Advanced Technology 120
This course is designed for those students with an interest in the environment, technology, science, math, physics and making a difference. Students will build on their critical thinking and problem solving skills and use current technology to analyze and present solutions to real world problems. The focus of the course will be on the Conservation, Generation, Use and Storage of Energy. Students will explore the social and political implications of using various forms of energy. It is highly recommended that students taking this course have Grade 10 math**.**

AP English
The Advanced Placement (AP) Program provides an opportunity for high school 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.

AP French Language and Culture
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.

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 120

Applied Technology 110
This course will introduce students to a variety of trades in a multi-activity learning environment.

Biology 111
This course is similar to topics in Biology 112. Biology 111 is a more in depth course geared for the above average student with a deeper interest in Biology. In addition to the material covered in Biology 112, there will be an increased emphasis on evolution and evolutionary trends seen in living organisms. This course will include more intensive lab work, as well as dissections.

Prerequisite: 75% in Science 10

Biology 112
This introductory Biology course covers a wide variety of topics. Microscope structure and function are introduced to the student. Cellular structures and their functions are then studied with the aid of microscopes. Additionally, classification methodology is discussed, followed by a review of the six Kingdoms of living organisms. Finally, the human circulatory, respiratory, and digestive systems are studied and compared to the same systems in other animals. The course includes lab work and dissections.

Prerequisite: Science 10

Biology 113
This course follows the same course outline as Biology 112 but utilizes a text at the student's reading level. The content requirements and the test standards are adjusted to the students' ability. Students who have not met the requirements of Science 10 should feel prepared for this course.

Biology 121
Biology 121 is a one-semester course that includes the following topics: mitosis, meiosis, genetics, DNA structure, DNA replication, protein synthesis, and sexual reproduction, as well as change and population dynamics. These topics will be covered to a greater depth than in Biology122. Each student will complete an independent project. Teaching methods will combine readings, independent library research and student papers supplemented by laboratory activities and field trips (where possible). Students choosing this course should have a genuine interest in science and a better than average achievement in science and mathematics.

Prerequisite: Biology 111

Biology 122
This course begins with a review of cellular structure and function. This is followed by a study of the biochemistry of the cell which includes heredity and molecular genetics, photosynthesis, and cellular respiration. Human anatomy and physiology using homeostasis as a theme is also considered through the study of the human nervous, endocrine, sensory, and reproductive systems. Lab work is included in this course, and some background in Chemistry will make the student more comfortable in the course.

Prerequisite: Biology 112

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 corse students will develop 21st century skills which will help students become creative innovators who will be able to quickly adapt to an ever changing business environment.

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. Prerequisite: Pre-Calculus 12B.

Canadian Geography 120
Are you interested in the way that our landscapes influence our society? Canadian Geography 120 is the study of the ever-changing cultural and physical landscapes of Canada and how they impact on each other. It examines physical systems and interrelates these with man-made structures and systems. It focuses on environmental issues. Geographic understandings and skills are integrated throughout the course.

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.

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.

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 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 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

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 BTIO program.

Computer Aided Design 110
This is an introductory course designed to give students a solid base of knowledge and skill in the drafting area. Through various activities, including sketching, and computer assisted drawing (CAD), students gain the skills necessary to both visualize and present ideas graphically. As use of this form of graphic communication is so universal, this course would be of interest and benefit to a wide range of students beyond those pursuing a career specifically in the drafting industry or technology/engineering areas.

Computer Science 110
Computer Science 110 is practical course introducing object-oriented programming through the study of Visual

Basic. Students will acquire skills in using the Visual Basic IDE, adding objects to forms, resizing and moving objects, saving/running applications, event procedures, commenting code, algorithms, pseudocode, creating executable files, variable assignment, using constants, choosing identifiers, built-in data types, error types, debugging, arithmetical operations, option buttons, If…Then statements, scope, message boxes, text boxes

Co-operative Education 113/123
Co-operative Education 120
(2 credits-PM) (3 credits-AM)
This course is available to grades 11 & 12 students. Preference is given to grade 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.

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.

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.

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.

English 111-121
English 111-121 is a pair of courses designed for students whose aptitudes and interests in language/literature are above average. These courses will provide an enriched variety of experiences with language and texts 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 is a pair of courses appropriate for students intending to pursue studies at a post-secondary institution. Each of the English courses will provide a wide variety of experiences with literacy skills and writing formats. 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 is a pair of 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.

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.

FI Conversational French 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

FI 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. This is a **compulsory** course for those students who have elected to follow the French Immersion option at High School level.

FI Language Arts 110
Through this course students will continue to expand their facility in oral and written French with the following general 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. **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 Arts 110

FI Modern History 112
Modern History 112 follows the secularization of Western society with particular emphasis on the revolutions on the 19 th and 20 th 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. **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.

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. *Students have a choice of this course or Foundations of Math 11 to complete graduation requirements. 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 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 work force. 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 2-D and 3-D 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 are 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. Students 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. *The prerequisite for this course is Financial and Workplace Mathematics 11.*

Foundations of Mathematics 11
This course is a pre-requisite 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 pre-requisite for the pre-calculus pathway. Students develop spatial sense and proportional reasoning through problems that involve rates, scale diagrams and relationships among similar 2D and 3D shapes and objects. 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. *Students have a choice of this course or Financial and Workplace 11 to complete graduation requirements. 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 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. The prerequisite to this course is Foundations of Mathematics 11.

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.

French 111
The goal of this course is to further enhance the oral and written communication skills of French as a second language. French 111 is for students who enjoy French and are interested in an enriched atmosphere. An individual oral presentation is part of the evaluation. The course content is the same as French 112.

Prerequisite: 75% in French 10

French 112
This course continues the sequence of Core French courses. 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 French10 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. **Students who <u>have been</u> in the French Immersion Program are to register in French 111.**

Prerequisite: French 10

French 121
This course is for students who enjoy French and are interested in an enriched atmosphere. The course content is the same as French 122. An individual oral presentation is part of the evaluation.

Prerequisite: French 111

French 122
This is the final course in the program of Core French courses. Course content includes: vocabulary enrichment, practice in oral skills and reading selections designed to improve reading comprehension. This course deepens and sharpens the language skills, structures and concepts for effective communication acquired in French 112. It is designed to bring the student to a level of communicative efficiency useful to daily life in a French environment. The New Brunswick Oral Proficiency Interview is a required part of this course. **Students who <u>have been</u> in the French Immersion Program are to register in French 121.**

Prerequisite: French 112

Health and Physical Education 120 (Leadership)
Health and Physical Education 120-Leadership-is designed to fill needs of the community with qualified volunteers. It is an elective course for students with a special interest in physical activities and healthful living, combined with a desire to develop leadership skills, which will enable them to translate their interests into dynamic personal involvement in the community. This course is not an activity course but a leadership course where leadership skills are taught and developed through activities. Activities include teaching classes, organizing intramural sports & class trips to local recreational facilities, coaching extracurricular teams, and running designated tournaments during the semester.

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.

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.

Horror Fiction
An Introduction to Horror Fiction: This course will be an examination of horror as it has evolved in both film and literature. Classic works of horror will be read and as will more modern masters of the genre. A wide variety of directors and writers will be examined. Bram Stoker, Edgar A. Poe, H.P Lovecraft, Stephen King and Clive Barker are just some of the authors. If you like your reading and movies on the scary side, this is the course for you.

Individual and Family Dynamics120
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 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.

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.

Introductory 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.

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.

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.

Learning Strategies 110
Learning strategies is a course designed to enhance achievement and gain skills for lifelong learning. Students will demonstrate achievement in learning styles identification and study skills; however, 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 with the focus being on the six Write Traits, editing strategies, mechanics of language, and various genres of writing.

Media Studies120
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 and activity based. Students enrolled Media Studies 120 must be mature enough to meet the high level of independence, reliability and responsibility required of them.

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

Micro Electronics 120
Students taking this course will recognize digital electronics as an integral part of computers and calculators, and part of most other electronic equipment in use today. Wiring and testing circuits as well as computer simulation of circuits develops knowledge of electronics. This course should be of interest to students with career objectives in an electrical occupational area, those planning to continue their education at the technical or engineering level, as well as those with a personal interest in electronics or computers.

- Prerequisite: Introductory Electronics 110. good math skills are an asset.

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.

Modern History 111
Modern History 111 is an in-depth thematic study of major events in modern European history that have shaped the 21 st 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 th and 20 th 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.

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. The course lists a series of performance indicators that will assist in determining the course level. Music 112 is designed to articulate with Music 122.

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.

Pathology 120

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.

Prerequisite: Science 10

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 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 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, primarily 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' experiences include laboratory investigations, and multi-sources of information including print and software video. Emphasis is placed on student-centered activities.

Prerequisite: Physics 112

Introduction to Police Foundations 120
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.

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.

Pre-Calculus 11
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, 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)O-60 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. *This course is a pre-requisite for Pre-Calculus 12A.*

Pre-Calculus 12A
This course follows Pre-Calculus 11 and precedes Pre-Calculus 12B. 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
This course follows Pre-Calculus 12B and precedes Calculus 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 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.*

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 Technology 120
This course explores the fields of robotics and automation. Through the use of experimentation labs, students will learn and apply various automation concepts such as logic programming and integration of technologies including pneumatic, electrical, mechanical and computer. Students in this course will construct simulations and models of robot and automation processes using industrial types of equipment and computer simulation software. The knowledge and skills developed in this course would be an asset to any student who will at some point become involved in processing or manufacturing whether at the entrepreneurial, administration, engineer, technologist or technician level. Good math skills are an asset.

Science 122
The topics of study include oxidation-Reduction 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 some branches of engineering.

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.

Tech Support 110
This course provides opportunities for students to gain foundation skills and knowledge in servicing microcomputers and peripheral devices. Topics covered include PC Hardware, DOS and Windows, Macintosh, Networking, Printers and Troubleshooting. Hands-on activities and a variety of resources aid students in achieving course outcomes. Resources include e-mail, chat, web-board and other distance education applications. Flexibility is built into the course to meet the learning needs of all students. The course is facilitated by an off-site facilitator and may be offered to a small number of students through distance or an on-site teacher may deliver the web-based curriculum.

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.

Visual Arts 110
Visual Arts 110 builds on the experience and knowledge gained in grade 10. 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.

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). This course will offer a range of learning experiences for students that encourage healthy active living but not sport specific.

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 as players in the global community.

Writing 110
Writing 110 is recommended for all students who wish to enhance the fundamental skills of writing. 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.

Yoga 110
Yoga 110 will introduce students to various styles and characteristics of yoga. Students will be participating in a variety of activities that will include both physical practice and classroom theory. The physical practice of yoga will include learning, developing, and practicing skills that involve strength, flexibility, endurance, balance, poise, regulation of energy, and mental focus, all of which can be applied to other physical activities.

Course Descriptions

Simonds High School