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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 2018 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.

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. Please note that all grade 10 courses are required for graduation and are prerequisites for most grade 11 courses.

Homeroom teachers and guidance counselors 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 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

Student Course Loads & Credit Requirements

Students are required to take a full course load of five courses each semester of grades 11 and 12. Grade 11 students must have successfully completed seven credits to continue in their grade 12 homeroom the following school year. Students must attempt a total of 20 credits and attend for four semesters in order to be eligible to graduate. 17 out of 20 credits in grades 11 and 12 must be passed with a minimum mark of 60% to be eligible for graduation.

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: Entrepreneu

Level 2 courses are academic/university/college preparatory.

Level 3 courses are general/college preparatory.

Level 1 courses are enriched university preparatory.

ex: Entrepreneurship 110, Calculus 120

ex: Music 112, Biology 122

ex: Modern History 113, English 123

ex: English 111, Physics 121

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. See page 31 for a listing of courses requiring prerequisites.

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 (ex. Foundations 110 and Chemistry 112).

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 March 30th to the guidance department. **See page 31.**

Student Timetables:

Timetables are computer-generated to best match the maximum number of student requests and therefore courses fall by chance into either semester. For senior students, certain courses required for university and college will not be completed in the first semester. However, applications to post-secondary institutions are usually assessed on past, present and predicted performance at the time of application.

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.

Choose your courses carefully.

- The number of classes offered in any given subject is dependent upon the number of students choosing that course at the time of course selection in spring.
- Once registered for a course, a commitment to regular attendance and course completion is expected.

Transcripts:

All grade 11 and 12 courses and their final marks are permanently recorded on a student's transcript. The school transcript provides an on-going 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.

Transfer Students and External Credits

Students transferring to LHHS from other school systems will have their transcript assessed and graduation requirements adjusted accordingly. Every effort will be made to give credit for acceptable work completed.

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 in 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. **Placements in trades related areas may be used as hours credited towards apprenticeship.** See your guidance counselor for more information.

Focus on Information Technology Program (FIT Certificate)

The FIT Concentrations and Competencies Framework is designed to introduce students in high school to the basic work and digital literacy competencies that most people will need in the 21st Century. It provides high school students with technology and business/entrepreneurial skills and with essential workplace skills and experience. The FIT program uses regular high school courses in business, co-op and technology to provide students with the skills needed for a career in information technology. Students complete courses in two general areas and one specialized area (called a Concentration). See a guidance counsellor or technology teacher for more information.

FIT Program

General Skills Part of all FIT Programs:		Four Areas of Concentration Choose One:					
Part of all F	ii Programs:				I		
General	General	Business and Software Network and Interactive					
Technical	Business	Information	Design and	Systems Media			
		Analysis	Development	Operation			
Course:	<u>Course</u> :						
Information	Business	<u>Course</u> :	Course:	<u>Course</u> :	<u>Course</u> :		
Technology	Organization	Entrepreneurship	Computer	Technical	Digital		
120	and	110	Science 110	Support 110	Productions		
	Management				120		
	120						

Trades Course Option at FHS

This program provides the opportunity to enroll in two trades related courses held at FHS in the afternoon while attending LHHS in the morning. <u>Students must enroll in both courses.</u> Transportation by bus from LHHS to FHS and return is 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 conduct.

Fine Arts Certificate Program

Any student who attends LHHS for more than one year is eligible to apply for this program. If students are interested in earning the LHHS Fine Arts Certificate (FAC) they should consult a Fine Arts teacher in grade 9 or early in the grade 10 year. The minimum requirement will take about 2.5 years to complete and will take careful planning.

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. There are two tracks that a student can follow in pursuit of this certificate. Track A is for students involved in art and music and the many extracurricular activities our school offers. Track B involves having a deep commitment to one of the Fine Arts areas. See a Fine Arts teacher for more information.

French Immersion Program

CERTIFICATE OF IMMERSION

This certificate is issued by Anglophone School District West and is offered to all students who have completed at least **ten** courses in the **Immersion Program** during grades 10, 11 and 12 (50% of grade 10; 25% of grades 11 & 12 over the two years). A complete listing of LHHS' F.I. courses can be found on the Index of Courses by Cluster, page 8.

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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 after an 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.

Mathematics Program Pathways

The NB mathematics curriculum requires grade 10 students to <u>successfully complete two grade 10 math courses</u> as part of the grade 10 compulsory program. Upon entering grade 11, students have the option of following one of three mathematics pathways. <u>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 Counsellors and/or Math teachers may be contacted.</u>

Grade 10

Geometry, Measurement and Finance 10

AND

Number, Relations and Functions 10

Grade 11

Students must pass either "Financial and Workplace Mathematics 11" or "Foundations of Mathematics 11" for graduation

Financial and Workplace Mathematics 110

<u>Prerequisite:</u> Geometry, Measurement and Finance 10

Foundations of Mathematics 110

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

Pre-Calculus 110

<u>Prerequisite or Co-requisite:</u>
Foundations of
Mathematics 11

Grade 12

All elective courses; students must pass the corresponding Grade 11 prerequisite course.

Financial and Workplace Mathematics 120

<u>Prerequisite</u>: Financial and Workplace Mathematics 11

Foundations of Mathematics 12

<u>Prerequisite</u>: Foundations of Mathematics 110

Pre-Calculus 12A

Prerequisite: Pre-Calculus 11

Pre-Calculus 12B

Prerequisite: Pre-Calculus 12A

Calculus 120

Prerequisite:Pre-Calculus12A&B

Students and parents should research post-secondary requirements for programs of interest. Requirements vary from school to school.

Financial Workplace 110-Entrance into a Bachelor of Arts, Fine Arts, Social Sciences and various college programs that don't require further math. Foundations 110 & 120-Bachelor of Nursing, BBA at some universities, such as Acadia, SMU (not UNB)

Foundations 110, Pre-Cal 110, 120A, 120B-Bachelor of Science and all Science related degrees, Comp. Science, Engineering, Some BBA programs (UNB)

New Brunswick High School Graduation Requirements

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

- o Complete the entire Grade 9-10 program
- Pass 17 out of 20 credits in Grades 11-12, seven of which are compulsory courses listed below
- o Five of these credits must be from Grade 12 courses including English
- Pass the English Language Proficiency Assessment
- Have no more than two local option courses out of the 17 required courses

Compulsory (must select and pass) courses

- English 11 (full-year course, 2 credits)
- o Financial and Workplace Mathematics 11 OR Foundations of Mathematics 11 (1credit)
- Science (1 credit) (see list of options below)
- History 11 (1 credit)
- o Fine Arts & Life Role Development (1 credit) (see list of options below)
- o English 12 (1 credit)

*Notes-

French Immersion students must have five of their 20 credits (over the two years) in French to obtain their FI certificate in grade 12.

To be eligible for the oral proficiency interview in grade 12, a grade 12 French course must be taken in grade 12.

Science Options

Physics Biology Chemistry

Human Physiology 110

Introduction to Environmental Science 120

Introduction to Electronics 110

Micro Electronics 120

Physical Geography 110

Robotics and Automated Technology 120

Automotive Electrical Systems 120

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

Fine Arts and Life/Role Credit Options

Career Exploration 110
Cooperative Education 120
Entrepreneurship 110
Individual & Family Dynamics 120
Fine Arts 110
Graphic Art & Design 110
Physical Education Leadership 120
Music 111/2, 113, 120, 122
Outdoor Pursuits 110*
Reading Tutor 120
Theatre Arts 120
Visual Arts 110, 120

Wellness through Physical Education 110

*Army, Air, Sea Cadet courses may be combined and used as Challenge for Credit for Outdoor Pursuits 110 or PE Leadership 120. See Guidance Counsellor.

COURSE CLUSTER INDEX GRADE 11-12 COURSES 2018-2019

BUSINESS AND RELATED COURSES	FRENCH IMMERSION COURSES
Accounting 120	FI Biology 112
Advanced Keyboarding 110	FI Individual Family Dynamics 120
Business Organization & Management 120	FI Language Arts 110
Economics 120	FI Language Arts 120
Entrepreneurship 110	FI Modern History 112
Hospitality & Tourism 110	FI Financial Workplace Math 110
Marketing 120	FI Foundations of Mathematics 11
CAREER AND TRANSITION PREPARATION	FI Pre-Calculus 110
Career Exploration 110	FI Techniques de Communication 120
Cooperative Education 120	INFO COMMUNICATION TECH & DESIGN
Senior Project 120	Applied Technology 110 (Introduction to)
ENGLISH AND RELATED COURSES	Computer Aided Design 110
Canadian Literature 120	Computer Science 110 (Intro to Gaming)
English 111	Computer Science 120
English 112	Digital Production 120
English 113	Electronics 110 (Introduction To)
English 121	Housing and Interior Design 120
English 122	Information Technology 120
English 123	Microelectronics 120
Journalism 120	PCMT (Per. Comp. & Maintenance)120
Media Studies 120	Robotics and Automated Technology 120
Reading Tutor 120	Tech Support 110
Women, Media and Culture 120	LANGUAGES
Writing 110	Mandarin 120
FINE ARTS	Post Intensive French 110
Aboriginal Art 110	Post Intensive French 120
Fine Arts 110	Spanish 120
Graphic Arts & Design 110	LIFE STUDIES
Visual Arts 110	Child Studies 120
Visual Arts 120	Early Childhood Services 110
Music 112 (Choral)	Human Services 110
Music 112 (Guitar)	Independent Living 110
Music 112 (Instrumental)	Individual and Family Dynamics 120
Music 112 (Keyboarding)	Nutrition for Healthy Living 120
Music 120 (World Music)	Psychology 110
Music 122	
Theatre Arts 120	

MATH	TRADES
Financial & Workplace Mathematics 110	Applied Technology 110 (Introduction to)
Financial & Workplace Mathematics 120	Culinary Technology 110
Foundations of Mathematics 110	Culinary Technology 120
Foundations of Mathematics 120	Mill and Cabinet Work 120
Pre-Calculus 110	
Pre-Calculus 12A	TRADES COURSE OPTIONS AT FHS
Pre-Calculus 12B	SEMESTER 1
Calculus 120	Metals Fabrications 110 and
PHYSICAL EDUCATION & HEALTH	Metals Processing 110
Outdoor Pursuits 110	-
Physical Education Leadership 120	SEMESTER 2
Wellness Through Physical Education 110	Power Train and Chassis 110 and
SCIENCE	Automotive Electrical Services 120
Biology 111	
Biology 112	LOCAL OPTIONS
Biology 121	Aboriginal Art 110
Biology 122	Advanced Keyboarding 110
Chemistry 111	Exercise Science 120
Chemistry 112	FI Tech de Com 120
Chemistry 121	Independent Living 110
Chemistry 122	Introduction to Debate 110
Environmental Sci. 120 (Introduction to)	Mandarin 120
Human Physiology 110	Marketing 120
Physical Geography 110	Psychology 110
Physics 111	Senior Project 120
Physics 112	Women Media and Culture 120
Physics 121	World History 120
Physics 122	
Science 122 (Advanced)	
SOCIAL STUDIES	
Canadian Geography 120	
Canadian History 122	
Debate 110 (Introduction to)	
Law 120	
Modern History 111	
Modern History 112	
Modern History 113	
Native Studies 120	
Political Science 120	
World Issues 120	

ALPHABETICAL INDEX GRADE 11-12 COURSES 2018-2019

Course	Page	Course	Page
Aboriginal Art 110	28	Entrepreneurship 110	17
Accounting 120 (Introduction to)	12	Environmental Science 120 (Intro to)	17
Advanced Keyboarding 110	29	Exercise Science 120	29
Applied Technology 110 (Introduction to)	12	FI Biology 112	18
Automotive Electrical Services 120	12	FI Financial Workplace Math 110	18
Biology 111	12	FI Foundations of Mathematics 110	18
Biology 112	12	FI Individual Family Dynamics 120	18
		(Relations Familiales)	
Biology 121	12	FI Language Arts 110	18
Biology 122	13	FI Language Arts 120	19
Business Org. & Management 120	13	FI Modern History 112	19
Calculus 120	13	FI Pre-Calculus 110	19
Canadian Geography 120	13	FI Techniques de Communication 120	29
Canadian History 122	13	Financial and Workplace Mathematics 110	19
Canadian Literature 120	13	Financial and Workplace Mathematics 120	19
Career Exploration 110	14	Fine Arts 110	19
Chemistry 111	14	Foundations of Mathematics 110	19
Chemistry 112	14	Foundations of Mathematics 120	20
Chemistry 121	14	Graphic Arts & Design 110	20
Chemistry 122	14	Hospitality and Tourism 110	20
Child Studies 120	15	Housing and Interior Design 120	20
Computer Aided Design 110	15	Human Physiology 110	20
Computer Science 110 (Intro to Gaming)	15	Human Services 110	20
Computer Science 120	15	Independent Living 110	29
Cooperative Education 120	15	Individual Family Dynamics 120	21
Culinary Technology 110	15	Information Technology 120	21
Culinary Technology 120	16	Journalism 120	21
Debate 110 (Introduction to)	29	Law 120	21
Digital Production 120	16	Mandarin 120	29
Early Childhood Services 110	16	Marketing 120	30
Economics 120	16	Media Studies 120	21
Electronics 110 (Introduction to)	16	Metals Fabrication 110	22
English 111	16	Metals Processing 110	22
English 112	17	Microelectronics 120	22
English 113	17	Mill and Cabinet Work 120	22
English 121	17	Modern History 111	22
English 122	17	Modern History 112	22
English 123	17	Modern History 113	22

Music 112 (Choral)	22	Robotics & Automated Technology 120	27
Music 112 (Guitar)	23	Science 122 (Advanced)	27
Music 112 (Instrumental)	23	Senior Project 120	27
Music 112 (Keyboarding)	23	Sociology 120	27
Music 120 (World Music)	23	Spanish 120	27
Music 122	23	Tech Support 110	27
Native Studies 120	23	Theatre Arts 120	27
Nutrition for Healthy Living 120	24	Tune Up and Emissions 120	27
Outdoor Pursuits 110	24	Visual Arts 110	28
PCMT (Per Comp. & Maintenance) 120	24	Visual Arts 120	28
Physical Education Leadership 120	24	Wellness through Physical Education 110	28
Physical Geography 110	24	Women, Media and Culture 120	30
Physics 111	25	World Issues 120	28
Physics 112	25	World History 120	30
Physics 121	25	Writing 110	28
Physics 122	25		
Political Science 120	25		
Post Intensive French 110	25		
Post Intensive French 120	26		
Power Train and Chassis 110	26		
Pre-Calculus 110	26		
Pre-Calculus 12A	26		
Pre-Calculus 12B	26		
Psychology 110	30		
Reading Tutor 120	26		

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

ACCOUNTING 120 (Introduction to)

This course is an introduction to the profession of Accounting/General Book Keeping. Students interested in the day to day operation and ownership of a business will be provided the basic accounting principles and practices with which to gather, analyze and process financial information in a form that provides business with accurate meaningful records. The concentrated areas of study include:

- Accounting Careers, Concepts and Principles
- Accounting Life Cycle for a Sole Proprietorship
- Banking

This course may be used for admission to UNB.

APPLIED TECHNOLOGY 110 (INTRODUCTION TO)

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 tools both hand held, stationary and power tools. The following topics will be covered in the semester:

- Safety
- Machine instruction
- Wood working (deck chair, clock)
- Ceramic tile project (dinner tray)
- Design project
- Reading Blue Prints

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

Lab fee: \$50 (safety glasses, hearing protection, clock mechanism, Tray Project/ceramic tiles, deck chair and consumables)

AUTOMOTIVE ELECTRICAL SERVICES 120

This course introduces the student to the theory and operation of automobile electrical systems. Students will study the principles of electricity that includes electron theory, magnetism, and electrical systems and will then progress from the study of individual components such as coils, distributors, and alternators to the study of systems as a whole. Charging, ignition, and starting systems will be the main focus. This course also includes an

introduction to engine management systems, scanning, and diagnostics. This course may be used as a science credit. Power Train and Chassis must also be selected if you choose this course.

BIOLOGY 111

Prerequisite: Science 10
Teacher recommendation

Biology 111 is an advanced course that includes the following topics: microscopy, cellular organics, 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

Prerequisite: Science 10

This course is designed for students who plan to proceed to university or community college. Topics include: microscopy, cellular organics, and principles of taxonomy, microorganisms and kingdoms of life. Students will take part in laboratory sessions (including dissections) and will be assigned projects based on curriculum components. Lab fee \$5.00

BIOLOGY 121

Prerequisite: Science 10

Recommended Prerequisite: Bio 111

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

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.

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.
 This course is also a general skills credit for the FIT certification (Focus on Information Technology Program)

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 for more details. This course will only be offered in semester two.

CANADIAN GEOGRAPHY 120

Where we live plays a tremendous role in our culture and our livelihood. This course is a study of the ever-changing cultural and physical landscapes of Canada and how they impact each other. It considers where things are, why they are there, and the significance of these with respect to our day-to-day lives and future patterns. Included is an examination of environmental issues that affect the lives of all Canadians. Students will use a wide range of new skills and information to project a vision of Canada in the future. Geography 120 is accepted for university entrance.

CANADIAN HISTORY 122

Prerequisite: History 111/112 (recommended mark of 70%)

This course explores the deep and often complex history of Canada since confederation. It includes the study of immigration, industrialism, American and British influence, Canada's participation in World Wars, the French-English dynamic, and multiculturalism. Students will explore Canada's current strengths and weaknesses and its place on the global scene. This course will integrate visuals, Canadian literature, music and textbook work.

CANADIAN LITERATURE 120

This course is for Grade 12 students who love literature and want to further explore an interest in Canadian texts. The course offers opportunities to examine and respond personally and critically to our rich literary heritage by featuring texts, written in or about a social, a political, and/or cultural time which provide snapshots of time and place in Canada. The ultimate goal of the course is to approach and examine texts in a way which will launch a life-long appreciation for Canadian writing. A fundamental principle of this course is that students assume responsibility for their own learning through inquiry into an area of interest. Self-motivation and independence are key characteristics for success in the course.

CAREER EXPLORATION 110

Are you looking for an opportunity to explore possible career options, gain actual work experience and earn two credits while still in school? Career Exploration will allow you to explore and identify personal characteristics, consider various career paths and develop skills in the workplace. Trades related placement hours can be credited towards Apprenticeship Certification. FI students may have one credit applied toward an FI Certificate if their placement requires regular usage of French. Due to the out-of-school workplace component of this course, an application and interview process will consider teacher required that 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.

CHEMISTRY 111

Prerequisites: Science 10; NRF & GMF Math 10; Pre/Co-requisite: Foundations Math 110; Teacher recommendation

Chemistry 111 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. 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. A mark of 85%+ in Science 10 and Math 10 (GMF/NRF) is recommended for students taking this course. Lab fee \$5.00.

CHEMISTRY 112

Prerequisites: Science 10; NRF & GMF Math 10 Pre/Co-requisite: Foundations Math 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. Lab fee \$5.00.

CHEMISTRY 121

Prerequisites: Chemistry 111 (112 w/Teacher recommendation), Foundations Math 110 Chemistry 121 is designed for students who are interested in pursuing science, engineering or related field at the postsecondary 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 (or teacher recommendation in Chemistry 112) is recommended for students taking this course. Lab fee \$5.00.

CHEMISTRY 122

Prerequisite: Chemistry 112/1; Fnd.Math 110
Chemistry 122 is designed 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 have the opportunity to perform lab experiments to support their understanding of these concepts. 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 intensive theory course designed for students who have in 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

CAD 110 offers students an opportunity to learn create architectural/technical drawings using Auto Cad software. Students will learn how to create orthographic technical views well become competent in a as comprehensive software package, Auto Cad 2016. 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. 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 secondary programs. The software used in this course is Java.

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 though 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. FI students may have one credit applied toward an FI Certificate if their placement requires regular usage of French. Due to the out-of-school workplace component of this course, an application and interview process 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.

CULINARY TECHNOLOGY 110

Culinary Technology 110 is an entry level handson 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

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. Co-Op 120 may also want to be considered. *Lab fee:* \$25. Application required-see Guidance

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).

EARLY CHILDHOOD SERVICES 110

This practical course explores the role of the caregiver and the child care profession. It is a study of early childhood education, studying children from the early times to the day care centres of today. Child theorists such as Montessori and Piaget are explored. The four areas of child development are studied in

children from birth to five years old. Other topics include health and safety, playground equipment and running a daycare.

Mandatory Component: Observation at a child care centre arranged by the student.

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. It is highly recommended that students successfully complete English 112 before attempting this course.

ELECTRONICS 110 (INTRODUCTION TO) 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. This course meets the science graduation requirement.

ENGLISH 111

Prerequisite: English 10; Successful evaluation on the grade nine English Language Proficiency Assessment. Before choosing this course, you should have the written recommendation of your Grade 10 English teacher. You may use a mark of 85% as a guideline.

This year-long course worth two credits is designed for students wishing to pursue the study of English at a more advanced pace and scope. Areas of study include short stories, essays, poetry, a Shakespearean play and novels. Formal and informal presentations (including a speech), a formal essay and various forms of written composition are required. **Students will be required to read a pre-determined selection**

of summer readings from a Reading List provided in June.

ENGLISH 112

Prerequisite: English 10; Successful evaluation on the grade nine English Language Proficiency Assessment is highly recommended and a mark of 70% or greater in grade 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 (i.e. short stories, fiction, poetry, drama etc.) including opportunities for personal choice will be the focus of your reading and viewing experiences.

ENGLISH 113

Prerequisite: English 10

This mandatory, 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 121

Prerequisite: English 111

This semester course is designed for students wishing to pursue the study of English at a more advanced pace and scope. Areas of study include short stories, essays, poetry, a Shakespearean play, and novels. Formal and informal presentations, a formal essay and various forms

of written composition are required. Students will be required to read a pre-determined selection of summer readings from a Reading List provided in June.

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, a 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

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

ENVIRONMENTAL SCIENCE 120 (INTRO TO)

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 (local and global) and for communicating their knowledge and analysis to others. Students will investigate population

growth and resource limitations, ecology of natural systems, historical and current perspectives of the environment from various world views, recognize the ways we value the environment, and look at other topics connect to the environment. They will explore the interconnectedness of natural ecosystems and human dependence and impact on these systems. Each student will research a current environmental issue and in groups will explore current solutions to environmental problems and share their findings with the class. Students will also choose from an extensive list, a few projects that suit their interest (i.e. Outdoor activities, art, research, photography, etc.), with the aim of increasing their appreciation/respect/understanding of the environment. This course meets the science credit graduation requirement.

F.I. BIOLOGY 112

Prerequisite: F.I. 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.

F.I. FINANCIAL & WORKPLACE MATHEMATICS 110

Prerequisite: F.I. 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.

F.I. 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. *This course fulfills graduation requirements for mathematics.*

F.I. 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 everchanging 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. This course follows the same themes as the English version.

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, participate in group role play scenarios and will study and perform a French play.

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

F.I. MODERN HISTORY 112

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

History is the story of the human community-how people lived, how people shared ideas, how they ruled and were ruled, and how they fought. Modern History is a journey through historical development from the French Revolution to the Cold War. In this course you will learn about big ideas that have shaped the world we live in today. This course will count towards a French Immersion certificate.

F.I. PRE-CALCULUS 110

Prerequisite: Foundations of Mathematics 11

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.

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*.

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.

FINE ARTS 110

This elective course requires no previous experience and is intended to give students exposure to the arts. Content areas include music, art, drama, and literature. Students will be expected to take part in discussions concerning the value of art and will explore artists and art institutions at the local, provincial and international level. Art History will be explored and visual works will be created to demonstrate an understanding of an art movement of your choice. Students will discover the elements of music, create and use nontraditional instruments and explore the meaning of lyrics. The focus of this course is performance based and there will be several opportunities to share and present work for the class. Students will create puppets and write and act in a play. Final projects will allow students to create expressive works using visual arts, music or drama. This course meets the Fine Arts/Life Role Development graduation requirement.

Lab fee: \$10.

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. *This course fulfills graduation requirements for mathematics.*

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.

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.

GRAPHIC ARTS AND DESIGN 110

Prerequisite: Grade 10 Visual Arts.
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. Course meets the Fine Arts/Life Role Development graduation requirement. Lab fee: \$5

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 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.

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.

HUMAN SERVICES 110

Do you enjoy working with people? Does helping people make you happy? Geriatrics/Human Services is one of the fastest growing areas for job opportunities. Due to the increasing elderly population and the trend towards "at home care" versus "institution care," there is a need for trained human service workers. The overall aim of Human Services is to increase students' awareness of the importance of human service work and prepare them for future employment and/or post-

secondary education. The course will focus on the skills to prepare people to work with the elderly and the handicapped. There is a potential for community activities.

INDIVIDUAL AND FAMILY DYNAMICS 120

Who am I? Why am I here? Are you trying to understand yourself, life, love, or family? These are just a few of the questions and topics you will explore in this course. Individual and Family Dynamics 120 will help you gain a better understanding of who you are, how your personality influences your relationships, the effect of your place in the family and society, and the impact of society on family and individual wellness. Students will learn strategies on how to cope with the everchanging issues that impact our lives, and the skills and information necessary to make informed decisions about personal development, lifestyle choices, and healthy relationships. This course is an excellent introduction to further studies in psychology, sociology, teaching, social work, and family life education. Individual and Family Dynamics 120 meets the Fine Arts/Life Role Development graduation requirement.

INFORMATION TECHNOLOGY 120

IT 120 offers students the opportunity to become competent using information processing tools in Microsoft Office 2010. Word processing, worksheets, presentations, and data processing 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.

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. Students who have taken Writing 110 or who have done well in English or History courses might be interested in Journalism 120. 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.

LAW 120

Who writes the law? Who enforces the law? How does the law impact my life? What are my rights? The aim of the course is to provide students with a basic understanding of the Canadian Legal System. While the course does have a theoretical side, it is designed to be highly interactive. Students will be encouraged to engage in discussion and debate and share ideas freely with the class.

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.

METALS FABRICATION 110

Students in this welding course develop basic skills in the safe use of arc and MIG welding equipment, instruction is also provided in oxygen-acetylene and plasma cutting equipment as well as machine and equipment used to cut and form metals. Students use a modern, well equipped welding shop to construct or repair products such as furniture and cargo trailers. The course will appeal to students interested in exploring opportunities in metal working, mechanical servicing and other skilled trades. Metals Processing 110 must also be selected.

METALS PROCESSING 110

This course develops skills in the operation of lathes, shapers, grinders and milling machines in the lab, students learn a variety of processes used to form parts for machines and tools. This course would appeal to students interested in pursuing a career in the mechanic or machines trades, mechanical engineering or mechanical technology area. Metals Fabrication 110 must also be selected.

MICROELECTRONICS 120

Recommended Prerequisite: Electronics 110 (Introduction To)

Through theory and practical labs, this course is designed to introduce students to the world of semiconductors and digital electronics.

Students planning a career at the electrical occupational or engineering levels, or who have a keen interest in electronics/computers should consider this course. This course meets the science graduation requirement.

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 first project, a night stand with traditional face frame construction. Other projects include kitchen

cupboards both lower and upper, built on the 32 mm system. If you have a project that falls within the curriculum it is possible for you to build it providing you pay for materials. Lab fee: \$50 (It is recommended students have already taken Intro to Applied Tech)

MODERN HISTORY 111

Prerequisite: Recommended mark of 80% and recommendation of Social Studies 10 teacher.

History 111 closely mirrors History 112 in the exploration of big ideas and modern developments in our history. As a level 1 course students with be exposed to more independent work, project-based learning and primary source discovery. This is a course for selfmotivated history lovers.

MODERN HISTORY 112

Prerequisite: Social Studies 10 (recommended mark 70%)

History is the story of the human community-how people lived, how people shared ideas, how they ruled and were ruled, and how they fought. Modern History is a journey through historical development from the French Revolution to the Cold War. In this course you will learn about big ideas that have shaped the world we live in today.

MODERN HISTORY 113

Prerequisite: Social Studies 10

A journey through the major events and ideas of Modern History, this course begins with 18th century revolution and travels through the industrial age, world wars, the Roaring Twenties and Dirty Thirties all the way to the Cold War and current events. Students will learn the basics of thinking like a historian as they analyze our recent past.

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. Inclass solo and group performances occur regularly. Course meets the Fine Arts/Life Role Development graduation requirement.

MUSIC 112 (GUITAR)

Prerequisite: Grade 10 Music

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

MUSIC 112 (INSTRUMENTAL) Prerequisite: Grade 10 Music

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

MUSIC 112 (KEYBOARDING) Prerequisite: Grade 10 Music

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

MUSIC 120 (WORLD MUSIC)

This is a researched based course designed for students who are interested in music and wish to learn more about it regardless of their background. It is an exploration of music of the World from both a historical and contemporary context. Students will choose from several focuses including music of Africa, Latin America, Asia, 20th Century, the Maritimes and Aboriginal cultures. Each unit includes an opportunity for self-directed research into areas of interest.

MUSIC 122

Choral, Instrumental or Keyboarding 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. Course meets the Fine Arts/Life Role Development graduation requirement.

NATIVE STUDIES 120

This course is designed to promote understanding of the Mi'kmaq and Maliseet cultures in the Maritime provinces-past, present, and future-and to see how Native and non-Native views have influenced the course of events in the Maritimes. Some of the units to be considered are language and culture, religion and spirituality, ancient times, arts and crafts, community and colonial relations. This elective course is open to all grade 11 and 12 students who are interested in developing an understanding of Native culture and their perspectives on various native issues.

NUTRITION FOR HEALTHY LIVING 120 Recommended Prerequisite: Science 10

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.

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 Development graduation requirement. Please note that it is recommended that students do not take this course and Phys. Educ. 120 during the same semester. Course fee: \$100

Application required-see Guidance.

PCMT CO-OP 120 (PERSONAL COMPUTER MAINTENANCE & TROUBLESHOOTING)

Recommended Prerequisite: Tech Support 110/ previous computer experience (approval of instructor by demonstration of knowledge)

PCMT Co-Op 120 qualifies as a 1 credit on-site Co-Op placement with an emphasis on providing technical support for LHHS. Students disassemble and assemble computers and provide service & repair of computer hardware. Regular software upgrades, installation of new

software and troubleshooting individual systems are regular activities which will have to be performed. An interest in computers, a desire to learn and a good work ethic are required.

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. Students are required to volunteer for 35 hours during the semester in and out of class time. This course meets the Fine Arts/Life Role Development graduation requirement. Please note that it is recommended that students do not take Outdoor Pursuits 110 and Phys. Ed. 120 during the same semester.

Application required-see Guidance.

PHYSICAL GEOGRAPHY 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. "A Portrait of a Planet" involves students in an examination of the current state of planet Earth. Students will determine how it the Earth came to be the way it is today and look at the long-term future of the planet and its passengers. The course is particularly recommended to students who are interested in the scientific fields of astronomy, oceanography, geology, meteorology, mapping, or urban and rural planning. The course also presents an introduction to skills and methods that are basic to further study of survey engineering.

PHYSICS 111

Prerequisites: Science 10; NRF & GMF Math 10;

Teacher recommendation

Pre/Co-Requisite: Foundations Math 110

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, 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; NRF & GMF Math 10 Pre/Co-Requisite: Foundations Math 110

This course is the first of two 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 fields as engineering, 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 (112 w/ Teacher recommendation); Foundations Math 110 Recommended Prerequisite-Calculus 110

Physics 121 utilizes the discovery approach. Students who choose this course must have a genuine interest in science and a better-thanaverage 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 Newton's (vectors, dynamics 11, 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

Foundations Math 110

Recommended Prerequisite-Calculus 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 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 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.

POST-INTENSIVE FRENCH 110

Post-Intensive French is a literacy-based, nonimmersion program for students choosing to continue to learn French as a second Language. Themes at this level include: mysteries, injustices and the power of photography. *Note also that if a student achieves a level of Intermediate at the end of grade 10, he/she/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.

POST-INTENSIVE FRENCH 120

Post-Intensive French is a literacy-based, nonimmersion program for students choosing to continue to learn French as a second Language. Themes at this level include: looking to the future, ecological challenges, similarities and differences and careers.

*Note also that if a student achieves a level of Intermediate at the end of grade 10, He/she/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.

POWER TRAIN AND CHASSIS 110

This 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. Students planning on pursuing a career in the motor vehicle service industry would benefit from this course. *Automotive Electrical Systems 120 must also be selected.*

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 12A

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 indepth 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 12B

Pre-requisite: 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.

READING TUTOR 120

As an elective course for grade twelve students who have successfully completed English 112/1, Reading Tutor 120 provides students with the unique opportunity to act as both one-on-on tutors of reading and writing as well as mentors to help struggling students cultivate motivation within and find success at school. Of particular interest to students with a desire to work with people (teachers, social workers, psychologists, health professionals, etc.), this course requires students to complete approximately six weeks of training in reading and writing theory followed by one-on-one tutoring that requires planning daily individual lessons for their tutees, keeping a journal of activities, and a portfolio of their tutee's work. Students selecting this course should have excellent attendance, strong interpersonal and organizational skills, a good academic record, and a desire to help others. This course meets the Fine Arts/Life Role Development graduation requirement. Application required-see Guidance.

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.

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 seeks to understand why humans behave the way they do when they are in groups. In this class you will learn to critically examine, and better understand your own beliefs about the social world. In this class we will be examine topics such as: culture, race, crime, gender, social structure, social reform, religion, family, media and deviance.

SPANISH 120

The primary objective of this introductory course is to develop the ability to communicate in the Spanish language. Students taking this course will experience continual practice in communicating, and will become familiar with common Hispanic customs and traditions.

TECH SUPPORT 110

If you are interested in the technical side of computing and have an interest in the expanding IT field, this course will offer a stepping stone understanding basic computer into maintenance, repair and networking. This hands-on, CISCO Systems curriculum will give students practical skills which will allow you to provide basic technical support at the school. No prerequisite required, however, an interest in computers would be an asset. This course is also an area of concentration credit for the FIT certificate (Focus on Information Technology Program).

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 introduced to all aspects of theatrical performance including acting technique, scene creation, and 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.

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

Prerequisite: Grade 10 Visual Arts

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 various artists from Art History creates a background for various projects. This course requires students to have painting and drawing materials. Course meets the Fine Arts/Life Role Development graduation requirement. *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 various artists from Art History creates a background for various projects. Students will also critique aspects of their creative process and product. Course meets the Fine Arts/Life Role Development graduation requirement.

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, 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. *Course fee: \$50*

WORLD ISSUES 120

Pre-requisite-Modern History 111,112, or 113

Students will examine the global challenges of building a sustainable and equitable future, focusing on current issues that demonstrate these challenges. The course provides for student choice within the themes of 'humanity', 'interdependence', and 'geopolitics'.

There is no final exam in this course but students are required to present a seminar in

There is no final exam in this course but students are required to present a seminar in front of the class as well as design and follow through on a citizenship-based project.

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. Students will maintain a portfolio of their published pieces.

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 seventeen (17)
credits.

ABORIGINAL 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.

Lab Fee: \$20

ADVANCED KEYBOARDING 110

This keyboarding course will concentrate on developing touch-keyboarding skills with speed and accuracy. Using Microsoft Office 2010, students will learn to format personal and business letters, tables, and long reports. This course will be beneficial to students who plan to pursue a career in a computer-related field. It will also be of interest to students who plan to attend a post-secondary institution after high school.

EXERCISE SCIENCE 120

The focus of Exercise Science is to develop an appreciation of the human body and its' systems as it adapts to training physically. Major topics include: human anatomy, cardiovascular and cardiorespiratory physiology, energy systems, motor learning and skill development. Current issues related to the mechanisms of strong athletic performance in sport are investigated experimented upon and via physical performance labs and activities. The impact of technology, disease and aging on physical performance is also explored. Students in this course should also know that their own physical fitness will be analyzed in an effort to give them the information required to perform better in various athletic situations.

FI TECHNIQUES DE COMMUNICATION 120

This course will mostly develop and enhance student's oral communication skills. The use of appropriate language conventions in both written and spoken French will be emphasized. The course will include a variety of communication activities. The focus of this course will be on oral communication and preparation for the Oral Proficiency interview by the Department of Education in grade 12 French courses. The course will include several types of oral presentations and activities. Students must be in grade 12 to register for this course.

INDEPENDENT LIVING 110

Do you want to buy a car? Get your own apartment? Maybe you would like to know how to purchase and prepare your own food, or be in

control of your money. If you have ever thought about these things then this is the course for you. Independent Living is designed to prepare and assist students to develop the skills need to function effectively in the world beyond high school. This reality-oriented course provides students with management skills necessary to adapt to our complex, dynamic world. This is a hands-on course that will help you to make the transition into a world of independence.

DEBATE (Introduction to) 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

MANDARIN 120

This is one-semester selective course for grade 11 and 12 students in high schools. This course focused on two areas: language and culture difference. The course will teach students the Chinese Pin Yin Romanization system which is the Chinese characters called and also Chinese characters. The purpose of the language learning is for students to speak and read Chinese at a basic level. Students will know the daily life and lifestyle of the Chinese people, Chinese traditions, education, food, history and cross cultural communication. By the end of the course students should be able to speak Mandarin at a basic conversational sentences including greetings, asking directions, describing

objects and /or people and explaining situations and events. They should be able to say and recognize many daily words such as color, body parts, food, weather and sports. They should also know the major differences between English and Chinese grammar, how to count to large number and how to identify and talk about family members. Students also should be able to read, write and recognize more than 150 basic Chinese characters.

MARKETING 120

This business oriented course will involve independent learning whereby students will demonstrate their understanding through case study and project work. Students will be exposed to concepts and industry language which may encourage further study at the University or College level. No Prerequisite required.

PSYCHOLOGY 110

Why do you think and act the way you do? Psychology is a social science that seeks to answer questions about us all - how we think, feel and act. In this introductory course, you will learn to think critically as you explore human nature. Topics covered:
Groundbreakers and History, Research, Nature/Nurture, the Brain, Sleep and Dreams and Psychological Disorders. This is a great course for anyone interested in pursuing a psychology career or for those who are interested in what makes us tick! PLEASE BE AWARE: There is sensitive content and discussion in this course.

SENIOR PROJECT 120

Designed for grade 12 students, this course will appeal to those interested in a self-directed exploration of a topic or subject of their own choosing. Students will undertake individual project management including project

identification and proposal submission; planning and scheduling; research and development; reflection and reporting; and students will also be required to present the progress/direction of their project at mid-semester and then give a final project presentation at the end of the semester. This course is for students who are passionate about learning outside the constraints of a normal classroom environment. They will need to be self-starters, highly motivated and able to work with minimal supervision.

Application required-see Guidance.

WOMEN, MEDIA AND CULTURE 120

WMC 120 introduces students to critical literacy practices by examining cultural constructions such as media representations that shape and inform identities. Students will engage in reflective thinking and participate in discussions and activities that focus on race, gender, class, sexuality, ability, language, and other identity categories found in current and past media sources. The overall goal is to encourage critical thinking, critical questioning, and critical action in an effort to construct a more socially just and democratic world. In considering this course, students should be well-read and possess strong comprehension skills.

WORLD HISTORY 120

This course is designed to build greater understanding of the characteristics, development and interactions between civilizations and peoples throughout history. A close look at historical thinking skills will be used. Students will also examine the ways in which various individuals, groups, and events influence continuity and change in major legal, political, and military traditions over time. Social, economic and political structures of various societies will also be explored.

Courses with Prerequisites and/or Application Requirements (See Course Descriptions for Details)

Course	Prerequisite/Application (see course descriptions)
Biology 111	Science 10; Teacher recommendation
Biology 121	Recommended Pre-Requisite-Biology 111
Calculus 120	Pre-Calculus 12A & 12B
Canadian History 122	History 112/111 (recommended mark 70%)
Career Exploration 110	Application required
Chemistry 111	Science,NRF,GMF10; Pre/Co-requisite-Foundations110; Teacher recommendation
Chemistry 112	Science, NRF, GMF 10; Pre/Co-requisite-Foundations 110
Chemistry 121	Chemistry 111 (112 w/Teacher recommendation) Foundations 110
Chemistry 122	Chemistry 112/111; Foundations 110
Cooperative Education 120	Application required
Culinary Technology 120	Application required
English 111	English 10 (recommended mark 85%) Teacher recommendation
English 112	English 10 (recommended mark 70%; ELPA successful)
English 131	English 10
English 122	English 111
English 122	English 112
English 123	English 113
FI Language Arts 120 FI Financial Workplace Math 110	FI Language Arts 110
	FI GMF 10 FI NRF & GMF10
FI Foundations of Math 110 FI Pre-Calculus 110	
	Foundations of Mathematics 11
Financial & Workplace Math 110	Geometry, Measurement and Finance 10
Financial & Workplace Math 120	Either grade 11 math credit NRF 10 & GMF10
Foundations of Math 110	
Foundations of Math 120	Foundations of Mathematics 110
Post Intensive French 122	Post Intensive French 112
Music 112 (Choral)	Music 10
Music 112 (Guitar)	Music 10
Music 112 (Instrumental)	Music 10 Music 10
Music 112 (Keyboarding)	
Music 122	Music 112 Science 10
Nutrition for Healthy Living 120 Outdoor Pursuits 110	Health & Physical Education 10; Application required
PCMT Co-Op 120 Physical Education Loadership 120	Recommended: Previous computer experience/Tech Support 110
Physical Education Leadership 120	Health & Physical Education 10; Application required Science, NRF, GMF 10; Co-requisite-Foundations 110
Physics 112	
Physics 121	Science, NRF, GMF 10; Co-requisite-Foundations 110
Physics 121	Physics 111 (112 w Teacher rec.); Foundations 110; Recommend-Pre-Calculus 110
Physics 122	Physics 112/111; Foundations 110; Recommended-Pre-Calculus 110
Pre-Calculus 110	Foundations 110
Pre-Calculus 12A	Pre-Calculus 110
Pre-Calculus 12B	Pre-Calculus 12A
Reading Tutor 120	English 111/112; Application required
Science 122 (Advanced)	Chemistry & Physics 112/111
Senior Project 120	Application required
Visual Arts 110	Visual Arts 10
Visual Arts 120	Visual Arts 110
World Issues 120	

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GRADE 11 &12 COURSE SELECTION PLANNING FORM 2018-2019

Name:					
Planning: Check off the Grade 10 courses about the Courses about the Grade	=				
will be met.	z II una, or	Grade 12 chare	below to elibal	e gradation require	inches
☐ Geometry, Measurement & Finance 10	□ Broa	d Based Techno	ology 10	□ English La	nguage
☐ Numbers, Relations and Functions 10	□ Intro	o to Applied Te	:h. 110	Proficiency Ass	sessment
☐ English 10	□ Phy	s. Ed. 10		*Please note: Stu	dents who took
☐ Social Studies 10	□ Art	10		Read 180 or Healt	
□ Science 10	□ Mu:	sic 10		Wellness 110 only	need one grade
☐ French 10 or Maliseet	(Any 2 d	of the above)		10 elective	
□ PDCP					
GRADE 11			ENTERING GR	ADE 12	
1. English 111 \square 112 \square 113 \square (full-year, 2	2 credits)	1. English 1	2		
2. Financial & Workplace Mathematics		2			
FI Financial Workplace □					
OR Foundations of Mathematics 11 □		3			
FI Foundations of Mathematics 11 $\ \square$		4			
3. Modern History 111 □ 112 □ 113 □					
FI Mod History 112 □		5			
4. Science (see below)		6			
5. Fine Arts & Life Role (see below)		7			
6		8			
7		9			
8					
9					
Alternate #1:		Alternate #1:			
Alternate #2:					
Alternate #3:					
SCIENCE OPTIONS		F	INE ARTS AND	LIFE ROLE	
Biology		<u></u>	EVELOPMENT	OPTIONS	
Chemistry			Career Explora		
Physics			Cooperative Ed		
Human Physiology 110			Entrepreneurs	· ·	
Introduction to Electronics 110				mily Dynamics 120	
Introduction to Environmental Science 120			Fine Arts 110	d Dosign 110	
Automotive Electrical Systems 120 Micro Electronics 120			Graphic Art and	_	
			Music 111, 112	tion Leadership 120	
Physical Geography 110 Robotics and Automated Technology 120			Outdoor Pursu		
Robotics and Automated Technology 120			Reading Tutor		
*Note: 5 grade 12 credits must be ea	rned out	1	Theatre Arts 12		
of the 17 courses required for gradu			Visual Arts 110		

Wellness through Physical Education 110

Only 2 of the 17 can be local options.