS in the morning. Students must enroll in both courses. Transportation by bus from LHHS to FHS and return is expected and provided for students in this program. **NOTE: Enrolment is limited and competitive.** Priority will be given to students that can demonstrate a commitment to regular attendance and appropriate, respectful behaviours.

### **Skills for Success**

### **Formerly (Essential Skills Achievement Pathway)**

The Skills for Success 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 Skills for Success 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.

### **Fine Arts Certificate Program**

This program, designed to reward both quantity and quality of artistic work, is an enrichment opportunity for students that are motivated, self-disciplined, and interested in the Arts. The F.A.C. will take approximately 2.5 years to complete. While the requirements are quite reasonable, it will take careful planning by the student to ensure success. The F.A.C. is designed to reward depth of work in one area of concentration. It also demands that applicants experience at least one additional discipline of artistic expression. Students who receive the LHHS F.A.C. will have been involved in both curricular and extra-curricular arts activities. Across the 3 years of grades 10, 11 and 12 students must complete three curricular courses in their area of study, 6 extra-curricular activities in the arts (three of which MUST be in their area of study), complete a self-evaluative paper and a portfolio to be reviewed by local artists in their corresponding discipline. If students are interested in earning the LHHS Fine Arts Certificate (FAC) they should consult a Fine Arts teacher for more information.

Leo Hayes High School  
**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 LHHS' F.I. courses can be found on the Course Theme Index, pages 7- 8.

**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.

\*Students interested in taking the OPI and who do not meet the above criteria should contact their school counselor. They may qualify under "special circumstances."



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)
2. Click 'Sign Up'
3. Select Your School: Leo Hayes 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.

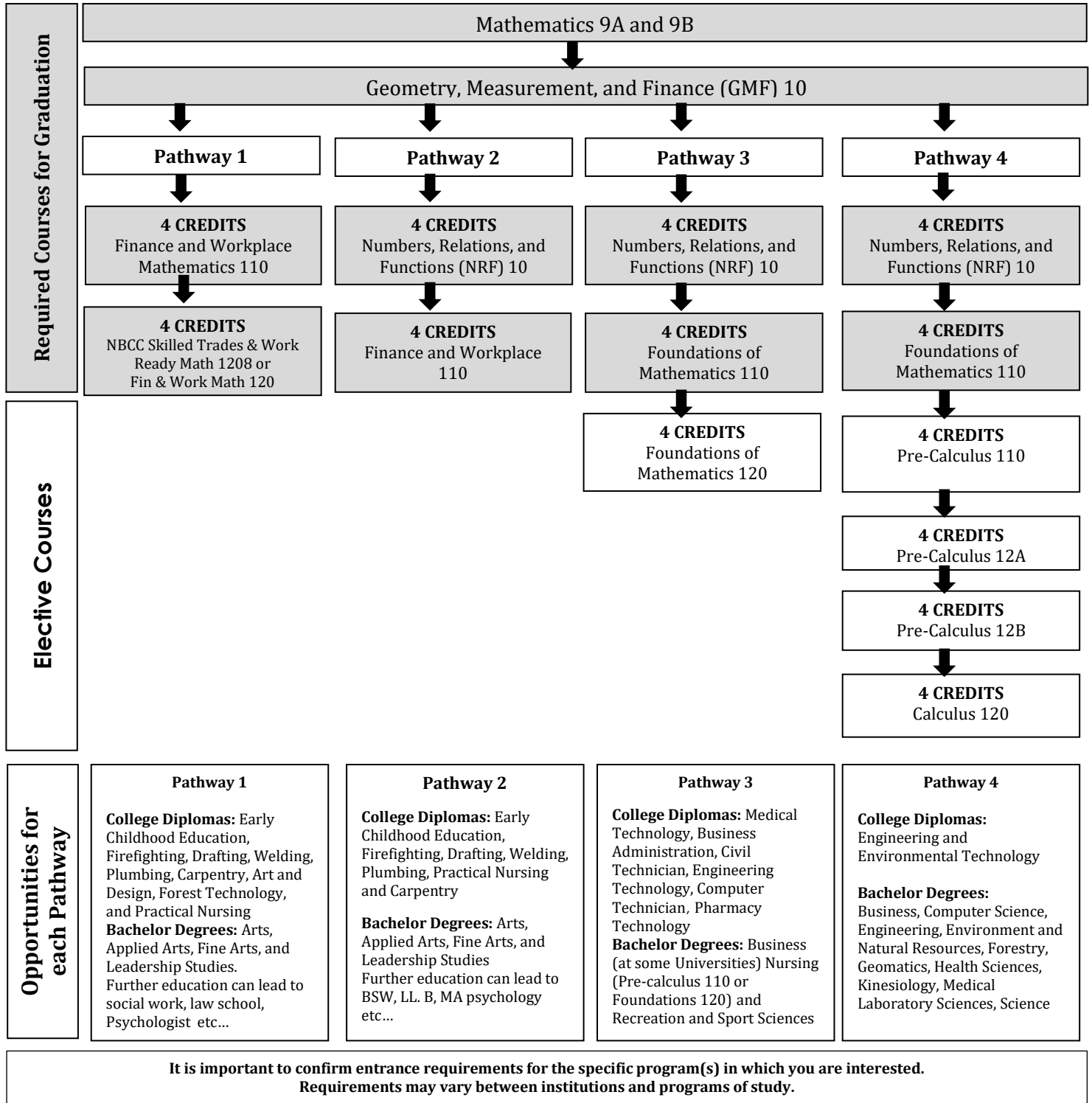
# Important

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 2023 and staffing allocations ultimately determine the availability of sections/courses. Administration and Guidance 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.

# Leo Hayes 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:** Students need to complete a min of two 2 math courses (8 credits) from the options listed in the table below. Please refer to the diagram below for the various options of required courses for graduation.



Leo Hayes High School  
**New Brunswick High School Graduation Requirements**

**In order to graduate, you must meet all of the following requirements:**

- Complete the entire Grade 9-10 program
- Pass 18 out of 21 courses (72 out of 84 credit hours) in Grades 10-12, 8 (32 credit hours) of which are compulsory courses listed below
- **Five** of these courses 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 courses (or 84 credit hours).

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

- English Language Arts Literary Text 11 (**4 credit hours**)
- English Language Arts Informational Text 11 (**4 credit hours**)
- Math – must pass **two** of (Numbers Relations and Functions 10 **and either** Fin and Workplace 110 **OR** Foundations 110) **OR** (Fin & Workplace 110 **and either** Fin & Work Math 120 **OR** NBCC Sk Trd Wrk Ready 120) (**8 credit hours**)
- Science (**4 credit hours**) (see list of options below)
- Humanities (**4 credit hours**) See list of options below
- Fine Arts & Life Role Development (**4 credit hours**) (see list of options below)
- English 12 (**4 credit hours**)

**\*Notes- French Immersion students must successfully complete five of their 21 courses** (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. Students may also qualify to take the OPI under “Special Circumstances” – see your School Counsellor for more information.

**Humanities Options**

Canadian History 122, Indigenous studies 120, Modern History 11, (ENG or FI) **OR** Sociology 120

**Science Options**

Biology, Chemistry, Environmental Geoscience 110, Human Physiology 110, Introduction to Environmental Science 120, Introduction to Electronics 110, Physics, Robotics and Automated Technology 120, \*Automotive Electrical Systems 120.

**Fine Arts/Life Role Development**

\*Automotive Electrical Systems 120, Cooperative Education 120, Creative Arts 110, Culinary Technology 110/120, Dramatic arts 110/120, Early Childhood Coop 120, Electrical Wiring 110, Entrepreneurship 110, Fashion Technology & Design 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, Introduction to Applied Technology 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 110, Physical Education Leadership 120, Power Chain and Chassis 110, Residential Finish 120, Tune-up and Emissions 120, Visual Arts 110/120 and Wellness through Physical Education 110.

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

<p>*Duke of Edinburgh’s Award Young Canadians Challenge Silver or Gold level may be used as Challenge for Credit for Outdoor Pursuits 110. <b>See School Counsellor.</b></p> <p>*Army, Air, Sea Cadet courses may be combined and used as Challenge for Credit for Outdoor Education 110. <b>See School Counsellor.</b></p>
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Leo Hayes High School

<b>BUSINESS AND RELATED COURSES</b>		<b>LANGUAGES</b>	
Economics 120		Intro to Wolastoqey 110	
Entrepreneurship 110		Post Intensive French 110	
Hospitality & Tourism 110		Post Intensive French 120	
Marketing 120		Spanish 120	
<b>ENGLISH AND RELATED COURSES</b>		<b>LIFE STUDIES</b>	
English 111 (Lit Text & Info Text)		Child Studies 120	
English 112 (Lit Text & Info Text)		Individual and Family Dynamics 120	
English 113 (Lit Text & Info Text)		FI/FSL Individual Family Dynamics 120	
English 121		Psychology 110	
English 122		Psychology 120	
English 123			
Growth, Goals and Grit: Skills for Success 120		<b>LOCAL OPTIONS</b>	
Intro to Debate 110		Indigenous Wabnaki Art 110	
Literacy Through Graphic Novels 110		Introduction to Debate 110	
Media Studies 120		Introduction to Wolastoqey 110	
Writing 110		Literacy Through Graphic Novels 110	
<b>FINE ARTS</b>		<b>MATH</b>	
Creative Arts 110		Financial & Workplace Mathematics 110	
Dramatic Arts 110		Financial & Workplace Mathematics 120	
Dramatic Arts 120		NBCC Skilled Trades & Work Ready Math 120	
Graphic Arts & Design 110		Foundations of Mathematics 110	
Fashion Technology & Design 110		FI/FSL Foundations of Mathematics 110	
Indigenous Wabanaki Art 110		Foundations of Mathematics 120	
Visual Arts 110		Pre-Calculus 110 <b>OR</b> FI/FSL Precalculus 110	
Visual Arts 120		Calculus 120	
Music 112 (Choral)			
Music 112 (Guitar)		<b>PHYSICAL EDUCATION &amp; HEALTH</b>	
Music 112 (Instrumental)		Nutrition for Healthy Living 120	
Music 112 (Keyboarding)		Outdoor Education 110	
Music 122		Physical Education Leadership 120	
		Wellness Through Physical Education 110	
		Yoga 110	
<b>FRENCH IMMERSION COURSES</b>			
FI Language Arts 110			
FI Language Arts 120			
FI Modern History 110			
FI Techniques de Communication 110			
FI Techniques de Communication 120			
FI/FSL Biology 112			
FI/FSL Canadian History 120			
FI/FSL Foundations of Mathematics 110			
FI/FSL Individual Family Dynamics 120			
FI/FSL Pre-Calculus 110			





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Canadian History 122 (ENG or FI)	11	Foundations of Mathematics 120	17
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Chemistry 112	12	Graphic Arts & Design 110	18
Chemistry 121	12	Growth, Goals and Grit 120	18
Chemistry 122	12	Hospitality and Tourism 110	18
Child Studies 120	12	Housing and Design 120	18
Computer Aided Design 110 (former BBT 10)	12	Human Physiology 110	18
Computer Science 110 (Intro to Gaming)	12	Indigenous Studies 120	18
Computer Science 120	13	Indigenous Wabanaki Art 110	26
Cooperative Education 120 (1, 2 or 3 periods)	13	Individual Family Dynamics 120	19
Creative Arts 110	13	Information Technology 120	19
Culinary Technology 110	13	Internal Combustion Engines 110	19
Culinary Technology 120	13	Intro to Applied Technology 110	19
Cybersecurity 120	13	Intro to Debate 110	26
Digital Production 120	14	Intro to Early Childhood Coop 120	19
Dramatic Arts 110	14	Intro to Electronics 110	19
Dramatic Arts 120	14	Intro to Environmental Science 120	19
Economics 120	14	Intro Wolastoqey 110	26
Electrical Wiring 110 (Residential)	14	Law 120	20
Electrical Wiring 120 (Commercial)	14	Literacy Through Graphic Novels 110	26
English 111 (Lit Text & Info Text)	14	Long-Term Care Coop 120	20
English 112 (Lit Text & Info Text)	15	Marketing 120	26
English 113 (Lit Text & Info Text)	15	Media Studies 120	20
English 121	15	Metals Processing 110 (N/A 2023/24)	
English 122	15	Mill and Cabinet Work 120	20
English 123	15	Modern History 111, 112 or 113	20
Entrepreneurship 110	15	Music 112 (Choral)	20
Environmental Geoscience 110	15	Music 112 (Guitar)	21
FI Language Arts 110 (FILA 110)	16	Music 112 (Instrumental)	21
FI Language Arts 120	16	Music 112 (Keyboarding)	21
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FI Techniques de Communication 110	16	NBCC Skilled Trades & Work Ready Math	21
FI Techniques de Communication 120	16	Nutrition for Healthy Living 120	21
FI/FSL Biology 112	16	Outdoor Education 110	21
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Post Intensive French 120	23	Visual Arts 110	25
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Pre-Calculus 120 B	24	World Issues 120	25
Psychology 110	24	Writing 110	25
Psychology 120	24	Yoga 110	25

**Also available on our website:  
<http://leohayeshigh.nbed.nb.ca>**

### **BIOLOGY 111**

#### ***Recommended Prerequisite: Science 10***

Biology 111 is an advanced course that includes the following topics: microscopy, cellular biology, cellular respiration, principles of taxonomy, microorganisms and kingdoms of life. These topics will be covered in greater depth than in Biology 112. Teaching methods will combine lectures, independent and group research projects, laboratories (including dissections), guest speakers and field trips. An average above 85% in Science 10 is highly recommended for students taking this course.

***Lab fee \$5.00.***

### **BIOLOGY 112**

#### ***Recommended Prerequisite: Science 10***

Biology 11 explores the diversity among living things from viruses and bacteria to vertebrate zoology. Students understand the cell as the basic unit of life and the diversity of organisms that are organized into the various kingdoms of life. Students investigate the impact of biology and technology on society and the impact of human activities on the natural world. Students will participate in a wide variety of hands-on learning opportunities to help them better understand a wide variety of biological concepts.

***Lab fee \$5.00***

### **BIOLOGY 121**

#### ***Recommended Prerequisite: Science 10 (with a min. mark of 85%)***

This course is targeted toward students who have a strong science background and are interested in post-secondary studies in medicine, forestry, biotechnology and genomics. The program will focus on genetics, human reproduction, DNA replication, protein synthesis, biochemistry, ecological functions and the physiology of human sight and hearing. Students will present seminars, conduct lab experiments, take field trips and perform library and internet research.

***Lab fee \$5.00.***

### **BIOLOGY 122**

#### ***Recommended Prerequisite Science 10***

This course is designed for students who plan to proceed to university or community college. Topics including 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.

***Lab fee \$5.00.***

### **CALCULUS 120**

#### ***Pre-requisites: Pre-Calculus 12A & 12B***

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" at UNB. Please visit [www.math.unb.ca](http://www.math.unb.ca) for more details. This course will only be offered in semester two.

### **CANADIAN GEOGRAPHY 120**

Where we live plays a big role in how we live.

This course is a study of the ever-changing human and physical landscapes of Canada and how they impact each other. It considers where things are, why they are there, and what this means in our lives today and into the future. Included is a look at environmental issues that affect all Canadians. Students will use a wide range of new skills and information to project a vision of Canada in the future.

### **CANADIAN HISTORY 122**

How did Canada come to be the country it is today? What is myth? What is reality? Who decides the Canadian story? This course is a deep dive into Canadian history covering a range of eras and topics from Indigenous cultures thousands of years ago to the modern debates around government and media. Learn to think about our country like a historian. This course can be counted as your required Social Studies credit.

### **CHEMISTRY 111**

#### ***Recommended Corequisite: Foundations 110***

Chemistry 111 is designed for students who may be pursuing science, engineering, nursing or a

## Leo Hayes High School

related field at the post-secondary level. It is the first of two chemistry courses which exposes students to the development of atomic theory, the classification and structure of matter, elements and compounds, bonding, molecular shape, the mole, chemical reactions and stoichiometry. Chemistry 111 will cover more topics than Chemistry 112, therefore a more accelerated learning pace can be expected. In addition to several labs (including a field trip to UNB), students will be expected to do an enrichment project. An average above 85% in Science 10 and Math 10(GMF/NRF) is highly recommended for students taking this course.

**Lab fee \$5.00.**

### **CHEMISTRY 112**

**Recommended Prerequisite: Science 10; GMF Math 10 and NRF 10**

**Recommended Corequisite: Foundations 110**

Chemistry 112 is designed for students who may be pursuing science, engineering or a related field at the post-secondary level. It is the first of two chemistry courses which exposes students to the development of atomic theory, the classification and structure of matter, elements and compounds, bonding, molecular shape, the mole, chemical reactions and stoichiometry. Students will have the opportunity to perform lab experiments to support their understanding of these concepts. Although NRF 10 is not an official prerequisite, a demonstrated competency in math skills is an essential asset for this course.

**Lab fee \$5.00.**

### **CHEMISTRY 121**

**Prerequisites: Chemistry 111**

**Recommended Prerequisite: Foundations 110**

Chemistry 121 is designed for students who are interested in pursuing science, engineering, nursing or a related field at the post-secondary level. Chemistry 121 will cover more topics than Chemistry 122, therefore an accelerated learning pace can be expected. Previous concepts from Chemistry 11 will be applied to new topics including thermochemistry, kinetics & equilibrium, acids & bases and organic chemistry. In addition to several lab reports, students will be expected to do an individual enrichment project. A

minimum mark of 85% in Chemistry 111 is recommended for students taking this course.

**Lab fee \$5.00.**

### **CHEMISTRY 122**

**Prerequisite: Chemistry 112/1**

**Recommended Prerequisite: Foundations 110**

Chemistry 122 is designed for students who are interested in pursuing science, engineering, nursing or a related field at the post-secondary level. Chemistry 11 is a required prerequisite as previous concepts will be applied to new topics including thermochemistry, kinetics & equilibrium, acids & bases and organic chemistry. Students will have the opportunity to perform lab experiments to support their understanding of these concepts. Foundations of Math 110 is strongly recommended as a prerequisite due to the math skills required in this course.

**Lab fee \$5.00.**

### **CHILD STUDIES 120**

This course explores the early years of childhood development. How does a baby develop in the womb? How do children learn? What support and care do children need? It is an in-depth theory course designed for students who have an interest in continuing study in fields such as childhood education, nursing, child psychology or social work. Topics covered: heredity, conception, prenatal developments, pregnancy and childbirth, child growth and development. Mandatory component: Extended observation of a young child. The student is responsible for choosing the child to observe and study outside of regular class time.

### **COMPUTER AIDED DESIGN 110 (Formerly grade 10 BBT)**

In this introductory course students will learn how to use TinkerCad and Adobe Illustrator to design and then manufacture their own projects using a 3D printer, Laser engraver/cutter or a CNC machine. This course prepares students for CAD 120. **Lab Fee: \$10**

### **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. This course is also an area of concentration credit for the FIT certificate (Focus on Information Technology Program).

### **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.

### **CO-OPERATIVE EDUCATION 120**

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 interview process is required that will consider teacher recommendations, attendance patterns, commitment to learning, the ability to represent the school in a mature and responsible manner and **your own access to transportation to and from the workplace.** *Students may select either a 1- period, 2- period or 3-period. Application required—see Guidance. Enrolment is limited.*

### **CREATIVE ARTS 110**

Art is so much more than a picture on the wall! Art is music, sculpture, theater, dance, painting, poetry, and more. No art experience is necessary for this elective course. You will have many opportunities to discuss and make art. You will sharpen your critical thinking skills, and learn to discuss your likes, dislikes, and opinions of art in an informed way. Learn how the arts are connected to and contribute to our everyday lives, our communities, and our cultures. Come

to this class with a positive attitude and a willingness to try new things.

***Lab fee: \$10***

### **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.

***Lab fee: \$25.00.***

### **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, fruits, vegetables; job search skills; large equipment operation and food borne illnesses. This course will require students to participate in school-based catering opportunities such as “Meals to Go” and other events outside of class time during noon hours and evenings. ***Enrolment is limited.***

***Lab fee: \$25.00.***

### **CYBERSECURITY 120**

The Cybersecurity 120 (CYBER120) course will inspire students through the experiential learning of the fundamentals and possibilities of cybersecurity. In CYBER120, students will be actively engaged in the design, development and evaluation of defensive cybersecurity projects, including awareness, concepts and challenges. The intent of this program of study is to have students discussing real-world case studies and learning in hands-on activities from day one, while maintaining a high level of engagement throughout the course through a commitment to problem-based and project-based learning.



### **DIGITAL PRODUCTION 120**

Digital Media can be defined as information that can be created, viewed, organized, distributed, modified and preserved using computers. If you are interested in Digital Media, creating web sites, and working with digital audio, Digital Productions 120 can offer you the skills you need to create different digital media. This class is a skills-based course designed for those who are self-directed and motivated to learn more about digital media as it relates to Digital Media. No prerequisite required. This course is also an area of concentration credit for the FIT certificate (Focus on Information Technology Program).

### **DRAMATIC ARTS 110**

Are you interested in acting? Dramatic Arts 110 is a performance class where you get the opportunity learn the skills of acting. You will be shown a wide range of dramatic styles and get a chance to perform in scenes, short skits, monologues and one act plays. In addition to acting skills, you will develop more self-confidence as you step out of your comfort zone in a fun and accepting class environment. This course is highly participatory and requires excellent attendance.

### **DRAMATIC ARTS 120**

Take your acting further! This course builds on Dramatic Arts 110 with an enhanced level of theatrical experience. You will be expected to have more involvement and ownership of acting choices. You will work individually, independently, in small groups, and in larger ensembles to create, analyze, and perform scenes, monologues, physical theatre and one act plays. Successful completion of Dramatic Arts 110 is highly encouraged, but not required, especially if you have acting experience in extra-curricular acting studios. This course is highly participatory and requires excellent attendance.

### **ECONOMICS 120**

Economics 120 provides a basic understanding of our economic system and how it works. The role of Canada's major economic institutions and how they interact is examined. It is designed to develop an understanding of the concepts and techniques needed in making economic decisions and to

develop an awareness of the major economic problems and issues of the day.

### **ELECTRICAL WIRING 110 (RESIDENTIAL)**

Have you ever wondered why people say, "Don't touch that wire!"? Find the answer to that question and more as we design, install, test, and troubleshoot residential electrical systems! Using industry-standard hand and power tools, you will interpret electrical drawings to install electrical systems compliant with the 2018 Canadian Electrical Code. Open to any grades 11 and 12 and especially recommended to anyone pursuing a pathway into skilled trades. Course hours count towards NBTAP.

### **ELECTRICAL WIRING 120 (COMMERCIAL)**

Do you want to pull a fire alarm pull station? Come to Electrical Wiring 120 and do it without getting in trouble! Imagine Electrical Wiring 110, but the wires and tools are bigger, and the structures are all steel. If a career as a Construction or Industrial Electrician after high school appeals to you, come get your hands dirty down in the D Wing! Open to those who passed Electrical Wiring 110 and especially recommended to anyone pursuing a pathway into skilled trades. Course hours count towards NBTAP.

### **ENGLISH LANG ARTS INFO TEXT 111**

### **ENGLISH LANG ARTS LIT TEXT 111**

***Prerequisite: English 10 with mark of 85%***

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 one courses increase in pace, scope and depth of the study of texts. **Students must select both English Literary Text and Informational Text.**

**ENGLISH LANG ARTS INFO TEXT 112**

**ENGLISH LANG ARTS LIT TEXT 112**

***Prerequisite: English 10 (Lit Text & Info Text)***

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**

**ENGLISH LANG ARTS INFO TEXT 113**

**ENGLISH LANG ARTS LIT TEXT 113**

***Prerequisite: English 10 (Lit Text & Info Text)***

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**

**ENGLISH LANG ARTS 121**

**Prerequisites: Eng. 111 (Lit Text & Info Text)**

This semester course is designed for students wishing to pursue the study of English at a more advanced pace and scope. Students will build understanding by listening to, reading, and viewing a range of spoken, written, and visual texts representing all voices. They will respond personally and critically to the works of authors, creators, illustrators, and speakers; speak, write and represent to learn about self, others, and the world; and create texts, collaboratively and independently, for specific audiences and purposes.

**ENGLISH LANG ARTS 122**

**Prerequisites: Eng. 11 (Lit Text & Info Text)**

This semester course is designed for students wishing to pursue a post-secondary education. Students will build understanding by listening to, reading, and viewing a range of spoken, written, and visual texts representing all voices. They will respond personally and critically to the works of authors, creators, illustrators, and speakers; speak, write and represent to learn about self, others, and the world; and create texts, collaboratively and independently.

**ENGLISH LANG ARTS 123**

**Prerequisites: Eng. 11 (Lit Text & Info Text)**

This semester course is designed to prepare students for some community colleges and/or direct employment after completion of high school. The 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.

**ENTREPRENEURSHIP 110**

This course is designed for 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.

**Environmental Geoscience 110**

***Recommended prerequisite: Science 10***

Environmental Geoscience 110 is targeted towards students who are looking for a deeper understanding of earth sciences and the forces that govern change of the planet over time. The goals are three-fold: learn about position and space through fields such as physical geography and geomatics, learn about earth systems through fields such as geology and geochemistry/geophysics, and ultimately demonstrate their

knowledge of these areas through a hands-on summative project.

**FI LANGUAGE ARTS 110**

French immersion students will continue to develop their French language skills in this course, through a variety of reading, writing, listening, speaking and social activities. Students will explore oral, regional & poetic language, present a debate, and improve their linguistic abilities and increase cultural understanding of and their place in the Francophone world.

**FI LANGUAGE ARTS 120**

French immersion students will continue to develop their French language skills in this course. French literature will be used to expand communication and reflection skills in reading and writing with particular emphasis on oral language skills. Students will develop critical thinking and social interaction skills necessary in our fast-changing society with short stories & french novels. They will continue to be exposed to cultural similarities & differences to be able to understand others better and interact as well-rounded citizens of the world. Students in this course will have the opportunity to participate in the French Oral Proficiency Interview and will receive a certificate from the Province of New Brunswick indicating their proficiency level.

**FI MODERN HISTORY 112**

250 years seems like a long time. It isn't, really. This walk through history looks at rebels and revolutionaries, war and peace, alliances and enemies in order to help us understand how we got here and what we should do next. We will learn about stories from the French Revolution, the world wars, the Cold War, and more! Once you see the modern world through the eyes of a historian your perceptions will change. This course can count as your social studies credit and towards your French immersion certificate.

**FI TECHNIQUES DE COMMUNICATION 110**

This course is for students wishing to continue to develop and maintain their French language skills through a variety of oral interaction activities, group and/or individual presentations, writing activities, and oral comprehension activities.

Outcomes are intended to better prepare students for their grade 12 Oral Proficiency Interview. 70% of the course is speaking French. Students should be prepared to converse daily in class to improve their French communication techniques.

**FI TECHNIQUES DE COMMUNICATION 120**

Develop and enhance French oral communication skills through a variety of oral interaction activities and presentations. The use of appropriate language conventions in both written and spoken French will be emphasized. Students in this course will have the opportunity to participate in the French Oral Proficiency Interview and will receive a certificate from the Province of New Brunswick indicating their proficiency level.

**FI/FSL BIOLOGY 112**

**Prerequisite: F.I. Science 10**

Biology 11 explores the diversity among living things from viruses and bacteria to vertebrate zoology. Students understand the cell as the basic unit of life and the diversity of organisms that are organized into the various kingdoms of life. Students investigate the impact of biology and technology on society and the impact of human activities on the natural world. Students will participate in a wide variety of hands-on learning opportunities to help them better understand a wide variety of biological concepts.

**Lab fee: \$5.00**

**FI/FSL CANADIAN HISTORY 122**

How did Canada come to be the country it is today? What is myth? What is reality? Who decides the Canadian story? This course is a deep dive into Canadian history covering a range of eras and topics from Indigenous cultures thousands of years ago to the modern debates around government and media. Learn to think about our country like a historian. This course can count as your social studies credit and towards your French immersion certificate.

**FI/FSL FOUNDATIONS OF MATHEMATICS 110**

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

Build on your existing French language skills while learning financial mathematics, geometry,



## Leo Hayes High School

measurement, number, logical reasoning, and relations and functions. This course is the first course in the Foundations pathway and the prerequisite for the Pre-Calculus pathway. Students must pass this course to enter into the Pre-Calculus courses and/or to take Foundations 12. Students entering this pathway should have a 70% or higher in Numbers, Relations and Functions 10.

### **FI/FSL INDIVIDUAL AND FAMILY DYNAMICS 120 (Relations Familiales)**

Build on your existing French language skills while studying personal development, relationships, and the importance of family. You will gain theoretical understanding of how individuals relate to family, friends, and society, and explore your own development and relationships with others. You will also learn strategies on how to cope with the ever-changing issues that impact our lives. This course complements further studies in psychology, sociology, teaching, social work, and family life education. Students in this course will have the opportunity to participate in the French Oral Proficiency Interview and will receive a certificate from the Province of New Brunswick indicating their proficiency level.

### **FI/FSL PRE-CALCULUS 110**

***Prerequisite: Foundations of Math 110***

Build on your existing French language skills in this 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.

### **FASHION TECHNOLOGY AND DESIGN 110**

This course is designed to introduce students to the possible careers in the fashion industry. The course is project based, hands on, and skill oriented. Students will examine then world of textiles, their production process, and learn to identify various fibres and fabrics. Through a variety of small projects, including a sample portfolio and the creation of a personal garment, students will follow commercial patterns and apply current construction techniques using a

sewing machine and a serger. Prior experience is not required. **Lab Fee: \$25**

### **FINANCIAL & WORKPLACE MATH 110**

***Prerequisite: GMF 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.

### **FINANCIAL & WORKPLACE MATH 120**

***Prerequisite: Fin & Work Math 110 OR Foundations of Math 110.***

The Financial and Workplace Mathematics pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into some college programs and for direct entry into the work force. Topics covered in Finance and Workplace 12 are: Linear equations and graphs, Trig Laws of Sines and Cosines, financial viability of a small business, statistics, probability, accuracy and precision and translations of 2 and 3 D shapes.

### **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. 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.

### **FOUNDATIONS OF MATHEMATICS 120**

***Prerequisite: Foundations of Math 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

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include statistics, probability, relations and functions.

### **FRAMING AND SHEATHING 110**

Students in this course will participate in the planning and construction of wooden structures in a large, well-equipped shop. Students will learn the safe operation of carpentry tools and equipment. Emphasis will be placed on the interpretation of the National 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 must also be chosen.**

**Lab Fee: \$10.00**

### **GRAPHIC ARTS AND DESIGN 110**

**Prerequisite: Visual Arts 10**

Students will explore skills, processes and knowledge involved in graphic art and design in order to create original art and design products such as logos, illustrations, and more. Images will be created by hand and/or computer. A strong interest in Art and a high level of dedication to artwork is required for this course.

**Lab fee: \$10.00.**

### **GROWTH, GOALS & GRIT: SKILLS FOR SUCCESS 120**

This course will help students develop skills in three main areas: positive and productive mindsets and behaviours, organizational patterns, as well as functional and critical literacy. Within the learning expectations of the course, specific success skills, strategies, and practices will be explored. Students will be supported to transfer these skills, strategies and practices to authentic life situations and circumstances, including their other courses. Students will also learn how these support their plans for life after high school.

### **HOSPITALITY AND TOURISM 110**

Looking for a fun, interesting, and dynamic career option? Hospitality & 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.

### **HOUSING AND DESIGN 120**

Housing and 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.

**Lab fee \$10.**

### **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.

**Lab fee \$5.00.**

### **INDIGENOUS STUDIES 120**

Indigenous peoples have lived on and nurtured this land since time immemorial. But do most of us truly understand what this means? Develop your understanding of Wabanaki cultures, languages, arts, stories and contributions prior to European contact. Dig into the history of colonialism, Indigenous resistance, and important perspectives in history. Understand the influences of age-old history on dealing with modern Indigenous issues. This course can count as your Social Studies credit.

### **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.

### **INFORMATION TECHNOLOGY 120**

IT 120 offers students the opportunity to become competent using information processing tools in Microsoft Office 365. Word processing, worksheets, and presentations are key components of this course. Whether you plan to join the workforce or pursue post-secondary studies immediately following high school, this course will be of benefit to you. This course is also a general skill credit for the FIT certificate (Focus on Information Technology Program).

### **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. ***Tune Up and Emissions 120 must also be chosen. Lab fee: \$5.00***

### **INTRO TO APPLIED TECHNOLOGY 110**

Whether you are a trade's-oriented person or academic, this is a good course to take! You will receive hands-on training and have a chance to learn valuable life skills. You will learn how to competently use various wood working hand tools, as well as stationery and power tools. The following topics will be covered in the semester:

- Safety
- Machine instruction
- Wood working
- Design project

- Reading Blueprints

Over the semester, you will learn a variety of skills from dressing rough lumber to size to applying a finish.

***Lab fee \$50.00***

### **INTRO TO EARLY CHILDHOOD COOP 120**

Early Childhood Coop is a two or three-period coop program where you work in a licensed childcare centre and complete the Early Childhood 90-hour online course. You will complete the coop program as normal, but you will also spend time working with a childcare expert to complete the online part of the program. If successful, you will earn the Early Childhood Certificate that shows you are ready to work in any licensed childcare centre in the province. Transportation is required. ***Application required—see Guidance. Enrollment is limited. Only students seriously planning a career working in a day care should apply.***

### **INTRO TO ELECTRONICS 110**

***Recommended Prerequisite: GMF & NRF 10***

Resistors, transformers, batteries, capacitors, inductors, and basic circuit analysis...sound interesting? Students with a career objective in the technical trades, an interest in this technology as a hobby, or for those who plan to pursue a career in engineering will benefit from this course. It is also recognized as an entrance credit for Engineering Degree Programs at UNB.

### **INTRO TO ENVIRONMENTAL SCIENCE 120**

***Recommended prerequisite: Science 10***

The objective of this course is for students to develop the knowledge base and skills for investigating and analyzing environmental issues (local and global) and for communicating their knowledge and analysis to others. Students will investigate population growth and resource limitations, ecology of natural systems, human impacts on the natural world, historical and current perspectives of the environment, and other related topics. Each student will research a current environmental issue, explore current solutions to environmental problems, and in groups, share their findings with the class. Students will also choose from an extensive list, a few projects that suit their interest (i.e., Outdoor

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activities, art, research, photography, etc.), with the aim of increasing their appreciation/respect/understanding of the environment.

**Lab fee: \$5.00**

### **LAW 120**

Who writes the law? Who enforces the law? How does the law impact my life? What are my rights? Answer these questions and more in this intro to Law course. While the course does have a theoretical side, it is designed to be highly interactive. Students will be encouraged to join in discussion and debate and share ideas freely with the class.

### **LONG-TERM CARE CO-OP 120**

Long-term Care Coop is a three-period coop program at a licensed long-term care facility with seniors and other individuals needing long-term care. You will spend the morning at a care facility near your school and earn two credits in Co-op 120 and one credit in Health Care 110. You will also receive “employment ready recognition” from the care facility. An excellent opportunity for students interested in Resident Assistant or Personal Support Worker careers. **Application required—see Guidance. Enrollment is limited.**

### **MARKETING 120**

This course introduces students to marketing function and activities that occur within the Canadian marketplace and how it affects us as consumers. Students will also be able to explore and be exposed to potential career opportunities. Areas of focus include: evolution of marketing, the marketing mix, the Canadian Code of Advertising standards, market research, as well as advertising techniques and strategies. Suggested prerequisite: English 112

### **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 on NHL hockey boards! 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. In lieu of an exam, students will present a seminar and major term project.

### **MILL AND CABINET WORK 120**

**Recommended pre-requisite: Applied Tech 110 (Introduction to)**

Do you like building projects with your hands? This is the second of the woodworking classes offered which engages students who have previous woodworking experience. You will learn how to effectively and safely use a variety of wood working and hand tools. Topics will include learning about the Tree to shelf process and how Lumber is harvested, dressing stock, advanced joinery techniques, moldings, and traditional woodworking methods. Other projects may include special projects or personal projects if time allows.

**Lab fee \$50.**

### **MODERN HISTORY 111, 112 or 113**

250 years seems like a long time. It isn’t, really.

This walk through history looks at rebels and revolutionaries, war and peace, alliances and enemies in order to help us understand how we got here and what we should do next. We will learn about stories from the French Revolution, the world wars, the Cold War, and more! Once you see the modern world through the eyes of a historian your perceptions will change. This course can count as your social studies credit.

### **MUSIC 112 (CHORAL)**

**Prerequisite: Grade 10 Music**

This course is designed for students who have taken the grade 10 Music course and who wish to further develop their skill in singing and their knowledge of music. Approximately half of the class time is spent on sight-reading, working repertoire, and vocal technique. The remainder of the class time will include the study of theory and music appreciation. Composition using various forms of technology are included so familiarity with technology will be an asset. In-class solo and group performances occur regularly. *\*Students interested in participating in the school production as an extra-curricular may benefit from the skills learned in this course.*

**MUSIC 112 (GUITAR)**

***Prerequisite: Grade 10 Music (Guitar)***

This course is designed for students that have taken Grade 10 music and wish to extend their study with a specific guitar focus. Students will learn to read music and compose and perform pieces. The course will study the development of the guitar historically and learn performance techniques and theory through various styles such as blues, jazz, folk, and classical.

**MUSIC 112 (INSTRUMENTAL)**

***Recommended Prerequisite: Music 10***

This course is for anyone who has played an instrument for the last two or more years. Approximately 50% of class time is spent on creating and performing a varied repertoire on your instrument of choice and developing fluency in technology that meets industry standards. The balance of the time is spent on theory and music appreciation. There will be opportunity to perform and compose for both solo and group performances. The course builds on outcomes and experiences covered in grades 9/10.

**MUSIC 112 (KEYBOARDING)**

***Recommended Prerequisite: Music 10***

This course is designed for students who have taken the grade 10 Music course and who wish to extend their experience to more advanced skills. Approximately half of the class time will be spent playing the keyboard while the remainder will be used to study how music is put together. Composition using various forms of technology is included so familiarity with technology will be an asset. In-class solo and group performances occur regularly.

**MUSIC 122**

***Choral, Instrumental, Guitar, or Keyboarding***

***Recommended Prerequisite: Music 112***

Students enrolled in any strand of this course will have a strong interest in music. As part of this course, students will be expected to work individually and in small groups in composition, research, and performance. Students who successfully complete Music 122 will have a strong foundation to study music as a vocation after high school or to pursue it in post-secondary studies.

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

***Prerequisites: Financial & Workplace Math 110 or Foundations Math 110***

The purpose of this course is to refresh skills in mathematics developed throughout school in areas deemed essential for the successful completion of trades programs. Although the topics covered in this course are common to any math program, every effort is made to illustrate their usage in the trades' professions. Upon completion of this course students will receive a high school credit and, in addition, if they attend a trades' program at NBCC they may apply for the Math 1208 credit thus this course provides dual credit at high school and NBCC. Topics include: decimals, fractions, percentages, measurement, area, volume and perimeter.

**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 a health or wellness related field.

**OUTDOOR Education 110**

***Recommended Prerequisite: Grade 10 Health & Phys. Educ.***

This course will develop personal outdoor recreation skills based on environmental ethics. Students will learn many different outdoor skills. Possible topics covered include fire making, outdoor cooking, skiing, snowshoeing, tree identification, map reading, compass and gps, wild edible and poisonous plants, knot tying and archery. Students must be prepared to plan, lead and evaluate out-trip experiences from personal and group dynamics perspectives. Please note that it is recommended that students do not take this course and PE Leadership 120 during the same semester. **Enrolment is limited. Fee \$100**

### **PERSONAL INTEREST 1**

Designed for grade 12 students, the one 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.**

### **PERSONAL INTEREST 2**

Designed for grade 12 students, the 2- period/ 2 credit Personal Interest Block will appeal to those interested in an in-depth, self-directed exploration of a topic or subject of their own choosing. 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. They will need to be self-starters, highly motivated and able to work with minimal supervision. Students must follow safety guidelines and review and follow policies related to their projects.

Students will have approximately 160 hours to devote to their project during the school day, but extra time is often required outside of school. Due to the amount of time provided, the breadth, scope and expectations of the projects produced in the Personal Interest 1&2 course are greater than those of the one credit Personal Interest course. The outcomes for the Personal Interest course are based on the New Brunswick Global Competencies. **Application required—see Guidance.**

### **PHYSICAL EDUCATION LEADERSHIP 120**

**Recommended 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. Students are required to volunteer for 35 hours during the semester in and out of class time. Please note that it is recommended that students do not take this course and Outdoor Pursuits 110 during the same semester. **Enrolment is limited.**

**Course fee \$40.**

### **PHYSICS 111**

**Prerequisites: Science 10 & GMF Math 10;**  
**Recommended Co-Requisite: Foundations Math 110**

An enriched physics course for the motivated science student. Students employ the scientific method in gathering experimental data, and laboratory work is a major part of this course. Topics covered will be the same as those in Physics 112 but the depth of coverage will be greater and independent project work may be required. An average of 85%+ in Science 10 and Math 10 (GMF/NRF) is recommended for students taking this course.

### **PHYSICS 112**

**Prerequisites: Science 10; GMF Math 10**  
**Recommended Co-Requisite: Foundations Math 110**

Physics 112 is an introductory course into Physics, designed to have students' question and understand the physical world around them. 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 include 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 121**

***Prerequisite: Physics 111***

***Recommended Prerequisite Pre-Calculus 110***

Physics 121 utilizes the discovery approach. Students who choose this course must have a genuine interest in science and a better-than-average achievement in both science and mathematics. The student employs the scientific method in gathering experimental data. Laboratory work is a major part of this course. Topics covered will be the same as Physics 122 (vectors, dynamics II, Newton's laws', applications, momentum and energy conservation, projectile motion, circular motion, universal gravitation, Kepler's Laws, field theory, electrostatics, and electricity) but the depth of coverage will be greater and independent project work will be required.

### **PHYSICS 122**

***Prerequisites: Physics 112/111***

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

Students planning to take science or engineering at university should consider taking this course. This 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, dynamics II, Newton's laws', applications, momentum and energy conservation, projectile motion, circular motion, universal gravitation, Kepler's Laws, field theory, electrostatics, and electricity.

### **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 ideas in politics and help you understand why our leaders take such different approaches to making laws and shaping our world. You will learn to evaluate political ideas, understand political debate, and speak clearly about your political beliefs. This course is valuable for both political newbies and political enthusiasts.

### **POST-INTENSIVE FRENCH 110**

Continue to develop your French language skills through a variety of speaking, reading, and writing activities intended to improve French proficiency. The course is designed for students who have NOT been in French Immersion and focuses primarily on oral communication skills. Themes at this level include injustice, mysteries, and the power of photographs. Instruction, materials, and classroom interactions will be in French.

### **POST-INTENSIVE FRENCH 120**

Continue to develop your French language skills through a variety of speaking, reading, and writing activities intended to improve French proficiency. The course is designed for students who have NOT been in French Immersion and focuses primarily on oral communication skills. Themes of study include planning for the future, ecological challenges, and cultures of the World.

Students in this course will have the opportunity to participate in the French Oral Proficiency Interview and will receive a certificate from the Province of New Brunswick indicating their proficiency level. Instruction, materials, and classroom interactions will be in French.

### **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.

### **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.

### **PRE-CALCULUS 120B**

#### ***Prerequisite : Pre-Calculus 12A***

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 12A course.

### **PSYCHOLOGY 110**

The vision for this course is to introduce learners to the systematic and scientific study of behaviour and mental processes. The course therefore examines why we think, feel, and act the way we do. Students will have the opportunity to explore, reflect on, and think critically through a psychological lens. Students will apply a variety of psychological concepts to real-world situations to develop competencies in personal development and self-awareness. Learners in Psychology 11 will cover a variety of areas related to psychology including scientific methodologies, historical perspectives, psychological disorders, and potential career opportunities. Students can expect to participate in class discussions, self-reflection, interacting with media, and collaborating with peers. The topics will include brain structure and function, intelligence, states of consciousness, and ethical research design.

### **PSYCHOLOGY 120**

#### ***Prerequisite: Psychology 110***

This course will provide students with a deeper understanding and applications of psychological methodologies and specific areas of psychological application. Psychology 120 can be used as an admissions course in some universities.

### **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. ***Framing and Sheathing 110 must also be chosen.***  
***Lab fee \$15.***

### **ROBOTICS & AUTOMATED TECHNOLOGY 120**

This is a technical course that deals primarily in Pneumatic systems and EV3 robotics. Students will learn about the various components of Pneumatic systems used in industry and how they are utilized. Classes are largely lab based using hands-on training centers and actual equipment, to complete the lab exercises. The robotics part of this class will see students do a 6-8-week study on Engineering in Robotics using the Lego EV3 as a medium. Students will learn how to program the EV3 brick, download the program into a Robot they have built complete with various sensors and have it complete various tasks on its own. This is not remote-control robotics! The various sensors including, touch sound, sight and hearing will enable you to build an interactive robot capable of completing tasks entirely by itself.

### **SCIENCE 122 (ADVANCED)**

#### ***Prerequisite: Chemistry and Physics 11***

#### ***Co-requisites: Chemistry and Physics 12***

This course, which is the completion of topics from Chemistry 11 & 12 and Physics 11 & 12, will include study of magnetism, electromagnetism, atomic structure, quantum mechanics, nuclear physics, redox reactions and electrochemistry. This course is recommended for students contemplating university entrance into Science, Engineering, Forestry, Nursing, or other related fields.

### **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 and tries to explain 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. You will learn about topics such as: culture, race, crime, gender, social structure, social reform, religion, family, media and deviance.

### **SPANISH 120**

This course introduces the Spanish language and culture by developing listening, speaking, reading, and writing skills. Each thematic unit consists of new vocabulary and grammar concepts, reading and listening comprehension activities, speaking,



and writing activities, multimedia cultural presentations, and interactive activities to reinforce language acquisition. There is a strong emphasis on providing context and conversational examples for each language concept. Students should expect to be actively engaged in their own language learning, become familiar with common vocabulary terms and phrases, participate in simple conversations, and respond appropriately to basic conversational prompts

### **TUNE UP AND EMISSIONS 120**

This advanced automotive course includes the study of automobile fuel and emission systems. Students will study the component functions and service procedures of modern fuel injection and emission systems. This course would be of interest to students entering the automotive, aircraft or marine service industries. *Internal Combustion Engines 110 must also be chosen.*

### **VISUAL ARTS 110**

*Recommended Prerequisite: Visual Arts 10*

The student is given some opportunities to work independently and to explore in greater depth, materials and concepts touched on in Grade 10 Visual Arts. A look at several artists from Art History creates a background for various projects. This course requires students to have painting and drawing materials.

*Lab fee: \$10.*

### **VISUAL ARTS 120**

*Prerequisite: Visual Arts 110*

Visual Arts 120 is designed for students who wish to pursue art related interests or careers. Students will review skills and concepts previously learned in grade 11, and apply them to select media with the goal of creating interesting and technically advanced art. A look at several artists from Art History creates a background for various projects. Students will also critique aspects of their creative process and product.

*Lab fee: \$10.*

### **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, zumba, personal training, snow shoeing, dance, boxing, hiking, etc. This is an activity-based course that requires students to be physically active. Students that enroll in this course are expected to be prepared for physical activity by wearing proper clothing and taking part in all planned activities. Running is an essential portion of the course where students train and work up to completing an 8km run. This course studies holistic wellness and requires a wellness action plan within the community that takes the place of a written exam.

*Course fee: \$50.00*

### **WORLD ISSUES 120**

The world is big, diverse, and hard to understand. This course gives you the chance to learn about some of the major stories in the news and in recent history alongside your peers. When we understand the big picture, we are in a better place to live in and make positive change towards a fair and sustainable future around the globe. You will learn about the topics of humanity, sustainability, interdependence, and geopolitics. This course can count as your social studies credit.

### **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 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. Students will maintain a portfolio of their published pieces.

### **YOGA 110**

Yoga 11 introduces students to Yoga and its vast capacity to bring health to body, mind and emotions. The intention is for students to develop a lifelong personal practice of yoga not only to maintain exceptional physical condition, but also to develop healthy relationships with self and

others. Students will participate in various activities, including the physical practice, personal reflection, partner exercises, group discussion and classroom theory.

The physical aspect of yoga involves the acquisition and development of skills such as strength, flexibility, cardiovascular endurance, balance, regulation of energy through breathing and mental focus. All of these skills are of significant benefit to one's overall health and well-being as well as other physical pursuits.

Classroom sessions will address topics such as: the essentials of good nutrition, ethical principles (like kindness, generosity and mutual respect) and exercises which empower students to become positive and purposeful members of society.

**LOCAL OPTIONS**

*These courses have been developed by LHHS Departments and have been approved by the Department of Education to provide additional course selection opportunities for our students. Students may take up to two (2) courses to meet the graduation requirement of eighteen (18) courses*

**INDIGENOUS WABANAKI ART 110**

This is an introductory art course open to all students that introduces themes reflective of Native culture. Students will explore hands-on crafts such as bead work, paper-maché (mask/puppet) and mural creation

**INTRODUCTION TO DEBATE 110**

The most common activity in class will be prepared debates. Students will each take part in several debates and these will involve a number of different formats. They will be required to do research and develop logical arguments. Students

are expected to keep track of all arguments and responses. Some debates will be recorded and viewed later with the students for a more detailed analysis and critique. Students will also prepare and present a variety of other types of speeches including persuasive, after-dinner, and congratulatory speeches, as well as interpretive readings. Students will learn structure of arguments and how to use informal logic both to develop and attack arguments. These lessons will be reinforced by practice through both oral and written arguments drawn from class debates, the media, the Internet and everyday life.

**INTRODUCTORY WOLASTOQEY 110**

The primary objective of this course is to introduce students to the Wolastoqey language, their culture and traditions. Students will develop the ability to communicate orally in the Wolastoqey language. Students taking this course will learn to introduce themselves, have small conversations, and speak basic phrases while learning about Wolastoqey culture and oral traditions.

**LITERACY THROUGH GRAPHIC NOVELS 110**

Graphic novels have become a mainstream form of writing. This course will explore the genre and what makes it so unique. You will learn various writing techniques specific to graphic novels, literacy skills unique to graphic novels, as well as artistic ways to convey a message. Throughout the term, you will read a variety of graphic novels and explore their significance. You will also be required to write/illustrate your own graphic novel. While art skills are not a requirement, an interest in drawing/art will help. If you are a fan of the genre or are interested in learning more about graphic novels, this course is for you.

## Leo Hayes High School

### Courses with Required and Recommended Prerequisites and/or Application Requirements

Course	Recommended and Required Prerequisite/Application
Biology 111	Science 10 (recommended mark 85%)
Biology 121	science 10 (recommended mark 85%)
Calculus 120	Pre-Calculus 12A & 12B
Chemistry 111	Science, GMF10; Recommended Co-requisite -Foundations110
Chemistry 112	Science, GMF 10; Recommended Co-requisite -Foundations 110
Chemistry 121	Chemistry 111, Recommended pre-requisite; Foundations 110
Chemistry 122	Chemistry 112/111
Cooperative Education 120	<b>Application required.</b> Enrolment is limited.
Culinary Technology 120	Enrolment is limited; Culinary 110 Required
Early Childhood Coop (Intro to)	<b>Application required.</b> Enrolment is limited
English 111	English 10 (recommended mark 85%)
English 112	English 10
English 113	English 10
English 121	English 111
English 122	English 112
English 123	English 113
FI Language Arts 120	FI Language Arts 110
FI Foundations of Math 110	FI NRF & FI GMF 10
FI Pre-Calculus 110	FI Foundations of Mathematics 110
Financial & Workplace Math 110	Geometry, Measurement and Finance 10
Financial & Workplace Math 120	Financial & Workplace Math 110 or Foundations 110
Foundations of Math 110	NRF 10 & GMF10
Foundations of Math 120	Foundations of Mathematics 110
Long Term Care Coop	<b>Application required.</b> Enrolment is limited
NBCC Skilled Trades Math 120	Either grade 11 math credit (Foundations of Financial)
Music 112 (Choral)	Recommended pre-requisite; Music 10
Music 112 (Guitar)	Recommended pre-requisite; Music 10
Music 112 (Instrumental)	Recommended pre-requisite; Music 10
Music 112 (Keyboarding)	Recommended pre-requisite; Music 10
Music 122	Music 112
Outdoor Education 110	Recommended pre-requisite; Health & Physical Education 10 Enrolment is limited; not all students will be selected
Personal Interest 1 & 2	<b>Application required</b>
Post Intensive French 122	Post Intensive French 112
Physical Education Leadership 120	Recommended pre-requisite; Health & Physical Education 10 Enrolment is limited; not all students will be selected
Physics 111	Science, GMF 10; Recommended Co-requisite-Foundations 110
Physics 112	Science, GMF 10; Recommended Co-requisite-Foundations 110
Physics 121	Physics 111 Recommend Pre-requisite; Pre-Calculus 110
Physics 122	Physics 112/111; Recommended Pre-requisite; Pre-Calculus 110
Pre-Calculus 110	Foundations 110
Pre-Calculus 12A	Pre-Calculus 110
Pre-Calculus 12B	Pre-Calculus 12A
Science 122 (Advanced)	Chemistry & Physics 112/111
Visual Arts 110	Recommended pre-requisite; Visual Arts 10
Visual Arts 120	Recommended pre-requisite; Visual Arts 110
Wellness through Physical Education 110	Recommended pre-requisite; Health and PE 10 Enrolment is limited; not all students will be selected
Yoga 110	Enrolment is limited; not all students will be selected

Leo Hayes High School  
**GRADE 11 & 12 COURSE SELECTION PLANNING FORM 2023/24**

Name: \_\_\_\_\_

Homeroom: \_\_\_\_\_

**Students Entering Grade 11**

Please refer to page 6 of the course guide for course requirements.

- |   |  |
|---|--|
| 1. Eng. Lang. Arts Lit Text 11_____   | 9. _____   |
| 2. Eng. Lang. Arts Info Text 11_____  | 10. _____  |
| 3. Financial and Workplace 110 <b>OR</b><br>Foundations of Math 110<br>FI Foundations of Math 110 | Chose 3 alternate courses and list<br>them in order of preference:<br>Alternate #1:<br>_____ |
| 4. Humanities _____   | Alternate #2:<br>_____   |
| 5. Science _____  | Alternate #3:<br>_____   |
| 6. Fine Arts/ Life Role _____   | _____  |
| 7. _____  | _____  |
| 8. _____  | _____  |

**Students entering Grade 12**

Please refer to page 6 of the course guide for course requirements

- |                    |   |
|--------------------|---|
| 1. English 12_____ | Choose 3 alternate courses and list<br>them in order of preference:<br>Alternate #1: _____  |
| 2. _____           | Alternate #2: _____   |
| 3. _____           | Alternate #3: _____   |
| 4. _____           | ***You need two of the following Math<br>courses to graduate (NRF 10, Foundations<br>110, Fin & Workplace 110, Fin &<br>Workplace 120 OR NBCC Skilled Trades<br>Math 120) *** |
| 5. _____           | _____   |
| 6. _____           | _____   |
| 7. _____           | _____   |
| 8. _____           | _____   |
| 9. _____           | _____   |
| 10. _____          | _____   |

## Humanities Options

- Canadian History 122
- Indigenous studies 120
- FI/FSL Modern History 112
- Modern History 111, 112 or 113
- Sociology 120

## Science Options

- Automotive Electrical Systems 120
- Biology 11 or 12
- Chemistry 11 or 12
- Environmental Geoscience 110
- Human Physiology 110
- Introduction to Electronics 110
- Introduction to Environmental Science 120
- Micro Electronics 110
- Physics 11 or 12
- Robotics and automated Technology 120

**\*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
- Cooperative Education 120
- Creative Arts 110
- Culinary Technology 110/120
- Dramatic arts 110/120
- Early Childhood Coop 120
- Electrical Wiring 110
- Entrepreneurship 110
- Fashion Technology & Design 110
- FI Family Relations 120
- Framing and Sheathing 110
- Graphic art and Design 110
- Growth, Goals and Grit 120
- Housing and Interior Design 120
- Individual Family Dynamics 120
- Internal Combustion Engines 110
- Introduction to Applied Technology 110
- Long Term Care Coop 120
- Metals Fabrication 110
- Metals Processing 110
- Mill and Cabinet Work 110
- 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
- Tune-up and Emissions 120
- Visual Arts 110/120
- Wellness through Physical Education 110
- Yoga 110

