BATHURST HIGH SCHOOL



COURSE DESCRIPTIONS 2019-2020

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COURSE PLANNING GUIDE

Read and be aware of all the graduation requirements and post-secondary requirements.

Before choosing a course, read the course description.

Note that in grades 11 and 12 most courses are designated at one of three levels

- Level 2 (for post-secondary intending students).
- Level 3 (for students preparing for some post-secondary options).
- A number of courses also have a Level 0 designation. Level 0 courses are open to any student and include special areas of interest (i.e. Economics 120, Media Studies 120, Business Organization & Management 120, Journalism 120.)

Map out a tentative two year (grade 11 and 12) high school plan in the chart below.

Course selections must be taken seriously. Choosing courses haphazardly will only result in disappointment and frustration later.

Remember there are fewer opportunities for course adjustments/changes once the semester has commenced.

GRADE 11 GRADE 12

1.English 11 (level 2 or 3)	1. English 12
2 English 11 (level 2 or 3)	2. Life role – if not taken in grade 11
3 Foundations 110/Financial 110	3.
4. Life role	4.
5. Mod. Hist. (FIMH) 112/113	5.
6. Science Course	6.
7.	7.
8.	8.
9.	9.
10.	10.

Bathurst High School Grade 11 Course Selection Form 2019-2020

Compulsory Credit Selection: All students must select <u>one</u> course from each of the boxes below. French is

Name: _____ Grade: _____

optional except for FI students.

Compulsory Credit Selection – C	Check only one in each section (box).		
English: (2 Credit Course)	Life Role:		
English 113 English 112	Entrepreneurship 110 Graphic Art 110 Individual & Family Dynamics 120		
Math: Financial/Workplace Math 110 Foundations Math 110 Pre-Calculus 110 – Adv. Students – only if continuing along the advance math track.	Music Vocal Music Instrumental - Experienced Music Instrumental - Beginner Music Collective Visual Arts 110/120 PE Leadership 120 Reading Tutor 120 Theatre Arts 120 Visual Art 110 Wellness 110		
History:	Science:		
Modern History 112 Modern History 113 FSL - Modern History 112 – FSL Students	Biology 112 Biology 122 Human Biology (Physiology) 110 Chemistry 112		
French: Note: - Only compulsory for FI students. Non-FI students may take PIF 110 if they would like to. FI Language Arts 110 Post Intensive French 110**	Intro to Environmental Sci. 120** FSL - Intro to Environmental Sci. 120 Intro to Electronics 110 Physical Geography 110 Physics 112		

****Elective Courses on Reverse Side****

Elective Credit Selection: If you did not choose a French course you must select ($\sqrt{\ }$) $\underline{4}$ electives. If you did choose a French course select only ($\sqrt{\ }$) $\underline{3}$ electives from the list on the next 2 pages.

Elective Cred	dit Selection
Literacy Studies:	Performance and Art Courses:
 Writing 110** Canadian Literature 120 Goal, Growth, & Grit 120 Reading Tutor 120 Intro to Mi'kmaq 110* Spanish 110* Spanish 120* FSL - Writing 110* 	Fine Arts 110* Music Vocal Music Instrumental - Experienced Music Instrumental - Beginner Music Collective Visual Arts 110/120 Theatre Arts 120 Fashion Tech 110
Math: Financial/Workplace Math 110 Financial/Workplace Math 120	Physical Education Courses: Physical Education Leadership 120 Wellness Through Phys. Ed. 110
Foundations 110 Foundations 120 ** Pre-Calculus 110 Pre-Calculus 120A – adv. Math students only	Humanities: Canadian History 122** Canadian Geography 120**
Business: Introduction to Accounting 120** Business, Org & Management 120 Economics 120** Entrepreneurship 110 FSL - Hospitality & Tourism 110* Hospitality & Tourism 110**	Economics 120 FSL - Law 120* Journalism 120 Law 120** Media Studies 120** Native Studies 120 Political Science 120 Sociology 120 World Issues 120** FSL - World Issues
Home Management: Child Studies 120 Culinary Tech 110 Culinary Technology 120 Early Childhood Services 110 Individual Family Dynamics 120 Nutrition 120**	Science: Biology 112 Human Biology (Physiology) 110 Chemistry 112 Intro to Environmental Sci. 120** FI Intro to Environmental Sci. 120** Intro to Electronics 110 Physical Geography 110** Physics 112

^{* -} Distance Ed Only

 $[\]ensuremath{^{**}}$ - Offered at BHS and through Distance Ed.

Bathurst High School Grade 12 Course Selection Form 2019-2020

Name:		_
		nake sure you have all the necessary graduation requirements from eck off the necessary courses you have taken.
English 112	or 113	
Foundation	s Math 110 or Finance Math 110	
Modern His	story 112/113 or FSL 110	
Science Cre	dit (Name:)
Life Roll	(Name:)
FILA 110	(If you are a French Second Lan	guage student)
11-12 level All students proficiency completed	to complete the NB French Immersions who continue to take French course	es in Grade 12 or those student that would like to complete an ora n oral proficiency rating from the Province of NB can get this
<u> </u>	eck English and French (if necessary)	
English:		French:
Eng	lish 122	FI Language Arts 120
Eng	lish 123	
L		

****Elective Courses ****

Elective Credit Selection: If you did not choose a French course you must select $(\sqrt{})$ $\underline{9}$ electives. If you did choose a French course select only $(\sqrt{})$ $\underline{8}$ electives.

<u>REMEMBER – some courses have prerequisites.</u>

Elective Cred	Elective Credit Selection		
Literacy Studies:	Performance and Art Courses:		
Writing 110** Canadian Literature 120 Goal, Growth, & Grit 120 Reading Tutor 120 Intro to Mi'kmaq 110* Spanish 110* Spanish 120* FSL - Writing 110*	Fine Arts 110* Music Vocal Music Instrumental - Experienced Music Instrumental - Beginner Music Collective Visual Arts 110/120 Theatre Arts 120 Fashion Tech 110 Physical Education Courses:		
Math: Financial/Workplace Math 110 Financial/Workplace Math 120 Foundations 110	Outdoor Pursuits 110 Physical Education Leadership 120 Wellness Through Phys. Ed. 110		
Foundations 120 ** Pre-Calculus 110 Pre-Calculus A 12 Pre-Calculus B 12 Calculus 120 Business: Introduction to Accounting 120**	Humanities: Canadian History 122** Canadian Geography 120** FI Law 120* Journalism 120 Law 120** Media Studies 120** Native Studies 120 Political Science 120		
Business, Org & Management 120 Coop 120 – 2 credits	Sociology 120 World Issues 120**		
FSL Coop 120 – 2 credits Economics 120** Entrepreneurship 110 FSL - Hospitality & Tourism 110* Hospitality & Tourism 110**	Science: Biology 112 Human Biology (Physiology) 110 Biology 122 Chemistry 112 Chemistry 122		
Home Management: Child Studies 120 Culinary Tech 110 Culinary Technology 120 Early Childhood Services 110 Individual Family Dynamics 120 Nutrition 120**	Intro to Environmental Sci. 120** FSL Intro to Environmental Sci. 120** Intro to Electronics 110 Physical Geography 110** Physics 112 Physics 122		

Industrial Courses:	Technology Courses:
Auto Elec. System 120	<i>.</i>
Framing and Sheathing 110	Advanced Technology 120
Internal Combustion Engines 110	Digital Production 120**
Metals Processing 110	Computer Science 110*
Mill & Cabin 120	Computer Science 120*
Powertrain and Chassis 110	Graphic Art and Design 110
Residential Finish 120	
Tune-up & Emiss.120	

^{* -} Distance Ed Only

^{** -} Offered at BHS and through Distance Ed.

A MESSAGE FROM GUIDANCE . . .

Bathurst High School, at various times and through various programs, informs students of the specific graduation requirements as defined by the New Brunswick Department of Education. Information is also available from the Guidance Office to enable students to plan for post-secondary and/or world-of-work opportunities. Another helpful source is the guidance website which is continually updated to provide information on such things as choosing a career, post-secondary institutions, financial aid, and scholarships.

http://bathursthigh.nbed.nb.ca/

Registration for 2019-2020 will begin soon. It has several steps. Initial registration will be completed in April. Each student in grade 10-11 will be contacted by a guidance counselor or administration to make course selections for the upcoming school year. Students may change their mind about courses they have selected based on several factors:

- Report Cards in June.
- Recommendations from teachers/Guidance/Administration
- Do not meet the required prerequisite
- Family discussions

Therefore, students have plenty of time to make informed decisions about their future.

If students would like to see their schedule before the school year begins in September 2019 they may visit one of the counselors in the guidance office over the summer; August 21st & 22nd from 9:00 AM to 3:00 PM in the Guidance Office at BHS or the Learning Commons. Students will be seen on a first come first serve basis during this time. Organizing schedules in advance prevents a great deal of anxiety on the first day of school.

It is our hope that this booklet will assist you in making wise decisions concerning your course planning and ultimately your future. If you have any questions or concerns during any of this process, please come to the Guidance Centre to meet with a counselor or contact us at any time. We can be reached at:

Guidance Counselors

Shirley Riordon & Janice Hache

shirley.riordon@nbed.nb.ca janice.hache@nbed.nb.ca

FRENCH IMMERSION PROGRAM

In order to receive a Certificate of Immersion from the Department of Education in NB, students in the French Immersion Program must have completed the following course upon graduation:

- The proper amount of FI Courses in the Grade 9-10 level
- FILA 110
- FILA 120
- FSL Modern History 112
- AND at least two other French Immersion Course (FSL French Second Language) at the grade 11/12 level for a <u>total of 5</u> grade 11-12 courses.

CERTIFICATE OF PROFICIENCY

The oral proficiency rating is available to any grade 12 students in the Immersion program, the PIF program or in any other program. This certificate identifies the students' French proficiency level from the Province of NB. It is awarded by the Department of Education after a professional evaluation is completed either in the Fall or Spring of the year.

BATHURST HIGH SCHOOL

Course Selection Guidelines for Parents & Students

The following is a list of some of Bathurst High School's Grade 11 & 12 courses and the prerequisites and where indicated, the course fees, that go with each course. Please refer to the Course Description Booklet for a full description of each course.

<u>Note</u>: Families that cannot afford course fees may receive financial assistance from the school. Please let Guidance or Administration know.

CO-OPERATIVE EDUCATION

Co-op 120

- Students must apply by application in order to be considered for this program.
- Application forms for the Coop Program are available through the Guidance Department and Ms. Cav. in the Spring of each Year.
- In order to accumulate the required daily Co-op hours outlined by the Department of Education, students will need to agree to a shortened noon hour to attend their Co-op placement.
- Good attendance is necessary for admission to the Coop Program.
- The Coop teacher arranges all Coop placements.

CULINARY TECHNOLOGY

Culinary Technology 110

- No Prerequisite
- Course fee \$10 students will get to consume some of what they prepare.

Culinary Technology 120

- No Prerequisite
- Course fee \$20 students will get to consume some of the meals they prepare.

LANGUAGES

English 112

• An overall English 10 grade of 70% is highly recommended for success in English 112.

English 122

• An overall English 112 grade of 70% is highly recommended for success in English 122.

French Immersion Language Arts (FILA) 110

• An overall FILA 10 grade of 70% is highly recommended for success in FI Program 110.

Post Intensive French 120

• Prerequisite is PIF 110

MATHEMATICS

Foundations 110

• An overall grade of 70% in GMF & NRF is highly recommended for success in Foundations 110.

Foundations 120

• Prerequisite is Foundations 110

Pre-Calculus 110

- Prerequisite is Foundation 110
- Highly recommended that a mark of 70% is acquired in Foundations 110.

Pre-Calculus 12A

- Prerequisite is Pre-Calculus 110
- Can be taken at the same time as Pre-Calculus 12B
- Highly recommended that a mark of 70% is acquired in Pre Calculus 110 for success in Pre-Calculus 12A

Pre-Cal 12B

- Prerequisite is Pre-Calculus 110
- Can be taken at the same time as Pre-Calculus 12A
- Highly recommended that a mark of 70% is acquired in Pre-Calculus 110 for success in Pre-Calculus 12B

Calculus 120

• Prerequisite 70% in both Pre-Calculus 12A & Pre-Cal 12B.

PHYSICAL EDUCATION

Wellness 110

- Must:
 - have an interest in physical activity.
 - o been an active participant in Grade 9 or 10 Physical Education.
 - o be willing and open to try new activities.
 - be prepared for each class with proper attire (indoor shoes and gym clothes)

PE Leadership 120

- Students must apply by application in order to be considered for this program
- Part of this course involves presentations/teaching in front of peers and other students.
- Must have been an active participant in Grade 9 or 10 Physical Education.
- Course could involves community involvement inside & outside of school hours
- Be prepared for each class with proper attire (indoor shoes and gym clothes)

Outdoor Pursuits 110

- Students must apply by application in order to be considered for this program.
- Preference is given to Grade 12 students first because of limited space.
- Must have an interest in spending considerable amount of time outside (January June).
- Must go on an overnight camping trip to complete course.
- Course fee \$75

SCIENCE

Chemistry 112

• An overall grade of 70% in GMF & NRF is highly recommended for success in Chemistry 112.

Chemistry 122

Prerequisite is Chemistry 112

Physics 112

• An overall grade of 70% in GMF & NRF is highly recommended for success in Physics 112.

Physics 122

- Prerequisite is Physics 112
- An overall grade of 70% in Physics 112 is highly recommended for success in Physics 122.

INDUSTRIAL COURSES

Wood Shop

• all woodshop courses are individual courses with no prerequisite.

Auto Shop

Powertrain and Chassis 110 (POW 110)

• individual course, no prerequisite.

Internal Combustion Engines 110 (ICE 110)

• individual course, no prerequisite.

Tune-Up & Emissions 120

Prerequisite - Auto Electrical Systems 120

Auto Electrical 120

• Prerequisite POW 110 or ICE 110

Metals

Metals Fab 110

• Involves applied mathematics concepts

Metal Processing 110

• Involves applied mathematics concepts

VISUAL ART & FASHION DESIGN

Visual Art 110

- Prerequisite Interest in Art
- Course fee \$25.00 for course material

Visual Art 120

- Prerequisite is VA 110
- Course fee \$25.00 for course material

FASHION DESIGN 110

- No prerequisite
- Course fee of \$20.00 for material

Course Descriptions 2019-2020

BUSINESS COURSES

BUSINESS ORGANIZATION & MANAGEMENT 120 (BOM 120)

Business Organization and Management 120 is a course designed for those students who plan to take further business courses at a university or community college or for those who would like to learn about the modern day corporation and its impact on our free enterprise economy. Emphasis is placed on finance, forms of business organizations, business ethics, and management.

BOM 120

ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

COOPERATIVE EDUCATION 120 (CO-OP 120)

(Double Credit Course)***application required****

Cooperative Education is an experiential form of learning that partners students with local employers. Students will explore a chosen career while earning two Grade 12 High School credits. Students will develop skills and gain insight into a career before attending university, college or apprenticeship programs. Students will enhance their potential as a future employee, gain appreciation for the importance of workplace ethics, responsibilities and rights in the workplace, and become aware of educational demands of a particular career field. Job search tools, interviewing techniques, problem solving, communication skills, and workplace safety are included in the three weeks of instruction before beginning the 15-week placement with a local employer. Excellent attendance, personal initiative and high ethical values are essential components for success. Other prerequisites may also be required depending on the career choice made.

FSL COOPERATIVE EDUCATION 120 - French Second Language

This course is the same as the Co-op 120 course except that the course work is completed <u>online</u> and in <u>French</u>.

ECONOMICS 120

Economics 120 is an elective course that provides a general overview of the way our economic system works. 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. The course also provides some experience in the application of economic knowledge, concepts and techniques.

ENTREPRENEURSHIP 110

It is intended that Entrepreneurship 110 be activity-based and make extensive use of case studies. This course will help students learn more about the skills, abilities and characteristics of successful entrepreneurs while they examine opportunities for entrepreneurial activities in their school or community. They will practice the techniques involved in accurately assessing opportunities, generating ideas, selecting and evaluating ideas and preparing carefully drawn up plans for putting all into action. Students will discover that these acts of creation require a high degree of vision, initiative and skill. The course will also foster a sense of self-confidence and self-esteem in our young people.

INTRODUCTION TO ACCOUNTING 120

This is an introductory course in accounting designed primarily for those students intending to further their studies in the area of business at a post-secondary institution. Its purpose is to introduce students to accounting

procedures, concepts and applications. Course topics include careers in accounting, and preparing transactions and financial statements required in completing the entire accounting cycle for a service business.

INTRODUCTION TO ACCOUNTING 120

• ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

HOSPITALITY AND TOURISM 110

Hospitality and Tourism 110 is an introductory course providing students with an awareness of career opportunities in a dynamic and growing industry sector. Students are made aware of potential social and economic benefits. Emphasis is placed on Tourism in New Brunswick and the Chaleur region and learning about the five major industry sectors.

HOSPITALITY & TOURISM 110

• ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

FSL HOSPITALITY & TOURISM 110 - French Second Language

ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

HOME MANAGEMENT COURSES

CULINARY TECHNOLOGY 110

FEE \$10.00 to take this course as student will get to consume some of what they make.

Culinary Technology 110 is an introductory, hands-on food service course. Outcomes introduced will focus on organization of the food service industry, safety and sanitation procedures necessary for working in a kitchen environment, identification of smallwares and equipment used in food preparation. Students will learn about quality standards of food products while preparing baked goods. Weekly cooking labs will give students the opportunity to work within a team and develop organizational skills necessary for working in the food service industry.

CULINARY TECHNOLOGY 120

FEE \$20.00 to take this course as student will get to consume some of what they make.

Culinary Technology 120 is a continuation of Culinary Technology 110. Students will continue to practice the outcomes learned in Culinary Technology 110 and with an introduction to HACCP System, flow of food, food-borne illness, and the principles of menu planning/cost control in meal preparation. Students will learn about quality standards of food products while preparing soups, salads, and sandwiches. Weekly cooking labs will give students the opportunity to work within a team and develop organizational skills necessary for working in the food service industry.

EARLY CHILDHOOD SERVICES 110

This course is designed to help students realize and appreciate the role of parenting in a child's development, and prepare students for jobs in the child care professions. It is a "how to" program applying basic theory to hands-on activities. Students will develop knowledge about the childcare industry and how excellent service can be provided to parents of diverse backgrounds.

CHILD STUDIES 120

This course is a study of "the most significant resource that we possess – children". Child Studies 120 explores how children develop physically, socially, emotionally, and intellectually. Issues are discussed regarding the "quality of life" and human development, "society's basic unit", the family plus parenting skills in our complex, consuming, and technological society. The importance of the need to provide love, continuity and stability, as well as the basic food, clothing, and shelter requirements is addressed. Child Studies 120 includes a variety of human centered experiences from conception through to the development of the school age child. Thus, ongoing observations and experiences with children is an essential part of this program.

INDIVIDUAL AND FAMILY DYNAMICS 120

Students will see the connections made between the course and their personal development and relationships. The curriculum will help prepare them to have a better understanding of themselves, their family and the world around students. This course touches on aspects of sociology, psychology, economics and anthropology.

NUTRITION 120

The science of nutrition continues to expand. Nutrition for Healthy Living 120 is designed to make students aware of current studies and preventative strategies that contribute to overall wellness. How to make healthy food choices and maintain a balance between eating habits and physical activity is also explored. The digestive system and the five major nutrient groups will be studied. Current issues relating to chronic diseases, lifestyles and food technologies will also be discussed. This is an excellent course for those concerned with personal wellness or for students who wish to pursue a career in science and nutrition or health-related fields.

NUTRITION 120

ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

INDUSTRIAL COURSES

AUTOMOTIVE

POWERTRAIN AND CHASSIS 110

This course is designed to develop proficiency in the service and maintenance of the automobile chassis and powertrain. Emphasis is placed on the function, repair and replacement of components. Topics include spring and shock assemblies, brakes, steering, wheel bearing, tires, transmissions, differential and drive lines. Students seeking admission to the motor vehicle service industry as well as those seeking guidance about a career choice should benefit from this course.

INTERNAL COMBUSTION ENGINES 110 (ICE - 110)

This course provides studies the operation of the internal combustion engine including the construction, theory of operation and function of its systems. Students disassemble and assemble engines, checking, servicing and repairing components and systems. Emphasis is placed on the development of basic skills essential for persons entering the motor vehicle service trades and other allied occupations. This course should be of interest to students interested in entering or learning about the opportunities and requirements of the motor vehicle service industry and students with a general interest in mechanics.

ELECTRICAL SYSTEMS 120

(This course also meets the grade 11/12 Science requirement for graduation.) Prerequisite: Internal Combustion Engines 110 and/or Powertrain Chassis

This course introduces the student to the theory of operation and basic service of the automobile electrical systems. Emphasis is placed on function and operation of the system components and circuits as well as practice in basic service procedure. Topics include cranking, charging and ignition system and related wiring circuits and engine protection warning systems.

TUNE-UP AND EMISSIONS 120

Prerequisite: Internal Combustion Engines 110 and/or Power Train & Chassis

This culminating course is designed to refine skills and knowledge necessary for the diagnosis of motor vehicle problems. Simulating practices of the trade follows the correction of faults through tune up procedures. Students are encouraged to work individually with a minimum of supervision. This course should be of interest to students seeking admission to the motor vehicle service industry.

CONSTRUCTION

FRAMING AND SHEATHING 110

This course is designed to provide for the acquisition of knowledge and the development of skills and work habits essential in the construction of wood frame buildings. The methods, material and skills used in light frame construction are covered, including layout and cutting of common rafters and trussed rafters. It should appeal to students interested in entering the construction industry or those seeking a career choice in a related field or the woodworking hobbyist.

MILL AND CABINET 120

This course is designed to acquaint the student with the safe use and operation of precision power tools and equipment. This project-based course will include the design and construction of fine furniture type assignment where attention to detail is important. This course would be of great value for those students entering the cabinet making trade or for the basics of acquiring another hobby.

RESIDENTIAL FINISH & INSULATION 120

This course is designed to acquaint the student with the knowledge and skills necessary to complete the interior of a residential dwelling. Insulation, wall and ceiling cladding, the installation of interior doors and windows as well as the installation of cabinets and built-ins found in a typical residence are covered through "hands-on" experience. It should be of interest to students seeking admission to the carpentry industry as well as those seeking a career choice in a related field or the woodworking hobbyist.

METALS

METAL PROCESSING 110 & METAL FABRICATION 110

Metal Processing 110 & Metal Fabrication is intended to introduce students to entry level skills and knowledge required to pursue post-secondary learning in the metal trades. These courses covers machining operations using hand as well as machine tools and CNC controlled equipment in a hands-on metals processing lab. Students enrolled in this course will work both independently and as a team member while achieving specific curriculum outcomes. Strong math skills are a must in order to be successful in the metals trades. These courses may be of interest to a student thinking about a career in machining or mechanical engineering.

HUMANITIES COURSES

GRADUATION REQUIREMENTS

Students must complete a Modern History 11 course for graduation requirements.

CANADIAN GEOGRAPHY 120

• AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

Canadian Geography 120 is an introductory course on the economic and social geography of Canada. The course is designed to introduce Canada, its landforms and climate, and how these have related to our patterns of settlement and the development of our economic base. It is a study of the ever-changing cultural and physical landscapes of Canada and how they impact on each other. This course examines physical systems and how they interrelate with man-made systems and structures. Assessment is based on contribution to discussion topics, many self-assessments and activities, module assignments and tests. The course finishes with research into a geographical issue currently of importance to the lives of Canadians.

CANADIAN HISTORY 122

Canadian History 122 is the study of the major forces and issues which have shaped Canada from pre-Confederation to the present. Students master the complexities of these issues by using the historical approach and benchmarks of historical thinking. They will be challenged to interpret the past through research, essay writing, interpreting primary source documents, comparative analysis and discussion. Major projects place an emphasis on community involvements and technology. Key issues include Africa-Canadian history, English-French relations, the struggle towards nationhood, the development of the roles of women, important developments in the cultural history of Canada, and Canada's role in the major events of the 20th century.

CANADIAN HISTORY 122

• ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

JOURNALISM 120

Journalism is intended not only for those interested in pursuing a career in the field of journalism but also seeks to demonstrate to all students that a well-informed citizenry capable of critical thinking is essential to the continuation of our free press and democratic society. Journalism 120, primarily a writing course, is a project-based learning opportunity that enables students to apply their knowledge and skills to real-life issues and situations. Computer technology is integrated into the curriculum, providing students with practical opportunities to prepare not only traditional forms of written news but also to use the tools of modern broadcast journalism to produce electronic media productions for televisions, radio or the internet. Journalism is not just school related but applies to fields of knowledge that affect students' lives, their communities, and the world.

LAW 120

Law 120 gives students a basic knowledge of the Canadian legal system, its operation, and an awareness of the impact of the law on their lives. Emphasis is placed on criminal law, and civil law as it pertains to torts and contracts. Major topics include the nature of crime, major offenses, defense to criminal charges, criminal procedures, civil suits and contract law. Weekly writing journals, issue-based assignments and weekly case study analysis place a strong emphasis on cross-curricular literacy and content-based literacy. This course will be of interest to those planning a future in areas emphasizing knowledge of the law and for anyone who would like to understand how our legal system works.

LAW 120

ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

FSL LAW 120 - French Second Language

ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

MEDIA STUDIES 120

Media Studies 120 introduces students to the evolution and impact of mass media on the individual and society. This course is designed to improve a student's media literacy that is the ability to sift through and analyze the messages that inform, entertain and sell to us every day. It is the ability to bring critical thinking skills to bear on all media when examining forms of advertising, film, television, and the Internet.

MEDIA STUDIES 120

ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

MODERN HISTORY 112

Modern History 112 is a mandatory course required for high school graduation. It is a study of the principal historical developments since the 1700s that have shaped the Western World. Students master the complexities of these issues by using the historical approach and benchmarks of historical thinking. These skills include asking questions, identifying cause and consequence, evaluating primary and secondary source documents, comparative analysis between events, and class discussions. Major topics include the French Revolution, Industrial Revolution, World Wars I & II, Nazi Germany and the Cold War.

FSL MODERN HISTORY – <u>FRENCH IMMERSION</u> 112

F.I. Modern History 112 is a mandatory course for graduation for French Immersion students. It presents a study of the principal developments that have occurred on the world scene in modern times. The course assists students in understanding and using several skills used in historical research and writing. These skills include asking questions, evaluating primary/secondary sources, identifying cause and consequence, and comparative analysis of events. Major topics include the French Revolution, Industrial Revolution, World Wars I & II, Nazi Germany and the Cold War.

MODERN HISTORY 113

Modern History 113 is designed to provide an understanding of the main events of the twentieth century, as well as some familiarity with a few of the basic skills used to interpret historical accounts. A survey approach is given to the following topics: Industrialization, World War I, Life in the 1920s and 30s, World War II and the Cold War.

NATIVE STUDIES 120

This course is designed to help students gain an understanding of the Mi'qmaq and Maliseet/ Wolastoqiyik cultures in the Maritime provinces (past, present and future) and to see how First Nations and non-First Nations views have influenced the course of events in the Maritimes. Units include: language and culture, religion and spirituality, ancient times, arts and crafts, community and colonial relations with a focus on native culture and traditions. Issues from the Truth and Reconciliation Commission will also be examined. This elective is open to all grade 11/12 students who are interested in developing an understanding of First Nations culture and their perspectives on various native issues.

POLITICAL SCIENCE 120

This course will trace the evolution of political science and political ideology, as well as the structure and practices of the Canadian federal system. Major emphasis is placed on current events; provincial, Canadian and International. Emphasis is also placed on the culture of politics. Weekly writing journals and issue-based assignments place a strong emphasis on cross-curricular literacy and content-based literacy. Marking takes into account class discussion and participation, which are foundation skills in class.

POLITICAL SCIENCE 120

• ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

SOCIOLOGY 120

Prerequisite: Completion of Modern History 112 or 113.

This course is designed to increase awareness of how humans develop as social beings, and examines society's institutions in terms of the values and attitudes that enter into group action. The course will provide background for the study of contemporary rapid social changes as well as the cultural origins of existing social patterns. Areas of study will include the social problems presently confronting Canadian society such as crime, race and ethnic relations, urbanization, poverty, gender, and societal constructs.

WORLD ISSUES 120

World Issues is a course designed to expose students to current events in the news not restricted to simply political situations but any events impacting upon the lives of the global community. A foundation of geography is beneficial as is knowledge of the current events of the day. This course is self-paced and requires significant time management abilities. There are varied ways of presenting submissions for marks and all deadlines are predetermined in the syllabus on the B.H.S. portal.

WORLD ISSUES 120

• ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

LITERACY STUDIES

GRADUATION REQUIREMENTS

Students must complete English 11 as well as English 12 for graduation requirements.

CANADIAN LITERATURE 120

The overall aim for students of the Canadian Literature 120 course is to discover and create for themselves a concept of Canadian identity. The course allows students to accomplish this through varied language activities, with a focus on the Canadian experience. If choosing this course, you should be a student who likes to read and have a genuine interest in the influence writers and our country have on one another.

ENGLISH LANGUAGE ARTS 112 FULL YEAR COURSE

English 112 is a two-semester course intended for students who are considering post-secondary studies. The focus of the course will be on further developing skills in the three strands of the English Language Arts Curriculum: Reading and Viewing, Writing and Representing and Speaking and Listening. Throughout the course, students will be required to reflect on and respond critically to a variety of texts (short stories, poetry, non-fiction, novels, and dramas) from various time periods in literature. Students will also be required to express themselves in various

forms of writing, including, but not limited to, several formal essays per semester. Classroom discussions and presentations will focus on improving students' speaking and listening skills. Completion of both semesters is required to attain the English 112 credit.

ENGLISH LANGUAGE ARTS 113 FULL YEAR COURSE

This is a full-year course for students whose focus is community college or the workforce following high school. Students continue to develop skills in reading & viewing, writing & representing, and speaking & listening. Prior skills in reading strategies and the traits of writing are extended through interactive lessons. In the first semester, the units covered include a nonfiction book study, procedural writing, and fiction writing. Second semester, students complete a novel study, and learn strategies for writing nonfiction. Critical thinking is developed through whole class and small group discussions, as well as shared and individual assignments. A variety of resources and materials is used in this student-centered course.

ENGLISH LANGUAGE ARTS 122

Prerequisite: English 112

This is a one-semester course designed for students who may continue to study at the post-secondary level. The focus is on further skill development of the three strands of the English Language Arts Curriculum: Reading and Viewing, Writing and Representing and Speaking and Listening. During the semester, students will be expected to apply deep reading and analysis strategies while reading a variety of text genres and lengths independently and collaboratively; engage in rich formal and informal presentations and discussions; and, use various strategies and techniques to write at least four major writing assignments that demonstrate thoughtfulness, clarity and proper format.

ENGLISH LANGUAGE ARTS 123

Prerequisite: English 113 or 112

This is a one-semester course designed for students whose plans include community college or the workforce. The focus is on further development of reading & viewing, writing & representing, and speaking & listening skills. Students complete a book study (memoir), narrative writing, text interpretation including reinforcement and further study of figurative language, and a final project involving all aspects of English Language Arts. Supplementary texts will include nonfiction articles, poetry, and songs. Students enhance writing skills through lessons focused on the traits of writing, and comprehension skills using reading strategies. Critical thinking is further developed through whole class and small group discussions, as well as shared and individual assignments.

GOAL, GROWTH, AND GRIT: SKILLS FOR SUCCESS 120

Goals, Growth, and Grit: Skills for Success 120 will provide students with skills in three main areas - positive and productive mindsets and behaviours, organizational patterns, as well as functional and critical literacy. Within the broad learning expectations of the course, specific success skills, strategies, and practices will be explored. Students will be supported to apply and transfer these skills, strategies, and practices to other courses and real-life situations. Students will learn how these support postgraduate pursuits.

POST INTENSIVE FRENCH 110

Post-Intensive French is a literacy-based, non-immersion program for students choosing to continue to learn French as a second Language. Themes at this level include: Mysteries, The Power of Photography, and My Career: Dream or Reality. *Note also that if a student achieves a level of Intermediate at the end of grade 10, he or she may select to enroll in French Second Language courses (including online options) in addition to or in place of Post-Intensive French courses in grades 11 and 12.

POST INTENSIVE FRENCH 110

ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

POST INTENSIVE FRENCH 120

Post-Intensive French is a literacy-based, non-immersion program for students choosing to continue to learn French as a second Language. Themes at this level include: My Future, Cultures: Similarities and Differences and Ecological Challenges. *Note also that if a student achieves a level of Intermediate at the end of grade 10, he or she may select to enroll in French Second Language courses (including online options) in addition to or in place of Post-Intensive French courses in grades 11 and 12.

POST INTENSIVE FRENCH 120

• ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

FRENCH IMMERSION LANGUAGE ARTS 110

French Immersion Language Arts 110 is designed to assure maintenance and progression in the second language. The content of this course is based on four skills; comprehension, speaking, reading and writing. The course content includes a variety of topics.

FRENCH IMMERSION LANGUAGE ARTS 120

Prerequisite: French Immersion Language Arts 110

French Immersion Language Arts 120 is designed to assure maintenance and progression in the second language. The content of the course is based on four skills: Comprehension, Speaking, Reading and Writing. The course content includes a variety of topics. There will be a Provincial French Oral Proficiency Interview during this course where a certificate will be issued with a standardized rating.

Mi'kmaq 110

• AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

In Mi'kmaq 110, students learn to read and write in Mi'kmaq using the Francis Smith writing system. Introductory lessons focus on the letters and their corresponding sounds. Later lessons include pronouns, forming the possessive and verb conjugation. Basic vocabulary is introduced throughout the course. Students will be provided with opportunities to practice their newly acquired skills through dictations, question sheets and online activities.

READING TUTOR 120

This course presents a unique opportunity for grade 12 students with high academic achievement and good communication skills. Under the guidance of the instructor, tutors work on a one-to-one basis with students who are seeking to raise their reading level and to improve their writing skills. Tutors learn basic reading theory and teaching techniques, and are assigned one student to work with for the term. Tutors must commit to being present each and every day and to preparing daily tutoring activities, because the student depends on the tutor. This is a chance to make a positive contribution to our school, to acquire leadership skills, and to experience a real-life teaching situation. Especially recommended for those planning careers in education, guidance, or the social services

SPANISH 110

• AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

Spanish 110 employs an interactive tutorial method of course delivery to introduce students to the basic elements of the Spanish language and Hispanic culture. Students will have the opportunity to practice the language and learn through live, online group sessions. Course themes, including Who Am I?, My friends, This Is my Family, My

House Is Your House and My Town, and topics for virtual partner projects have been selected with the interests of the student in mind.

SPANISH 120

AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

Prerequisite: Spanish 110

Spanish 120 requires students to improve their knowledge and ability level in the language. This will be accomplished by engaging students in the exploration of the Hispanic culture through the areas of travel, fashion and music. Over the course of the term, students will be required to engage in various online group sessions and will be expected to complete projects with a virtual partner.

WRITING 110

This course is designed for writers who wish to broaden and improve their current writing skills and is meant to complement a student's compulsory English course. While challenging in terms of its requirements, it is flexible enough to accommodate the needs and interests of a range of students. Students will experiment with various writing styles like narrative, descriptive, personal, persuasive, and expository. Students will study these forms of writing and look at good examples so they can learn and incorporate different techniques into their personal writing. Teacher and peer conferencing is another important component of this course, as it is intended to provide individualized help to students so they can improve their writing based on their current abilities.

WRITING 110

ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

FSL WRITING 110 – French Second Language

• AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

MATHEMATICS COURSES

GRADUATION REQUIREMENTS

Students must complete either <u>Foundations of Mathematics 11</u> or <u>Financial and Workplace Mathematics 11</u> to complete their graduation requirements.

FINANCIAL AND WORKPLACE MATHEMATICS 110

Prerequisite: Geometry, Measurement, and Finance 10

This course is the first of two courses in the Financial and Workplace pathway designed for entry into post-secondary trades and technical programs, or for direct entry into the workforce. Concepts of right triangles, trigonometry, and angles of elevation and depression are applied to contextual problems. Scale models and drawings of 2D and 3D objects are constructed from various views and perspectives. Students are challenged to solve problems that involve numerical reasoning. Costs and benefits of renting, leasing and buying are explored, investment portfolios analyzed and personal budgets developed. Students manipulate and apply formulas in a variety of ways and solve problems using proportional reasoning and unit analysis.

FINANCIAL AND WORKPLACE MATHEMATICS 120

Prerequisite: Financial and Workplace Mathematics 110 or Foundations of Mathematics 110. (This course completes the Financial and Workplace Math pathway.)

This is the second of two courses in the Financial and Workplace pathway designed for entry into post-secondary trades and technical programs, or for direct entry into the workforce. Students explore the limitations of measuring instruments, and solve problems using sine and cosine laws and the properties of triangles, quadrilateral, and regular polygons as they relate to construction, industrial, commercial and artistic applications. Transformations of 2D and 3D shapes are identified, drawn with and without technology, and used to create, analyze and describe designs and to solve contextual problems. The viability of small business options is explored including expenses, feasibility, and factors that could impact on profitability. Linear relations are studied including patterns and trends, graphing, creating tables of values, writing equations interpolating and extrapolating, and solving problems. Student's gain an understanding of mean, weighted and trimmed mean; median and mode, and explore the impact of outliers. They also compare percent and percentile, and explore probability. Opportunity is given to research and present an historical event or an area of interest that involves mathematics.

FOUNDATIONS OF MATHEMATICS 110

Prerequisite: Geometry, Measurement, and Functions 10 and Numbers, Relations, and Finance 10 This course is a prerequisite for a second Foundations of Mathematics course in Grade 12, Providing a pathway designed for entry into academic programs not requiring pre-calculus. It is also a prerequisite for the Pre-calculus pathway. Students develop reasoning skills and apply this to proofs and problems involving angles and triangles, the sine law and the cosine law. Students model and solve problems involving systems of linear inequality in two variables and explore characteristics of quadratic functions. Costs and benefits of renting, leasing and buying are explored and investment portfolios are analyzed.

FOUNDATIONS OF MATHEMATICS 120

Prerequisite: Foundations of Mathematics 110

This is the second of two courses in the Foundations of Mathematics pathway designed for entry into post-secondary academic programs not requiring pre-calculus. In statistics, students are introduced to normal curves, and learn to interpret statistical data, using confidence intervals, confidence levels, and margins of error. To develop logical reasoning students analyze puzzles and games, and solve problems that involve application of set theory and conditional statements. The validity of odds and probability statements are assessed and problems are solved that involve probability of two events, the fundamental counting principle, permutations, and combinations. The binomial theorem is used to expand powers of a binomial. Data is represented using polynomial functions, exponential and logarithmic functions and sinusoidal functions to solve problems.

FOUNDATIONS OF MATHEMATICS 120

ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

PRE-CALCULUS 110

Prerequisite (or Co-requisite): Foundations of Mathematics 110

This course, followed by later courses in Pre-Calculus and Calculus is designed for entry into post-secondary programs requiring Pre-Calculus. Students demonstrate an understanding of absolute value of real numbers, and solve problems that involve radicals, radical expressions, and radical equations. Students determine equivalent forms, simplify rational expressions, and solve problems that involve rational equations. They develop an understanding of angles in standard position (0 to 360 degrees) and solve problems for these angles using the three primary trigonometric ratios. Polynomial expressions are factored and absolute value functions and quadratic functions are analyzed and graphed. Students solve problems that involve quadratic equations and solve, algebraically and graphically, problems that involve systems of linear-quadratic and quadratic-quadratic equations in two variables. They also solve problems that involve linear and quadratic inequalities in two variables, and quadratic inequalities in one variable.

PRE-CALCULUS A 120

Prerequisite: Pre-Calculus 110

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

PRE CALCULUS B 120

Prerequisite of Co-requisite: Pre-Calculus A 120

Students analyze arithmetic and geometric sequences and series to solve problems. They learn to factor polynomials of degree greater than 2, and to graph and analyze polynomial functions. They also graph and analyze radical, reciprocal and rational functions, building a function toolkit. Students are introduced to the concept of limits and determine the limit of a function at a point both graphically and analytically. They explore and analyze left and right hand limits as approaches a certain value using correct notation, analyze the continuity of a function and explore limits, which involve infinity.

CALCULUS 120

Pre-Requisites: Pre-Calculus A 120 and Pre-Calculus B 120

This is a mathematics course for students interested in taking programs, which require Calculus in university. The goal of the course is to help students develop introductory Calculus reasoning. Some of the topics that will be covered include average and instantaneous rates of change, derivative techniques, optimization problems, curve sketching, related rates, integrals, and antiderivatives.

PERFORMANCE & FINE ARTS COURSES

FINE ARTS 110

• AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

Fine Arts 110 is an Art Appreciation course where students will explore pieces of Visual Art, Music, and Drama from the 20th century. Students will learn how artists are affected by and reflect the worlds that they live in by researching, collecting, and discussing a variety of artists, their work, and the events occurring around them. Students will also learn how to talk intelligently and with confidence about art by using the appropriate terminologies and language connected to it. Background experience in at least one of the art disciplines would be helpful to students, but it is not essential.

MUSIC INSTRUMENTAL BAND (EXPERIENCED) - MUSBE 9/10/11/12

This course is designed for students who are coming to BHS from a feeder school where they have been in an instrumental (band) music situation for a minimum of one year or who have received equivalent private instruction. In addition to studying music repertoire, students will also be given instruction in theory and aural concepts as part of their coursework.

MUSIC INSTRUMENTAL BAND (BEGINNER) - MUSBB 9/10/11/12

This course is designed for students who are playing a band instrument for the first time. Students choose an instrument based on availability from the following list: Flute, Oboe, Bassoon, Clarinet, Bass Clarinet, Alto Saxophone, Tenor Saxophone, Baritone Saxophone, Trumpet, French Horn, Trombone, Baritone, Tuba, Acoustic Bass, Percussion (Note: Percussion students are required to gain facility on snare drum, mallet percussion, and timpani.) In addition to studying music repertoire, students will also be given instruction in theory and aural concepts as part of their coursework.

Note: Classical/Traditional piano instruction is not available in instrumental music courses. However, students with piano background may select mallet percussion from the above list as their instrument of choice for Instrumental Music courses or opt to take the Music Collective course.

MUSIC VOCAL - MUSVOC 9/10/11/12

Music Vocal is designed for those students who love to sing in both solo and choral settings. A good deal of time is spent on team building activities, theatre games, and physical warm-ups in order to free the singing voice and to create a safe environment where students will feel comfortable singing for each other. Musical theatre, classical, jazz, and folk are the primary vocal styles that are explored in this class. However, there will be opportunities to explore pop music as well. Other topics include stage presence, vocal technique, music theory & ear-training. In order to fulfill the outcomes of this course, students registered in voice class will be strongly encouraged to attend one of the Choir rehearsals for one semester. The Guys Choir rehearses on Tuesdays during lunch and Girls Choir rehearses Wednesdays during lunch. Students may be given some "free" periods during the semester in lieu of the time they spend in choir rehearsals. Although there is no prerequisite for this course, students interested in this course should demonstrate a strong desire to sing in a choir.

MUSIC COLLECTIVE – MUSCOL 9/10/11/12

The Music Collective course has been designed to meet the needs of those students who do not fall into the band or voice categories of music courses. Typically, students who enroll in Music Collective play the piano/keyboard, drums, bass guitar, or guitar. (Drummers should note that as there may only be access to one or two drum kits on site, they should be prepared to play other percussion instruments such as the congas/bongs/djembe as part of their coursework). One class a week is devoted to making music and developing ensemble skills, usually in the form of a "jam session" of sorts. Therefore, experience in one of the instruments mentioned above is expected. Please note that students will be expected to perform and create (i.e. compose and improvise) for each other and in public settings in order to meet the outcomes of this course. Moreover, as music is a dependent art, students interested in taking this course should demonstrate a strong desire to work with others as a substantial portion of time will be devoted to group work. In addition to studying music repertoire, students will also be given instruction in theory and aural concepts as part of their coursework.

Visual Arts 11/12

***ART FEE \$25.00 to take this course This course enables students to further develop their knowledge and skills in visual arts. Students will use the creative process to explore a wide range of themes through studio work that may include drawing, painting, sculpting, and printmaking. Students will be responsible for keeping an art journal / sketchbook. Students will learn how to use the critical analysis process when evaluating their own work and the work of others and Students will also analyze art works and study aspects of Western art history, as well as art forms from Canada and other parts of the world. There is an exam in this course.

This is a combined 11/12 Art Class, at times, students who have taken Visual Arts in grade 11 will have the opportunity to explore their own artistic interests. VA 110 is a prerequisite for VA120

FASHION DESIGN

Fashion Design 110 will provide opportunities for each student to develop an understanding of the World of Fashion and the fundamentals of the fashion design and sewing process. The evaluation of fashion and its' relationship to societal change in the past, present and future, as well as the role of the fashion industry and its relationship to the Canadian economy will be addressed. Class trips to local businesses will be arranged. This course will introduce characteristics and construction of fabrics, careers available and the skills required, plus basic construction and product assembly. By the end of this course students will be able to complete simple and practical sewing projects both by hand and with the sewing machine. Possible class projects include the BHS Fashion show, Online Magazine, BHS Fashion Boutique.

Basic fabrics will be provided but students must supply their own sewing kit or be prepared to purchase one for \$20.00.

THEATRE ARTS 120

Theatre Arts 120 offers students further study in the area of drama. 50% of the curriculum includes theory: basic theatre terms, improvisation and pantomime theory, the history of drama, and the various aspects of producing a play. 50% of the curriculum includes practical skills: acting and character interpretation through pantomime, improv scenarios and participation in a play production. There will be opportunities for student-directed learning to meet the outcomes including participation in out of class activities. Students must be able to listen, cooperate, and participate. Teamwork is essential. Students will learn about themselves as they build on their personal strengths, and develop communication and theatre skills. Assessment is based on theory tests and assignments, as well as day to day and culminating performances. Therefore, regular attendance is extremely important.

PHYSICAL EDUCATION COURSES

OUTDOOR PURSUITS 110 - APPLICATION REQUIRED + \$75 FEE

Outdoor Pursuits 110 provides opportunities for students to explore various outdoor adventure activities such as camping, backpacking, hiking, cross-country skiing, snowshoeing and orienteering. From these experiences they will gain a greater insight, appreciation, concern and knowledge about the outdoor environment and the opportunities that it holds for educational, recreational, and economic benefit. Also throughout the course students will take part in many team-building activities and group problem solving initiatives, where students learn to communicate and support one another to reach their goals, improve self-esteem, develop leadership skills, develop strategies that enhance decision-making, and to respect the differences within a group.

PHYSICAL EDUCATION LEADERSHIP 120 - <u>APPLICATION REQUIRED</u> (Must not have failed a previous Phys. Ed. course)

Leadership is a class that will get you to step out of their comfort zone and take charge of your peers. You will work on your public speaking, presentation skills, and communication skills in a forum that is hopefully more comfortable than your typical classroom. You will research, design, and present games and skills. You will also learn, through doing, the skills and qualities necessary to become a efficient leader. Time will be spent in both the gym and classroom. Please note that this is not simply a Phys. Ed class, there is a large amount of work required.

WELLNESS THROUGH PHYSICAL EDUCATION 110

The goal of the Wellness Through Physical Education curriculum is to promote healthy active living for life. The course is intended to encourage a broad-based exploration of a variety of activities, highlighting some non-traditional approaches to fitness and wellness (i.e. yoga, Ultimate Frisbee, tabatta training, cross fit, sphere

ball, speedball, Danish Longball, jogging, meditation). As a result, the course offers a range of learning experiences for students that encourage healthy active living.

The course will be for students who have successfully completed Grade 9/10 Physical Education and Health and wish to personalize their learning by researching, self assessing and determining personal preferences for engaging in lifelong physical activity. Students will apply knowledge of fitness and wellness concepts to the creation of a personal healthy active living plan. The course is based on theory and practical application. A willingness and desire to be physically active is required.

SCIENCE COURSES

GRADUATION REQUIREMENTS

Students must complete Science 10 and at least one science course in grade 11 or 12 for graduation requirements.

BIOLOGY 112

Biology 112 is the first of two one-year sequential courses. This is our introduction into the world of Biology. The course begins with cell structure, diversity of living things, and unifying characteristics of the 6 kingdoms. The last part of the course deals with the regulation and function of digestive, respiratory, excretory and circulatory systems. Such topics would be an asset to anyone entering health science, or a science related field! This is a prerequisite for Biology 120.

BIOLOGY 122

Biology 122 is the second of two one-year courses. This first part of this course focuses on human DNA, protein synthesis, genetics, gene mutations and human reproduction. Many current issues such as genetic testing, the importance of proper protein production and nutrition, fertility treatments, and genetic disorders are explored. The second part of the course includes the nervous and endocrine systems as well as gene pools and evolution. Designed for students planning on attending university, science related community college courses or nursing.

BIOLOGY 110 (HUMAN PHYSIOLOGY)

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 and students who will take additional science courses. A study of Human Physiology will be relevant to every student, providing them with the tools they will need to make informed choices about their own health and that of others. It will also be relevant to those students who will be going on to careers in the social sciences, kinesiology and health care. This course focuses on the biology and healthy functions of all of the major human body systems and how wellness can be compromised by struggles with mental and social health, lifestyle choices and disorders.

CHEMISTRY 112

Chemistry 112 is the first of two courses designed for students going to university or technical school following graduation. Topics include classification of matter, atomic theories, naming elements and compounds, balancing chemical equations, classifying chemical reactions and calculations involving the mole. The experiments are for hands-on experience, so that students may make observations and draw conclusions that lead directly to important chemical principles.

CHEMISTRY 122

Prerequisite: Chemistry 112

Chemistry 122 is the second of two courses designed for students going to university or technical school following graduation. Topics include thermochemistry, organic chemistry, acid/base chemistry and chemical equilibrium. The experiments are designed so that students may make observations and draw conclusions that lead directly to important chemical principles.

INTRODUCTION TO ELECTRONICS 110

(Involves extensive computer and math skills)

Prerequisite: NRF 10 and GMF 10

Welcome to Introduction to Electronics 110 – a first step towards developing an understanding of the fundamental theory of electricity/electronics. This course will be of particular interest to learners with a career objective in applied technologies and engineering, as well as those with a personal interest in electronics. This course is recognized as a Science or a Technology credit towards graduation.

Introduction to Electronics 110 is divided into five units:

Ø Unit 1: Fundamentals

Ø Unit 2: Current, Voltage Resistance

Ø Unit 3: DC Circuit Analysis

Ø Unit 4: Magnetism

Ø Unit 5: AC Theory and Devices

While electronics technicians and electrical engineers obviously require an extensive knowledge of electronics theory, a surprisingly large number of other trades and professions require at least a basic level of knowledge in this field of study as well: Automation Mechanic, Automotive Service Technician, Computer Technician, Computer Engineer, Electrical Engineer, Electrician, Electronics Technician, Refrigeration and Air Conditioning Mechanic, Aviation Mechanic and Technician.

STRONGLY RECOMMENDED FOR:

Ø Automotive Electrical systems 120

Ø Tune-up and Emissions 120

INTRO TO ENVIRONMENTAL SCIENCE 120 & FSL INTRO TO ENVIRONMENTAL SCIENCE 120

Environmental Science 120 and FSL Environmental Science aims to help students develop the knowledge base and skills for investigating and analyzing environmental issues both globally and locally. Course topics include ecology, environmental awareness, population growth and resource limitations, sustainable ecosystems and communities. Students also learn about key features of current environmental issues such as climate change, renewable energy and pollution. Assessment may be based on the following: contribution to discussions, journals, self-assessments and activities; assignments and tests, experimental work, and collaborative presentations. An independent project portion is also included which involves a variety of topics of the student's choice.

INTRO TO ENVIRONMENTAL SCIENCE 120

ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

FSL - INTRO TO ENVIRONMENTAL SCIENCE 120

• ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

PHYSICAL GEOGRAPHY 110

Physical Geography provides an overview of Earth Science and our place in the Universe. It is divided into three major sections, the first focusing on the Universe, its creation, and the place of Earth and our solar system in it. Secondly students are introduced to graphic and mathematical skills as they apply to geography with the analysis and interpretation of maps and images, including compass use, longitude and latitude, and horizontal and vertical scales. Lastly students will explore the introductory themes of geology including the structure of the Earth, plate tectonics, landforms and their creation through natural forces such as volcanoes and earthquakes, and rock and mineral identification

PHYSICS 112

Physics 112 is the first of two courses designed for students intending to go to university or technical school following graduation. Topics include kinematics (the study of how objects move), dynamics (the study of why objects move), work, power, energy and waves (fundamental properties, sound and light). Success in grade 10 NRF & GMF is required.

PHYSICS 112

Physics 112 is the first of two courses designed for students intending to go to university or technical school following graduation. Topics include kinematics (the study of how objects move), dynamics (the study of why objects move), work, power, energy and waves (fundamental properties, sound and light). Success in grade 10 NRF & GMF is required.

PHYSICS 112

ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

PHYSICS 122

Prerequisite: Physics 112

Physics 122 is the second of two courses designed for students intending to go to university or technical school following graduation. Topics include vector analysis, the conservation of momentum and collisions, two-dimensional motion, the universal law of gravitation and satellite motion, electrostatics, fields and electric circuits.

PHYSICS 122

ALSO AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

PHYSICS 111

• AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

Physics 111-121 are sequential courses that utilize the discovery approach to scientific learning. Since these are enriched courses, students should have a genuine interest in science and better than average achievement in science and mathematics. The scientific method is used in gathering experimental data, and laboratory work is the focus of these courses. Topics are the same as in Physics 112-122, but the depth of coverage is greater.

PHYSICS 121

• AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

Prerequisite: Physics 111

TECHNOLOGY COURSES

ADVANCED TECHNOLOGY 120

Advanced Technology is a project-based learning course that provides students with a keen interest in environmental issues with the ability to engage in a variety of sustainability-related projects. Students will learn to collect and manipulate meaningful data using various technologies and use the information to design, develop, implement and evaluate solutions to real-world problems. Activities will be primarily completed in peer groups and will vary with hands-on lab and field work, research, case studies and field trips culminating in a final presentation. Students will be evaluated on their daily performance, presentations, research papers, and various projects. Personal initiative, self-discipline and the ability to work as part of a team are essential components for success. Advanced Technology 120 is an elective course with limited enrollment intended for students who wish to pursue their post-secondary education in the fields of science or engineering.

DIGITAL PRODUCTION 120

This course is for those aspiring to make it in the world of multimedia, or those wanting to know how to add that oomph to their repertoire of skills. You will learn to multimedia skills such as photography and digital image manipulation, website creation, as well as audio and video production. Other important aspects of the course include learning how to identify and fit media to different audiences, ethical considerations, copyright laws and acceptable use of digital equipment. The course is recommended for those who intend on pursuing graphic design, digital photography or animation at the post secondary level.

COMPUTER SCIENCE 110

• AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

Computer Science 110 teaches the fundamentals of structured programming and the program development cycle. Students will learn to use basic programming constructs to write simple programs using the Visual Basic programming language. More advanced topics, including graphics and animation, are also introduced. Computer Science 110 is recommended, but not required, as a prerequisite for Computer Science 120.

COMPUTER SCIENCE 120

• AVAILABLE ONLINE THROUGH DISTANCE EDUCATION

Computer Science 120 is recommended for students with a strong interest in computer programming. Students will learn the basic syntax of the Java language, program Java Applets and write simple programs using object-oriented design principles. The course provides a good foundation for students who wish to pursue a post-secondary program in computer science.

GRAPHIC ART & DESIGN 110

The Graphic Art and Design 110 course provides opportunities for students to explore the skills, processes and knowledge involved in graphic art and design. This includes developing foundational skills such as drawing, understanding various media, working with principles and elements of design, and image manipulation. Students will be introduced to creative problem solving and design processes to create art and design products. Attention will be paid to critical visual literacy in the industry of graphic art and design.

How are pathways different than levels?

Levelled courses are developed for different academic abilities. "Pathways" of courses are designed to better meet your interests and needs for after high school.

> What if I don't know what I want to do after I graduate? Can I switch pathways?

Yes. If you have started to take courses in one pathway, you can take courses in another one, as long as you complete the prerequisites. You will receive credit for all math courses you take.

Should I take more math courses, even if I don't need them to graduate?

You may need specific courses for entrance to post-secondary programs. You will also increase your math skills and keep them current which will help you no matter what you decide to do after high school.

For more information, contact the Guidance Counsellor at your school or go to: www.careercruising.com (login information availlable from Guidance Dept.)

High School Mathematics Pathways



An understanding of math is essential in today's competitive, technological world. Starting in 2008, the K-12 mathematics curriculum in New Brunswick has been changing to help students be better prepared for whatever they choose to do after high school. The new curriculum is focused on providing students with the skills and knowledge to confidently solve problems and contribute to society.

The high school mathematics program has changed significantly. There are new courses for Grades 9 to 12 and the Grades 11 and 12 courses are organized into three "pathways". These pathways and the courses included in each are explained in more detail on the next page.

 Financial and Workplace Mathematics



◆ Foundations of Mathematics



Pre-Calculus



Each pathway is designed to provide students with the mathematical competencies and critical thinking skills that will be needed after high school. Students should select courses in the pathway that best fits their interests and plans for after high school, similar to selecting science and other elective courses. Each pathway provides students with a different focus of math concepts and skills. Students may choose to take additional courses beyond what they need to graduate to better prepare them for what they want to do after high school.

REQUIRED COURSES

What math courses do I need to graduate?

- Mathematics 9
- Geometry, Measurement, and Finance 10
- · Number, Relations, and Functions 10
- Plus: one of the following Grade 11 courses
 Financial and Workplace 11



Foundations of Mathematics 11 (pre- or co-requisite for the Pre-Calculus pathway)

GRADE 9: MATHEMATICS 9

Length: Full year

Prerequisite: Grade 8 mathematics

Topics: exponents and bases, linear relations and equations, polynomials, circle properties, surface area, scale diagrams, data collection and displays, histograms, probability

GRADE 10: Geometry, Measurement, and Finance 10

Length: 1 semester

Prerequisite: Grade 9 mathematics Topics: Pythagorean Theorem, polygons,

angles, trigonometric ratios, metric and Imperial systems of measurement, surface area and volume, unit pricing, currency exchange, income (gross & net pay), credit cards, loans,

interest

GRADE 10: Number, Relations, and Functions 10

Length: 1 semester

Prerequisite: Grade 9 mathematics
Topics: prime factors, common factors,
square and cube roots, irrational numbers,
integral and rational exponents, polynomial
expressions, trinomial factoring, linear relations and functions, slope, distance formula,
midpoint formula

ND

High School Math Pathways: Which one is best for you?

FINANCIAL AND WORKPLACE MATHEMATICS

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

FOUNDATIONS OF MATHEMATICS

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

PRE-CALCULUS

This pathway is designed for students who plan to take post-se condary programs that require calculus.



GRADE 11 COURSES

Financial and Workplace Mathematics 110

Length: 1 semester

Pre-requisite: Geometry, Measurement, and

Finance 10

Topics: right triangles, trigonometry, scale models & drawings, numerical reasoning, renting & buying, investment portfolios, personal budgets, application of formulas, slope, proportion

application of formulas, slope, proportional

reasoning.

Opens doors to programs such as: College diplomas: Early Childhood Education, Firefighting, Drafting, Welding, Plumbing,

Carpentry; Bachelor degrees: Arts and Fine Arts Foundations of Mathematics 110

Length: 1 semester

Pre-requisites: Number, Relations, and Functions 10 and

Geometry, Measurement, and Finance 10 Topics: numerical & logical reasoning, angles & triangles, sine & cosine law, systems of linear inequalities, quadratic functions, renting & buying, investment portfolios

Opens doors to programs such as:
College diplomas: Medical Technology,
Business Administration, Practical Nursing;
Bachelor decrees: Arts and Fine Arts

Pre-Calculus 110

Length: 1 semester

Pre- or Co-re quisite:

Foundations of Mathematics 110

Topics: absolute value functions, radical expressions & equations, rational expressions & equations, angles & trigonometric ratios (0°-380°), polynomial factoring, systems of equations, quadratic functions & equations, linear & quadratic inequalities.

Opens doors to programs such as: College diplomas: Engineering and Environmental technology, Bachelor degrees: Nursing

GRADE 12 COURSES

Financial and Workplace Mathematics 120

Length: 1 semester

Pre-requisite: Financial and Workplace

Mathematics 110 OR

Foundations of Mathematics 110

Topics: measuring, sine & cosine laws, properties of polygons, transformations of

2-D & 3-D shapes, small business finance, linear relationships, data interpretation,

pro bability.

Not currently required for any specific program, but would support:

College diplomas: Art and Design,

Forest Technology, Business

Foundations of Mathematics 120

Length: 1 semester

Pre-requisite: Foundations of Mathematics 110
Topics: normal distribution, standard
deviation, confidence intervals, set theory,
conditional statements, probability,
binomial theorem, polynomial, exponential,
logarithmic & sinusoidal functions.

Opens doors to programs such as: College diplomas: Engineering Technology, Computer Technician, Pharmacy

Technology, Bachelor degrees: Nursing, Kinesiology, Business Administration,

Economics, Psychology

Pre-Calculus A 120

Length: 1 semester

Pre-requisite: Pre-Calculus 110
Topics: graphs of functions &
related equations, exponential &
logarithmic functions & equations,
angles in standard position, degrees &
radians, unit circle, trigonometric
functions & equations, trigonometric
identifies

**Most programs that require Pre-Calculus A 120, also require Pre-Calculus B 120



Please confirm the entrance requirements for specific programs offered by postsecondary institutions. Pre-Calculus B 120

Length: 1 semester Pre- or Co-requisite: Pre-Calculus A 120

Topics: arithmetic & geometric sequences & series, polynomial factoring & functions, radical, reciprocal & rational functions, function toolkit, permutations, combinations & binomial theorem, limits & continuity of functions.

Opens doors to programs such as: Bachelor degrees: Science, Computer Science, Engineering, Mathematics Calculus 120

Length: 1 semester

Pre-requisites: Pre-Calculus A 120 and

Pre-Calculus B 120

Topics: rates of change, derivatives of functions, derivative rules, inverse trig functions, optimization problems, definite integrals, antiderivatives, application of integrals

Supports: Bachelor degrees: Science, Computer Science, Engineering, Mathematics

Bathurst High School Summary of Credits



Nam e	2		<u>~</u>		PAR	PRSSU
Date						
Compuls	ory Credits				Mark	1/2
	☐ Eng 112		Eng 113		passetaka r	0.58740
3	Eng 122		Eng 123			
	Foundations	2000	Financial/Wrkplace Math			
4	M ath 110		110	2		
5	☐ Hist 112		Hist 113	FIH110		
6	Science		See (A) Below			
7	☐ F/A Life Role		See (B) Below		4	
Elective	Credits				Mark	1/2
8					87	3
9						
10						
11					2.	
12						
13						
14						
15					ĵ	
16						
17						
	* 17 Credits Re	quired	for Graduation		80	
18						
19						
20					j	
۸\ ۱	ine 6: One course	from				
A) - L	ille o. <u>Olle</u> coulse	110111.				
Physics 1	112		Chemistry 112	Biology 112	Phy sical Geo	graphy 110
Physics 122 Chemistry 122		Chemistry 122	Biology 122	Intro to Enviro. Science 120		
Auto-Elec	ctrical 120		Electronics 110	Biology 113	2	
B) - L	ine 7: One course	from:		77	-	
Art 110			Entrepreneurship 110	Music 112	PE Leadership 120	
Art 120			Family Living 120	Music 113	Outdoor Purs	suits 110
Fine Arts	110		Graphic Art 110	Music 122	Wellness 110	
Reading 1	Tutor 120		Career Exploration 110	Co-op 120	Theater Arts 120	

^{***} All Students Need Five Grade 12 courses to meet Graduation requirements