



**Simonds High School**

# **COURSE CALENDAR 2020-2021**



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# Simonds High School Registration Calendar

This course calendar has been developed to aid our students in registering for the next school year. Parents are encouraged to discuss registration with their child and ask any questions they may have.

Please note there are alternative options for various credits within the education system. There is a process for attaining these types of credits and students are encouraged to speak to their Faculty Advisor, or Guidance Counselor. In some cases, only the Administration can approve registration in some courses. These courses are:

## **Distance Education:**

New Brunswick's Distance Learning program, emphasizes a facilitated learning approach. All courses are led by distance facilitators/teachers who answer questions and engage student learning by email, chat room or web cam. The current slate of courses is constantly being improved and updated and new courses are also in development to expand the Distance Learning offering. Mrs. Quapp (Library) is our Distance Education Local Facilitator. Students must have her and Mr. Dumas recommendation before being registered in a Distance Education Course. For more information and a list of courses please use the following link: [www.gnb.ca](http://www.gnb.ca) SEARCH TERM: Distance Education.

**Students are encouraged to take registration seriously and use any and all support and guidance they can in determining the best courses for their education. The guidance department (located in the main office) is full of information with regards to post secondary institutions. Please note there are some post secondary courses that have pre-requisites beyond high school graduation requirements. There are two full time guidance counselors within these offices to answer questions and offer advice. Please make an appointment to see them if you wish.**

**Please note that all course offerings are dependent upon course registration. If not enough students register for a particular course, it will not be offered during that calendar year.**

## **French Immersion Courses**

Students who have successfully completed the Early or Late French Immersion programs in Middle School and have followed the French Immersion program through Grades 9 and 10, and other students with a similar proficiency in French as a second language may opt to take the following French Immersion courses:

FI Language Arts 110  
FI Language Arts 120  
FI Techniques de Communication 120  
FI Individual and Family Dynamics 120  
FI Modern History 110  
AP French

**Please Note:** FI Language Arts 110 & 120 are not available to Francophone students.

## **Certificate of Oral Proficiency**

All students enrolled in either Post Intensive French 120 or FI Language Arts 120 will be interviewed by a professional interviewer from the Department of Education. Those students who have completed all the required French courses (Post-Intensive or Immersion) from Elementary to Grade 12 will be presented a certificate at graduation indicating their level of oral proficiency.

## **Certificate of Immersion**

To obtain the Certificate of Completion of Immersion, a student must meet the following requirements:

- 50% of instruction in French in Grades 9 and 10
  - Five (5) French Immersion credits successfully taken during Grade 11 and 12.
- The certificate shall be presented at graduation.

Graduation Requirements

## New Brunswick Graduation Requirements

- **17 Credits** (including compulsory credits) are required
- **7 Compulsory credits:**
  - English 111, 112, 113 (one of) for 2 credits
  - English 121, 122, 123 (one of)
  - Foundations 110 **OR** Financial Workplace 110
  - Modern History 111/112/113 **or** FI Modern History 110
  - Science: (one of) Biology 111, 112, 113, 121, 122 Chemistry 112, 112, 121,122 Environmental Science 120, Human Physiology 110, Introduction to Electronics 110, Physics 111, 112, 121, 122, Physical Geography 110, Robotics and Automated Systems 120
  - Fine Arts or Life Role Development: (one of) Visual Arts 110, 120 Music 112, 122 Theatre Arts 120 Individual Family Dynamics 120 Co-op Ed 120 (2 or 3 credits) Phys. Ed Leadership 120, Entrepreneur 110, Wellness 110
- **English and at least four other subjects must be taken at the "12" level.**
- **Successful English Language Proficiency Assessment is required.** Students must achieve an "Appropriate Performance" Level or higher to receive a NB High School Diploma. All students in NB write the English Language Assessment in Grade 9. Students who score unsuccessful in Grade 9 will continue to be provided with support and the opportunity for a diploma by re-writing the English Language Proficiency in Grade 11 and if necessary, again in Grade 12.
- **Geometry Measures and Finance 10 and Numbers Relations and Functions 10** must be passed successfully with a minimum of 60% to receive a NB High School Diploma,
- **Locally Developed Courses:** Students may use no more than two locally developed courses in the count of 17 require credits to graduate with a NB High School Diploma.

Graduation Requirements

## SHS Registration – Entering Grade 10

Name: \_\_\_\_\_ HR TEACHER: \_\_\_\_\_

**Compulsory**

1. \_\_\_\_\_ A

English 10 Advanced

2. \_\_\_\_\_ B

English 10 Regular

3. \_\_\_\_\_ A

GMF 10 Advanced OR GMF 10  
AND

4. \_\_\_\_\_ B

NRF 10 Advanced OR NRF 10  
OR

FI GMF 10 AND FI NRF 10

5. Social Studies 10 OR FI Social Studies 10

6. French 10 OR FI Language Arts 10

7. \_\_\_\_\_

Art 10

Phys. Ed 10

Broad Based 10

Music 10

Pers. Development Career Plan 10

8. \_\_\_\_\_

Specialty Alternate:

**Options: Chose from the grade 10 options on the flip side of this page.**

9. \_\_\_\_\_

Choose one alternate:

10. \_\_\_\_\_

Alt: \_\_\_\_\_

**Graduation requirements:**

English 11 (A & B) and English 12 = 3

Foundations of Math 11 or Financial & Workplace Math 11 = 1

Modern History = 1

Science = 1

*(Biology, Chemistry, Environmental Science, Intro. to Electronics, Micro Electronics, Physical Geography, Physics, Robotics and Tech.,)*

Fine Arts/Life Role Development = 1

*(Coop, Entrepreneurship, Family Living, Health/Phys. Ed120, Theatre Arts, Visual Arts, Wellness 110)*

Options = 10

**Total = 17**

*\*Must have 5 grade 12 credits to graduate*

# Graduation Requirements

## SHS Registration – Entering Grade 11

Name: \_\_\_\_\_ HR TEACHER: \_\_\_\_\_

**Compulsory**

1. \_\_\_\_\_ A

2. \_\_\_\_\_ B

English 111  
English 112  
English 113

3. \_\_\_\_\_

Financial Workplace Math 11  
Foundations Math 11

4. \_\_\_\_\_

Modern History 111  
Modern History 112  
Modern History 113  
FI Modern History 112

- Please note that FI Individual Family Dynamics 112 and FI Language Arts 110 are Compulsory Classes for French Immersion.

**Options: Use the chart on the flip side of this paper.**

**Choose two Alternates**

5. \_\_\_\_\_

ALT: \_\_\_\_\_

6. \_\_\_\_\_

ALT: \_\_\_\_\_

7. \_\_\_\_\_

- Be sure that you have the requirements you need to attend the post-secondary program of your choice (i.e. Math, Science etc..)
- Students must have a minimum of 75% and a strong work ethic to take level 1 classes.
- Learning Strategies 110 is mandatory for any student who was not successful on both sections (Reading and Writing) of the ELPA.

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

**Graduation requirements:**

English 11 (A & B) and English 12 = 3

Foundations of Math 11 or Financial & Workplace Math 11 = 1

Modern History = 1

Science = 1

*(Biology, Chemistry, Environmental Science, Intro. to Electronics, Micro Electronics, Physical Geography, Physics, Robotics and Tech.,)*

Fine Arts/Life Role Development = 1

*(Coop, Entrepreneurship, Family Living, Health/Phys. Ed120, Theatre Arts, Visual Arts, Wellness 110)*

**\*Must have 5 grade 12 credits to graduate**

# Graduation Requirements

## SHS Registration – Entering Grade 12

Name: \_\_\_\_\_ HR TEACHER: \_\_\_\_\_

### Compulsory

1. \_\_\_\_\_ A

English 121  
English 122  
English 123

- **Please note that Conversational French 120 and FI Language Arts 120 are Compulsory Courses for French Immersion.**

### Options:

### Choose two Alternates

2. \_\_\_\_\_

ALT: \_\_\_\_\_

3. \_\_\_\_\_

ALT: \_\_\_\_\_

4. \_\_\_\_\_

- Be sure that you have the requirements you need to attend the post-secondary program of your choice (i.e. Math, Science etc..)
- Students must have a minimum of 75% and a strong work ethic to take level 3 classes.
- Learning Strategies 110 is mandatory for any student who was not successful on both editions (Reading and Writing) of the ELPA.

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

### Graduation requirements:

English 11 (A & B) and English 12 = 3

Foundations of Math 11 or Financial & Workplace Math 11 = 1

Modern History = 1

Science = 1

*(Biology, Chemistry, Environmental Science, Intro. to Electronics, Micro Electronics,*

*Physical Geography, Physics, Robotics and Tech.,)*

Fine Arts/Life Role Development = 1

*(Coop, Entrepreneurship, Family Living, Health/Phys. Ed 120, Theatre Arts, Visual Arts, Wellness 110)*

Options = 10

**Total = 17**

***\*Must have 5 grade 12 credits to graduate***

# Graduation Requirements

### Grade 9 Program

*Each grade 9 student must take the following course of study:*

	<b>English Program</b>	<b>French Immersion Program</b>
<b>Full Year</b>	English 9	English 9
	Math 9	FI Math 9
	Science 9 & 10	FI Science 9 & 10
<b>Semester</b>	Social Studies 9	FI Social Studies
	French 9	FI Language Arts 9
<b>Term</b>	Music 9, Visual Arts 9, Broad Based Technology 9, Physical Education and Health 9	Music 9, Visual Arts 9, Broad Based Technology 9, Physical Education and Health 9

### Grade 10 Program

*Each grade 10 student must take the following course of study, and have the opportunity to achieve success in 2 credit courses.*

	<b>English Program</b>	<b>French Immersion Program</b>
Full Year	English 10	English 10
Semester	Geometry/Measurement & Finance 10	FI Geometry/Measurement & Finance 10
	Numbers/Relations & Functions 10	FI Numbers/Relations & Functions 10
	Social Studies 10	FI Social Studies
	Post Intensive French 10	FI Language Arts 10
Must choose 2	Music 10, Visual Art 10, Broad Based Technology 10, Physical Education and Health 10, Personal Development and Career Planning 10	Music 10, Visual Art 10, Broad Based Technology 10, Physical Education and Health 10, Personal Development and Career Planning 10
Must choose 2	Biology 111, 112, Chemistry 111, 112. Computer Aided Design 110, Computer Science 110, Culinary Technology 110, Early Childhood Education 110, Hospitality and Tourism 110, Human Physiology 110, Intro Applied Technology 110, Physical Geography 110, Post Intensive French 110, Wellness 110, Writing 110	Biology 111, 112, Chemistry 111, 112. Computer Aided Design 110, Computer Science 110, Culinary Technology 110, Early Childhood Education 110, Hospitality and Tourism 110, Human Physiology 110, Intro Applied Technology 110, Physical Geography 110, Post Intensive French 110, Wellness 110, Writing 110

## Grade 9 & 10 Program

### **AP English (Grade 12)**

The Advanced Placement (AP) Program provides an opportunity for students to pursue and receive credit for university-level work. AP English will engage students in the careful reading and critical analysis of literature. Through the close reading of selected texts, students will deepen their understanding of the way writers use language to provide both meaning and pleasure for their readers. As they read, students will consider a work's structure, style and themes, as well as such elements as figurative language, imagery, symbolism and tone. Prerequisite: English 121

### **English 111-121**

English 111-121 are designed for students whose aptitudes and interests in language/literature are above average. These courses will provide an enriched variety of experiences to challenge and refine students' competencies. Greater range and depth of the content plus more independent and interdependent experiences will accommodate students' interests and talents. *Prerequisites:* English 111: 75% in English 10, English 121: an English 111 credit or 75% in English 112.

### **English 112-122**

English 112-122 are appropriate for students intending to pursue studies at a post-secondary institution. Each of the courses will provide a wide variety of experiences. English 112 will focus on argument, persuasion, fact and opinion, a Shakespearean play and other significant literary pieces; English 122 will concentrate on critical comprehension and evaluation skills of Canadian and world literature, including Shakespearean play. Prerequisite for English 112: 60% in English 10 English 112: an 112 English credit.

### **English 113-123**

English 113-123 are courses intended for students who do not plan to attend academic post-secondary institutions. These English courses provide a variety of experiences with language and texts to develop students' competencies in thinking, reading, viewing, writing, listening, and speaking. High priority is given to comprehension and to effective written and oral communication. Students will concentrate on improving strategies for learning from literary, technical and media texts' practical and personal writing is stressed. Students will participate in a provincial English examination at the end of grade 11.

### **Canadian Literature 120**

The goal of the Canadian Literature 120 curriculum is to promote an interest in important Canadian Literature and other creative texts. The course is for students who have successfully completed Grade 10 English Language Arts, who demonstrate an interest in literature and deconstructing texts, and who wish to explore Canadian identity through a variety of literary texts worthy of study and appreciation.

### **Journalism 120**

Journalism 120 provides students with intensive practice in writing and editing. Students learn to identify or generate story ideas, to gather pertinent information and to write and edit their stories with a view to publication or broadcast.

### **Growth, Goals and Grit 120**

The primary purpose of the course is to aid in reading and writing skills development. It is an intervention course where students will learn various reading strategies and reading fix-up strategies to aid in their reading skills development. They will also concentrate on their writing skills development.

### **Media Studies 120**

Media Studies 120 offers an introduction to the evolution and impact of mass media on the individual and society. The primary purpose of the course is to have students learn through experiment and exploration; the course is practical

### **Theatre Arts 120**

This course offers many aspects of theatre performance, including acting, movement, memorization, improvisation, character interpretation, play management, play writing and theatre history. The course is activity based with an element of research and requires students to be independent and reliable.

### **Writing 110**

The course offers students opportunities to reinforce and enrich their writing skills through a "writing lab" approach where exploring, drafting, revising, proofreading, sharing and reflecting are encouraged. Students may enter the course with varying skill levels, from university bound students looking to enhance their essay writing to students with basic literacy requirements.

English Department



### **AP Statistics**

AP Statistics is an introductory college-level statistics course that introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students cultivate their understanding of statistics using technology, investigations, problem solving, and writing as they explore concepts like variation and distribution; patterns and uncertainty; and data-based predictions, decisions, and conclusions. *The pre-requisite is Pre-Calculus 11.*

### **Calculus 120**

This one semester course is recommended for students who wish to enter the sciences or engineering at university. It includes the following topics: limits, slopes and rates of change, differentiation rules for sums, differences, products and quotients of functions including trigonometric, exponential and logarithmic functions, applications of derivatives such as curve sketching, velocity, acceleration and related rates. *The pre-requisite is Pre-Calculus 12B.*

### **Financial and Workplace Mathematics 11**

This course is the first of two courses designed for entry into many trades and technical programs, and for direct entry into the work force. Concepts of right triangles, trigonometry, and angles of elevation and depression are applied to contextual problems. Scale models and drawings of 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. *This is a pre-requisite for Financial and Workplace Mathematics 12. Students must have passed Geometry, Measurement and Finance 10 in order to take this course.*

### **Financial and Workplace Mathematics 12**

This course is the second of two courses designed for entry into many trades and technical programs, and for direct entry into the work force. Students solve problems using sine and cosine laws and the properties of triangles, and polygons as they relate to construction, industrial, commercial and artistic applications. Transformations of 2-D and 3-D shapes are identified and used to solve contextual problems. Linear relations are studied, including patterns and trends, graphing, creating tables of values, writing equations, interpolating and extrapolating, and solving problems. Students gain an understanding of mean, weighted and trimmed mean, median and mode, and explore the impact of outliers. *The pre-requisite for this course is Financial and Workplace Mathematics 11.*

### **Foundations of Mathematics 11**

Students develop logical reasoning skills and apply this to proofs and problems involving angles and triangles, the sine law and the cosine law. Students model and solve problems involving systems of linear 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. *This is a pre-requisite for Foundations of Mathematics 12 and a pre-requisite or co-requisite for Pre-Calculus 11. The prerequisites to this course are Geometry, Measurement and Finance 10 AND Number, Relations and Functions 10.*

### **Foundations of Mathematics 12**

This is the second of two courses in the Foundations of Mathematics pathway designed for entry into post-secondary academic courses not requiring Pre-Calculus. The course covers statistics, logical reasoning and probability. Data is represented using polynomial functions, exponential and logarithmic functions and sinusoidal functions to solve problems. *Foundations of Mathematics 11 is a pre-requisite for this course.*

### **Introduction to Accounting 120**

This course introduces the student to accounting procedures, concepts, and applications. Course topics include nature of business, accountancy as a career, bookkeeping procedures, accounting theory, the accounting cycle, subsidiary ledgers, inventory control systems, accounting controls, payroll, adjustments, accruals, partnerships, corporations, statement analysis, and automated accounting. The course is designed for those students intending to study business at post secondary institutions.

**Pre-Calculus 11**

This course 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, radical equations. Students determine equivalent forms, simplify rational expressions, and solve problems that involve rational equations. 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. *This course is a prerequisite for Pre-Calculus 12A.*

**Pre-Calculus 12A**

This course will allow 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 11 is a prerequisite for this course, and this course is a prerequisite for Pre-Calculus 12B.*

**Pre-Calculus 12B**

Students will 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  $x$  approaches a certain value using correct notation, analyze the continuity of a function and explore limits which involve infinity. *The prerequisite for this course is Pre-Calculus 12A.*

**Current Mathematics Pathways**

	Post-Secondary Pathways		Minimum Graduation Requirement				
	University Science, Engineering and Business	Most other university and college programs					
<b>Grade 10</b>	Geometry/Measurement and Finance 10 Numbers, Relations and Functions 10	Geometry/Measurement and Finance 10 Numbers, Relations and Functions 10	Geometry/Measurement and Finance 10  Numbers, Relations and Functions 10				
<b>Grade 11</b>	<table border="1"> <tr> <th><i>Calculus Path</i></th> <th><i>Pre-Calculus Path</i></th> </tr> <tr> <td>Foundations 110 Pre-Calculus 110 Pre-Calculus 12A</td> <td>Foundations 110 Pre-Calculus 110</td> </tr> </table>	<i>Calculus Path</i>	<i>Pre-Calculus Path</i>	Foundations 110 Pre-Calculus 110 Pre-Calculus 12A	Foundations 110 Pre-Calculus 110	Foundations 110 Pre-Calculus 110	Financial Workplace 110 <i>OR</i> Foundations 110
<i>Calculus Path</i>	<i>Pre-Calculus Path</i>						
Foundations 110 Pre-Calculus 110 Pre-Calculus 12A	Foundations 110 Pre-Calculus 110						
<b>Grade 12</b>	Pre-Calculus 12B Calculus 120	Pre-Calculus 12A Pre-Calculus 12B					

*Note: Calculus 120 is not an entrance requirement, but is strongly recommended for any student interested in a Science or Engineering Program.*



### **Advanced Technology 120**

The objective of this course is for students to construct technological solutions to real-world problems. Students will identify a problem, develop a plan, research/collect data, analyze a design, implement a plan, and test their solution. The course follows Intro to App Tech 110 (Maker) where students continue to apply the 4 C's...Creativity, Critical Thinking & Problem Solving, Collaboration, and Communication in the SHS MakerSpace. Students will develop a detailed project proposal, develop an instructable to journal their progress and present their results to not only their peers but also invited guests.

### **Introduction to Applied Technology 110**

SHS MakerSpace explores STEAM projects that involve Science, Technology, Engineering, Arts and Mathematics. This course will enable students to undertake creative, innovative and entrepreneurial projects in the classroom. Students will explore a variety of technologies while designing and engineering their own project. The course is designed to apply the 4 C's...Creativity, Critical Thinking & Problem Solving, Collaboration, and Communication. These skills are beneficial in any workplace and are essential for life-long learning. The course will also emphasize all the global competencies: Innovation/Creativity/Entrepreneurship; Critical Thinking/Problem Solving; Self-Awareness/Self-Management; Sustainability/Global Citizenship; Collaboration and Communication. The goal of the course is to improve these skills so they can be used in any of your future endeavours.

### **Computer Science 110**

This is a practical, introductory course in programming (coding) using PYTHON. Students will acquire skills in using Python the third most popular programming language in the world. Creating video games and working on projects of their own design, students will experience some of what it is like to work in the CS field. It is estimated that hundreds of thousands of jobs in the computer science field are unfilled each year. Students graduating from university with a CS degree are almost guaranteed employment upon graduation.

### **Culinary Technology 110**

This course is an introduction to the food service industry. Through participation in different experiences within a quantity food service, the student learns both to master skills through practice and to become familiar with the required qualities for employment. Some areas to which the students are exposed include personal hygiene, sanitation, safety precautions, time management, the basic principles of food preparation, and the importance of serving nutritious and appetizing meals.

### **Culinary Technology 120**

The Culinary Technology Program is designed to prepare students for employment and/or future education in the food service industry. This technology driven and skill oriented program involves not only the "how and why" of food service preparation, but focuses on the development of personal skills and knowledge that can be applied to the food service industry. Laboratory experimentation, food preparation and service are an integral part of this program. It gives students lifelong learning skills that may be transferable to future training and/or food services employment at an advanced level.

### **Framing and Sheathing 110**

This course will provide students with skills and knowledge associated with the framing in or shell construction of typical single-family dwellings. Students will participate in construction and planning activities which include interpretation of the National Building Code, blueprint reading, estimating and material layout.

### **Health Care 110**

In Health Care 110, students learn about and experience many different aspects of our health care system in New Brunswick. They explore with a class set of laptops different medical cases and find out what a patient has to do to get treatment for the illness or condition. They also do hands on activities where they learn basic skills such as: making a hospital bed, using a wheel chair, taking vital signs, and applying bandages, just to name a few. First Aid and Occupational Health and Safety training is provided as well. It is an exciting new course in the Province of New Brunswick and is presently only offered here at Simonds High School.

**Trades & Technology Department**

### **Introduction to Electronics 110**

This is an introduction to electronics, introducing basic electronics components such as diodes, transistors, integrated circuits, inductors and capacitors, along with basic electronic circuitry. Introductory electronics is application based using the components and circuitry in such applications as rectification, filtering, and amplification. Computer assisted instruction and computer simulation of electrical circuits is an integral part of this course. Introductory Electronics will be of interest to students with a career objective in the electrical occupational area as well as those who plan to continue their education at the technical or engineering level.

### **Metals Fabrication 110**

This course is concerned with the processes used to cut, form and fasten metal. Emphasis is placed on the development of basic skills needed to use electric arc and oxyacetylene welding and cutting processes. Machines and processes used to layout, cut and form sheet metal are also introduced. This course will appeal to students interested in entering occupations in metalworking, mechanical technology, mechanical service and primary resource industries.

### **Metals Processing 110**

This course is a study of standard machine shop processes used in the manufacture of metal products. Proper operating instruction will be given on a variety of machine tools common to the machine shop trade. Students will apply theory as well as develop practical skills through the production of practical projects. Instructional time of the course will benefit and appeal to those students interested in pursuing a career in the metals processing areas, those who are considering a future education in mechanical engineering or drafting technology areas, and those who would like to explore this area for personal interest or career guidance reasons.

### **Metals Processing 120**

This course is the study of advanced machine shop processes used in the manufacture of metal products. Proper operating instructions will be given on a variety of machine tools common to the machine shop trade, focusing on more complex and intricate projects made of metal. Prerequisite Metals Processing 110

### **Mill and Cabinet Work 120**

This is a finish woodworking course in which students will develop the necessary skills, knowledge, and work habits required constructing cabinets and other miscellaneous millwork typically found in residential dwellings. Students, through a series of projects, will be involved with all aspects of mill work including planning estimating, operation of woodworking equipment and machines and finish operations. This course will be of benefit to those students interested in entering the construction or woodworking occupations as well as those with a general interest in woodworking.

### **Residential Finish & Insulation 120**

This course examines the work required to finish a family dwelling once it is framed in. Topics, which are covered, include: insulation, wall cladding, doors, windows, cornice trim and roof covering. Students will study these topics both in theory and through practical project work. This course should be of interest and value to those students interested in pursuing a career related to the residential construction industry.

### **Robotics and Automated Systems 120**

This course explores the field of robotics and automated systems. Experimenting and building projects of their own design, students will learn and apply automation concepts such as logic programming and integration of technologies including electrical, mechanical and computer. The knowledge and skills developed in this course would be an asset to any student who will at some point become involved in exploration, system design, processing or manufacturing whether at the entrepreneurial, administration, engineer, and technologist or technician level.

Students have worked on projects such a selfie stick for a physically challenged person, a system to automatically pump water to a reservoir when it is at low levels, an autonomous roving fire suppression system and a self-tuning system for a guitar. Students from this course have competed in the Youth Entrepreneurial Challenge and done well at the provincial level.

**Trades & Technology Department**

### **AP Biology**

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. Students should have successfully completed Biology 12 and Chemistry 12.

### **Biology 111**

This introductory Biology course covers a wide variety of topics including: cell structures and processes, microscopes, body systems (digestive, circulatory, respiratory, immune) with a focus on maintaining homeostasis, biodiversity and classification. Biology 111 is a more in depth course geared for the above average student with a deeper interest in Biology. It involves independent study, and major research projects. There is also a focus on lab work involving microscope use and dissection. Prerequisite: 75% in Science 9/10.

### **Biology 112**

This introductory Biology course covers a wide variety of topics including: cell structures and processes, microscopes, body systems (digestive, circulatory, respiratory, immune) with a focus on maintaining homeostasis, biodiversity and classification. There is also a focus on lab work involving microscope use and dissection. Prerequisite: Science 9/10.

### **Biology 121**

This course looks at the more complex topics within Biology including: mitosis, meiosis, genetics, DNA structure and replication, protein synthesis and sexual reproduction. Topics are covered in more depth than Biology 122. There is also a focus on lab work involving microscope use and dissection. Background in chemistry is an asset. Independent study is required, as well as completion of major projects. Students choosing this course should be above average science students. Prerequisite: Biology 111

### **Biology 122**

This course looks at the more complex topics within Biology including: mitosis, meiosis, genetics, DNA structure and replication, protein synthesis and sexual reproduction. There is also a focus on lab work involving microscope use and dissection. Background in chemistry is an asset. Prerequisite: Biology 112

### **Chemistry 111**

Chemistry 111 is a first of two-year sequential course recommended for students who may be pursuing science or engineering at the university level. Students choosing this course should have a genuine interest and a better than average ability in science and mathematics. Topics covered will be the same as those for Chemistry 112, but the depth of coverage will be greater. Prerequisite: 75% in Science 9/10

### **Chemistry 112**

Chemistry 112 is the first of a two-year sequential course in which emphasis is placed on teaching chemistry using the scientific method. The experiments are designed so students make observations and draw conclusions, which lead directly to important chemical principles. Topics include matter and energy in chemical change, matter as solutions and gases, quantitative relationships in chemical changes, and chemical bonding. Prerequisite: Science 9/10

### **Chemistry 121**

Chemistry 121 is the second of a two-year sequential course recommended for students who may be pursuing science or engineering at the university level. Students choosing this course have a genuine interest and a better than average ability in science and mathematics. Topics covered will be the same as those for Chemistry 122, but the depth of coverage will be greater. Prerequisite: Chemistry 111

### **Chemistry 122**

Chemistry 122 is the second of a two-year sequential course in which emphasis is placed on teaching chemistry using the scientific method. The experiments are designed so the students make observations and draw conclusions, which lead directly to important chemical principles. Topics include organic chemistry, thermo chemical changes, equilibrium, acids and bases. Prerequisite: Chemistry 112

Science Department

### **Introduction to Environmental Science 120**

This course investigates the abiotic and biotic factors, which influence the ecosystem. Several biomes are studied in detail as we look at climate and adaptation of animals and plants. Special topics, which influence biomes such as global warming and acid rain, will be considered.

### **Physical Geography 110**

This course focuses on the study of all the processes that affect the surface of the earth. Topics include Plate Tectonics, earthquakes, volcanoes, mountain ranges, mountain building, continental drift, groundwater, weather and the formation of the universe and the earth. This course can be used as a science credit.

### **Pathology 120 (Locally Developed Course)**

This course is intended for students who are thinking about pursuing careers in the medical field, or have a higher interest in Biology. Students will study the immune system in depth indicating how various diseases affect the human body, and how diseases are diagnosed and treated. There is also a lab component.

Prerequisite: Biology 112

### **Physics 111**

This course covers the same topics as in Physics 112, but to a greater depth. Students taking this course should have a genuine interest in Physics and a better than average achievement in both Science and Math. Laboratory work is important to the course and is done in a rigorous manner. This course includes a scientific research paper. Prerequisite: 75% or above in Science 9/10 and Math 10

### **Physics 112**

This course is the first part of a two-year study of how energy and matter interact. Topics covered include motion, graphing, displacement, vectors, forces, waves and sound. Students choosing Physics should be comfortable in Math. Prerequisite: Science 9/10 and Math 10

### **Physics 121**

This course covers the same topics as in Physics 122, but to a greater depth. A scientific research paper is required. Prerequisite: Physics 111

### **Physics 122**

This course is the second of a two-year course designed for students intending to go to university or technical school following graduation. Topics include linear motion, forces, static equilibrium, two dimensional motion, impulse and angular momentum, work energy and power. As with Physics 112, each of these topics is studied in its societal context. Students will complete laboratory investigations. Prerequisite: Physics 112

### **Science 122**

This course involves an intensive study of the following topics: oxidation-reduction reactions, electrochemistry, atomic and nuclear structure, magnetism, electromagnetism, applications of electromagnetism. It is intended for students preparing to take post-secondary study in chemistry, physics and engineering. Prerequisites: Physics 122 and Chemistry 122

### **Human Physiology 110**

The focus of this course is the human body. Students will begin by exploring wellness and mental health in depth; and will study the effects of stress, addiction, disease, nutrition, and sleep on mental and physical well-being. Focus then shifts to human anatomy (body systems) and physiology (how our body works), with a continued link to wellness throughout. Students will set wellness goals, and participate in various wellness activities throughout the course. No prerequisite.

Science Department

### **AP European History**

AP European History is an introductory college-level European history course. Students cultivate their understanding of European history through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like interaction of Europe and the world; economic and commercial developments; cultural and intellectual developments; states and other institutions of power; social organization and development; national and European identity; and technological and scientific innovation.

### **AP Psychology**

This course is designed as a college-level Psychology program. Students study in preparation for the AP Exam in May. Psychology, the scientific study of human behavior and mental processes, stands between the social and biological sciences; therefore, unique to many of the courses that students experience in high school. The course not only gives insight to how and why our bodies and minds work the way they do, but also exposes students to research methods, theoretical frameworks for development, and debates going on in the modern world.

### **Business Organization and Management 120**

This course will allow students to work successfully in small business, by providing the student skills in leadership, critical thinking and problem solving. Students will develop communication and collaboration skills while working on project based learning assignments. Through this course students will develop 21<sup>st</sup> century skills which will help students become creative innovators who will be able to quickly adapt to an ever changing business environment.

### **Canadian History 121**

Canadian History 121 is a thematic study of Canada covering the last century. Themes examined include: The Constitution (Dilemma or Identity), Social Issues and Economics (ex: Nationalism versus Internationalism). Prerequisite: Modern History 111 or 75% in Modern History 112.

### **Canadian History 122**

This course presents the history of Canada from the early years of the nineteenth century to the present. Topics examined include: The Maritime Provinces (1815-1864), the Canadas, the Confederation Era, the MacDonald Era: Expansion and Consolidation, the Laurier Era: Prosperity and Development, Years of Crisis, Between the Wars, Canada in World War II, and Canada in the Modern World. Prerequisite: Modern History 111 or 112.

### **Child Studies 120**

The purpose of this course is to develop in students the learning skills for successful relationships with children. The students explore how children develop physically, socially, emotionally and intellectually to gain an understanding of human development from conception to school age. Students will apply basic theory to hands on activities in a lab consisting of a 6 week preschool program, with observation techniques being applied through completion of a preschool journal as well as the Baby think it over program.

### **Co-operative Education 120 (3 credits)**

This course is available to grades 12 students. Students who qualify are usually placed in a career environment, and as a result benefit from actual experience in the working world. The experience is worthwhile and a sense of accomplishment is one of the greatest rewards. Regular class sessions are held in school in order to learn fundamentals of employment readiness and to allow students to evaluate their experiences through reflective study. A high degree of self-discipline proves essential in the students' overall success.

### **Early Childhood Services 110**

Early Childhood Services 110 helps students understand the role of caregiver as well as the parents in a child's development. It prepares students for entry-level jobs in the child care profession through a knowledge of physical, social, emotional and intellectual development. This course will focus on the skills to prepare young people to work with children. This is a "how to" program applying basic theory to hands on activities including laboratory and/or observation with children. The theory in Early Childhood Services 110 best applies to the age group infancy to two years old.

Humanities Department

### **Entrepreneurship 110**

Entrepreneurship 110 is an introductory course to the world of small business. Students will study the characteristics of various businesses and the people who created them. In addition various aspects of the market economy will be examined including human wants, consumer demand and producer supply, setting prices in a free-market economic system, how a price change affects demand and supply of goods and services, competition in business, and labour and management. It will also focus on marketing and advertising your business and the organizing and writing of a business plan. Also included in this *course is an interactive* approach to starting a business. Students will be expected to create a business, write a business plan, market their business and sell their product/service to the students and staff.

### **Hospitality and Tourism 110**

This elective provides an overview of the geography and history of New Brunswick and the Maritimes with an emphasis on Saint John. It explores career and concepts of the eight sectors of tourism, types of travel packages, trends and marketing.

### **Individual and Family Dynamics 120**

Individual and Family Dynamics 120 is an elective course that will expose the students to the skills and information necessary to make informed decisions about personal development, lifestyle choices, and healthy relationships. This curriculum will help prepare them to have a better understanding of themselves, their family and the world around them. The course touches on aspects of sociology, psychology, economics and anthropology. The knowledge and skills presented in the course will benefit students who may wish to pursue fields of study such as: law enforcement, social services, family law, careers in counseling, psychotherapy and family medicine.

### **Introduction to Police Foundations 120 (Locally Developed Course)**

Introduction to Police Foundations will study a variety of subject areas, including human behaviour, criminology, communication, sociology, law, community policing, the Criminal Code, safety, policing interventions, ethics, and physical demands of working in this sector. Students interested in criminology, policing and security services as a career path would find this course interesting.

### **Law 120**

This course is designed to give students knowledge of the law, the courts' changing trends, and the major changes the constitution has brought about. Areas of study include the origins of the Canadian legal system, criminal law, civil and human rights, torts/civil law, and contracts. Actual case studies are used to illustrate situations within these areas of law.

### **Modern History 111**

Modern History 111 is an in-depth thematic study of major events in modern European history that have shaped the 21<sup>st</sup> century. Topics discussed include the French Revolutions, the Revolutions of 1848, the Industrial Revolution, the Russian Revolution, the World Wars and the Cold War. Student will be expected to make oral presentations, analysis from primary sources and write formal essays as part of the evaluation. It is a prerequisite for Canadian History 121/122.

### **Modern History 112**

Modern History 112 follows the secularization of Western society with particular emphasis on the revolutions on the 19<sup>th</sup> and 20<sup>th</sup> centuries. Topics will include the French Revolution, the Industrial Revolution, the world Wars and the Cold War. A formal essay will be part of the evaluation. It is a prerequisite for Canadian History 121/122.

### **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 basic skills used to interpret historical accounts. A survey approach is given to the following topics: Basic World Geography, Industrialization, Life in the 20's and 30's, World War I, World War II, and the Cold War.

Humanities Department



### **Nutrition for Healthy Living 120**

This course studies the science of food relating to Canada's Food Guide and the relationship between food, nutrition and wellness. It emphasizes the decision making process concerning the use of both human and non human resources required for safety and sanitation, dietary planning, food preparation and the concept of nutritional wellness. Nutrition issues are discussed regarding food on a global and regional level, food trends and lifestyles, eating disorders and new food technologies. Hands on laboratory experiments provide an integral part of this program.

### **Outdoor Pursuits 110**

This course provides opportunities to explore various outdoor adventure activities such as camping, kayaking, canoeing, backpacking, hiking, cross-country skiing, snowshoeing, orienteering, and rock climbing. A specific section of the course will focus on the WCE and development of the Simonds Pond Wetland Centre of Excellence for outdoor adventure activities. Students 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. Students will take part in many team-building activities and group problem solving initiatives, where they learn to communicate and support one another to reach their goals, improve self-esteem.

### **Political Science 120**

Political Science 120 is an introductory political science course designed to develop an understanding of various political ideologies and systems. The merits of each will be compared and contrasted to the Canadian system.

### **Psychology 120**

This introductory course will offer students an engaging look at the science of psychology. Psychology is the scientific study of behavior and mental processes. We will explore a variety of topics including the history of psychology, important thinkers, the brain structure, the conscious experience and more.

### **Sociology 120**

This course examines the way human beings behave in groups. Some topics to be covered include: prejudice, stereotyping, discrimination and racism, deviancy, and violence. A unit on media studies will round out the course. Students are responsible for an in-depth research project. Prerequisite: Modern History 11

### **Spanish 110**

Spanish 110 is an introductory course in one of the world's most widely spoken languages. A large component of this course is orally based with some focus on reading, writing and basic grammar. The study of culture and geography will also be an element of the course. Students must be willing to fully participate in communicative exercises and work in pairs and groups. Video presentations, films and dialogues contribute to make this a very active learning experience. It is an excellent preparation for a university Spanish course. Recognized as a credit at NBCC. Available to students entering Grade 11 and Grade 12.

### **World Issues 120**

This course examines various issues that are global in nature and that require a global solution. An examination of how countries are working independently and collaboratively to solve world issues is at the forefront. The concept of the global village is studied, as is the relationship between nations in the global community. Prerequisite: Modern History 11.

Humanities Department

### **AP French**

The Advanced Placement (AP) Program provides an opportunity to high school students to pursue and receive credit for university-level work. AP French emphasizes the use of language for active communication. Within this course, the students will develop:

1. The ability to understand spoken French in various contexts.
2. A vocabulary sufficiently ample for reading newspaper and magazine articles, literary texts, and other non-technical writings without dependence on a dictionary.
3. The ability to express themselves coherently, resourcefully, and with reasonable fluency and accuracy in both written and spoken French.

There will be a continued insistence on the use of French both as the language of instruction and communication in the classroom. The examination is the most important form of assessment in the course and there is a fee attached to its writing. Prerequisite: 85% or above in FI Language Arts 110

### **FI Individual Family Dynamics 120**

This course will expose the students to the skills and information necessary to make informed decisions about personal development, lifestyle choices, and healthy relationships. This curriculum will help prepare the students to have a better understanding of themselves, their family and the world around them. The course touches on aspects of sociology, psychology, economics and anthropology. The knowledge and skills presented in the course will benefit students who may wish to pursue fields of study such as: law enforcement, social services, family law, careers in counseling, psychotherapy and family medicine. There will be a continued insistence on the use of French both as the language of instruction and communication in the classroom. This is a **compulsory** course for those students who have elected to follow the French Immersion option at the high school level. Prerequisite: FI

### **FI Language Arts 110**

Through this course students will continue to expand their facility in oral and written French with the following objectives:

1. To ensure the maintenance and progression of the linguistic acquisitions of the student.
2. To continue to emphasize communication in order to foster growth of the language skills: listening, speaking, reading and writing.
3. To encourage the use of the language as a vehicle allowing students to express themselves in a fitting manner suited to their intellectual, social and emotional growth.
4. To increase the student's cultural knowledge and experiences in order to promote an appreciation for the French speaking population and culture of our country and of other parts of the world.

The course emphasizes vocabulary and oral expression, literature, grammar, written expression and composition and culture. The objectives of the course will be realized through exposure to various texts, novels and short stories, poetry, drama, newspapers, magazines and films. A formal oral presentation is part of the evaluation. **There will be a continued insistence on the use of French both as the language of instruction and communication in the classroom.** This is a **compulsory** course for those students who have elected to follow the French Immersion option at the high school level. Prerequisite FI Language Art 10

### **FI Language Arts 120**

This course is the final French Immersion Language Arts course in the French Immersion option. Through this course students will continue to expand their facility in oral and written French with the general objectives as stated in the course description for FI Language Arts 110. The content of the course is based on five components: oral expression, composition, grammar, literature and culture. To realize the stated objectives of the course, there will be continued exposure to various texts, novels and short stories, poetry, drama, newspapers, magazines and films. A formal oral presentation is part of the evaluation. This is a **compulsory** course for those students who have elected to follow the French Immersion option at the high school level. Prerequisite: FI Language Arts 110

### **FI Modern History 112**

Modern History 112 follows the secularization of Western society with particular emphasis on the revolutions on the 19th and 20th centuries. Topics will include the French Revolution, the Industrial Revolution, the world Wars and the Cold War. A formal essay will be part of the evaluation. It is a prerequisite for Canadian History 121/122. This is a **compulsory** course for those students who have elected to follow the French Immersion option at the high school level.

### **FI Techniques de Communication 120**

This course is designed to develop effective communication skills. It emphasizes the use of set-up phrases, idiomatic expressions, correct pronunciation and intonation, development of useful vocabulary, and ability to communicate without hesitation in a given situation. Students will be required to do oral presentations either individually or in pairs. An oral exam will be given at the end of the semester as part of the formal evaluation. This is a **compulsory** course for those students who have elected to follow the French Immersion option at High School level. The New Brunswick Oral Proficiency Interview is a required part of this course. Prerequisite: FI Language Arts 110

French Department

### **Post Intensive French 110**

The goal of this course is to further enhance the oral and written communication skills. The course continues the sequence of the Post Intensive French Program. This course extends the range of language skills: listening, speaking, reading, and writing, structures and concepts for effective communication in French in a variety of situations. It is designed for students who have successfully completed PIF 10 and who wish to broaden the scope of their communicative skills in the second official language. Oral presentations in pairs or in small groups are part of this course.

An individual exit project with an oral, reading, and written component is part of the formal evaluation. Prerequisite: 85% or above in Post Intensive French 10

### **Post Intensive French 120**

This course continues the sequence of the Post Intensive French 110. It is for student who enjoy French and are interested in an enriched atmosphere. This course extends the range of language skills: listening, speaking, reading, and writing, structures and concepts for effective communication in French in a variety of situations. It is designed for students who have successfully completed PIF 110 and who wish to broaden the scope of their communicative skills in the second official language. Oral presentations in pairs or in small groups are part of this course. An individual exit project with an oral, reading, and written component is part of the formal evaluation. Prerequisite: Post Intensive French 110

## Phys. Ed, Music and Art Departments

### **Physical Education Leadership 120**

This is an elective course for students with an interest in physical activities and healthful living, combined with a desire to develop leadership skills. This course is not an activity course but a leadership course where leadership skills are taught and developed through activities. Prerequisite: Health and Phys. Ed 10

### **Wellness through Physical Education 110**

This course is intended to promote healthy active living for life, encourage a broad based exploration of activities, highlighting non-traditional approaches to fitness and wellness (yoga, hiking, personal training, tai chi, ultimate Frisbee).

### **Dance 110**

This is a performance class and often completed in groups. Creation and Composition of dance will focus on the styles studied. Through extensive work in dance movement, students will have opportunities to explore basic expressive movement skills and to combine these in a wide range of dance styles. The emphasis is on the process of creating dance through improvisation and various forms of choreography.

### **Music 112**

The course consists of three major outcomes that require students to demonstrate achievement in performing music, in the application of theoretical and aural skills and concepts, and, in understanding music in a historical context. Music 112 is de-

### **Graphic Arts and Design 110**

This course 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.

### **Visual Arts 110**

Students learn to draw in perspectives, in tones, in textures as well as produce still life, figure drawings and imaginative projects. Students learn how to use color in painting illustrations and imaginative graphic art projects. Students also learn how to use paper mache and other forms in imaginative three-dimensional projects. Students develop the process of design and investigate the concept of printing and graphic art.

### **Visual Arts 120**

This course is designed for students who wish to investigate art-related interests or careers. The concepts developed in the grade 11 course are enhanced. Students are required to critique in writing aspects of process and product. Students are required to complete sketchbooks as homework.

French & Phys. Ed, Music & Art Departments

## SIMONDS HIGH SCHOOL - SUMMARY OF CREDITS

Student Name

Student Number

\_\_\_\_\_  
Surname

\_\_\_\_\_  
First Name

### ENGLISH AND MATH (4CR)

- English 11 \_\_\_\_ (2cr)
- English 12 \_\_\_\_
- Foundations of Math 11  
    **or**  
    Financial & Workplace Math 11



1.
2.
3.
4.
5.

**FIVE GRADE TWELVE  
CREDITS ARE  
REQUIRED FOR  
GRADUATION**

### SOCIAL SCIENCE (1CR)

- Modern History 11 \_\_\_\_

### SCIENCE (1CR)

- \_\_\_\_\_

*Bio/Chem/Phy/Phys Geos/Env Sci/Intro Elec/Micro Elec/Robotics & Automation*

### FINE ARTS/LIFE ROLE DEVELOPMENT (1CR)

- \_\_\_\_\_

*Ind Fam Dyn/Visual Arts/Theatre Arts/Hth & Phys/Entrepreneurship/Co-op Ed/Wellness 110*

- 8. \_\_\_\_\_
- 9. \_\_\_\_\_
- 10. \_\_\_\_\_
- 11. \_\_\_\_\_
- 12. \_\_\_\_\_
- 13. \_\_\_\_\_
- 14. \_\_\_\_\_
- 15. \_\_\_\_\_

- 16. \_\_\_\_\_
- 17. \_\_\_\_\_
- 18. \_\_\_\_\_
- 19. \_\_\_\_\_
- 20. \_\_\_\_\_
- 21. \_\_\_\_\_
- 22. \_\_\_\_\_

#### ENGLISH ASSESSMENT RESULTS

- Reading
- Writing

#### GRADE 10 MATH

- GMF
- NRF

Total Credits required: 17

Summary of Credits