



Simonds High School

COURSE CALENDAR 2023-2024



1490 Hickey Road, Saint John, NB, E2J 4K7 • Phone: 506 658 5367 • Website: sh.nbed.nb.ca

TABLE OF CONTENTS

Introduction and General Information	3
New Brunswick High School Graduation Requirements	4-5
List of Electives being Offered in 2022-2023	6
Courses with Pre-requisites and/or Applications	7
Mathematics Course Selection and Planning	8
AP Program Information and Planning	9-10
Course Descriptions by Department	11-33
Advance Placement (AP)	11-16
Applied Technology & Skilled Trades	16-20
Language Arts	21-22
French	23-25
Humanities	25-28
Mathematics	28-30
Physical Education	30-31
Science	31-36
Graduation Average Policy	37

Introduction

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.

Homeroom teachers and guidance counselors will provide you with direction and information, and counsellors will assist you with the course planning and selection process. Students should take every opportunity to discuss course options and post-secondary learning and career plans with their parents, guardians, teachers and guidance counselors. *We are here to help you, but it is ultimately up to the student and his/her/their parents or guardians to ensure courses are selected to meet post-secondary entrance requirements.*

General Information

Course Levels

All courses have a name and number. The first two digits indicate grade, and the third digit indicates the level.

Level 0 courses are offered to all at one level only;	ex: Entrepreneurship 110
Level 2 courses are academic/university/college preparatory.	ex: Music 112, Biology 122
Level 3 courses are general/college preparatory.	ex: English 123
Level 1 courses are enriched university preparatory.	ex: English 111, Physics 121

Many electives are open to both grades 11 and 12; read descriptions and pre-requisites carefully.

Prerequisites

Many courses have required or recommended prerequisites or co-requisites. Please read the course descriptions carefully prior to course selection. Students without the required prerequisites will not be allowed to enroll in the course. *See page 6 for a listing of courses requiring prerequisites.*

Prerequisite: A course that must have been successfully completed prior to enrolling in the course.

Co-requisite: A course that, if not previously completed, must be taken during the same semester as the course.

Course Applications

Please note that some courses require applications - due April 8th to the guidance department.

New Brunswick High School Graduation Requirements

Existing 18-Credit System (Students in Grade 11 or 12 in Fall 2023)

To graduate, students must meet all the following requirements:

- Complete the entire Grade 9-10 program
- Pass 18 out of 22 credits in Grades 10-12, eight of which are compulsory courses listed below
- Five of these credits must be Grade 12 courses including one English
- Pass the English Language Proficiency Assessment
- Have no more than two local options courses out of the 18 required courses
- Students are expected to attempt 22 credits

Compulsory (must select and pass) courses:

- English 11 (2 credits)
- Math – must pass GMF 10 and two more Math credit courses (2 credits total)
- Science (1 credit) *See below for a list of science courses.*
- One of: Modern History 11, Ancient & Medieval History 11, Canadian History 12, Indigenous Studies 12, World Issues 12 (1 credit)
- Fine Arts and Life Role Development (1 credit) *See below for a list of courses.*
- English 12 (1 credit)

***Notes** – French Immersion students must successfully complete five of their 22 credits (over the grade 11-12 years) in French to obtain their FI certificate in grade 12. To be eligible for the oral proficiency interview in grade 12, a grade 12 French course must be taken in grade 12.

Science Courses for Graduation (1 credit required)

Physics, Biology, Chemistry, Environmental Geoscience 110, Human Physiology 110, Introduction to Environmental Science 120, Robotics and Automated Technology 120, Introduction to Electronics 110,

Fine Arts and Life Role Development (1 credit required)

Visual Arts 110/120, Music 112, Graphic Art and Design 110, Individual and Family Dynamics 120, Co-op Ed 120, Outdoor Education 110, Sport and Recreation Leadership 120, Wellness Through Physical Education 110, Entrepreneurship 110, Reading Tutor 120, Nutrition and Healthy Living 120, Health Care 110, Goals Growth and Grit 120, Culinary Technology 110/120, Electrical Wiring 110, Fashion Design 120, Fashion Technology 110, Framing and Sheathing 110, Housing and Interior Design 120, Introduction to Applied Technology 110,

Metals Fabrication 110, Metals Processing 110/120, Mill and Cabinet Work 120, Residential Finishing 120

New 100 Credit Hour System (Students in Grade 10 in Fall 2023)

To graduate, students must meet all the following requirements:

- Complete the entire Grade 9 program
- Accumulate 100 credit hours in Grades 10-12, 28 of which will come from compulsory courses listed below
- Pass the English Language Proficiency Assessment
- Develop a documented career-life plan

Compulsory (must select and pass) courses:

- PIF 10 or FILA 10
- ELA Foundations 10, ELA Foundations 11, and ELA 12
- Geometry, Measurement, and Finance 10.
- One of: Modern History 11, FI Modern History 11, Ancient & Medieval History 11, FI Ancient & Medieval History 11, Canadian History 12, Indigenous Studies 12, World Issues 12
- Civics 10 or FI Civics 10

Students will complete 80 credit hours from the Core Clusters

Core cluster course options are listed in the course list on the next page. Students must complete a prescribed number of credit hours in each core cluster as follows:

Languages and Literacies Cluster: 24 credit hours

Humanities Cluster: 8 credit hours

Mathematics Cluster: 12 credit hours

Science Cluster: 8 credit hours

Personalized Well-Being Cluster: 20 credit hours as follows:

- 4 credit hours in Creative Arts
- 4 credit hours in Wellness and Physical Education
- 4 credit hours in Career, Information Communication Technology, Occupational, and Skilled Trades
- + 8 additional credit hours under the Personalized Well-Being Cluster

Students will complete 20 Flexible credit hours.

Students must complete 20 additional credit hours, which may be accumulated through a broader variety of options:

- Core cluster courses
- Locally developed courses
- Challenge for credit
- Independent study

For more information, students and families can contact the Guidance department.

***Notes** – French Immersion students must complete 40 credit hours in grades 10-12 in French to obtain their FI certificate in grade 12. To be eligible for the oral proficiency interview in grade 12, a grade 12 French course must be taken in grade 12.

SIMONDS HIGH SCHOOL COURSES 2023-2024

Languages and Literacies	Calculus 120 (RPR)	Advanced Training Principles 120
ELA Foundations 10	AP Calculus AB (RPR)	Health Care 110
ELA Extended 10 (RPR)	AP Calculus BC (RPR)	Nutrition for Healthy Living 120
ELA Foundations 111, 112, 113 (RPR)	AP Statistics (RPR)	Individual Family Dynamics 120
ELA Extended 111, 112, 113 (RPR)	Personal Interest Course 1	FI Individual Family Dynamics 120
ELA 121, 122, or 123 (RPR)	Personal Interest Course 2	Child Studies 120
PIF 10 or FILA 10	Science	Psychology 120
PIF 110 or FILA 110 (RPR)	Science for Sustainable Societies 10	AP Psychology
PIF 120 or FILA 120 (RPR)	Biology 111/112 or FI Bio. 111/112	Personal Interest Course 1
FI Tech de Comm 120	Biology 121 or 122 (RPR)	Personal Interest Course 2
Writing 110	Chemistry 111 or 112	Personalized Well-Being: Career-Connected
Journalism 120	Chemistry 121 or 122 (RPR)	
Media Studies 120	Physics 111 or 112 (RPR)	Computer Science 110
AP Seminar	Physics 121 or 122 (RPR)	Computer-Aided Design 110
AP English Lang & Composition	Human Physiology 110	Fashion Tech. & Design 110
AP English Lit & Composition	Environmental Geoscience 110	Cybersecurity & Tech. Support 110
AP Chinese Lang. & Culture (RPR)	Introduction to Electronics 110 (RPR)	Cybersecurity 120
AP French Lang. & Culture (RPR)	Agriculture 110 (RPR)	Robotics and Technology 120
AP German Lang. & Culture (RPR)	Intro. to Environmental Science 120	Advanced Technology 120
AP Italian Lang. & Culture (RPR)	AP Research (PR)	Career Pathway Design 10
AP Japanese Lang. & Culture (RPR)	AP Biology (RPR)	Develop and Lead 120
AP Latin (RPR)	AP Chemistry (RPR)	Agriculture 110 (RPR)
AP Spanish Lang. & Culture (RPR)	AP Environmental Science (RPR)	Early Childhood Services 110
AP Spanish Lit. & Culture (RPR)	AP Physics 1: Algebra-Based (RPR)	Hospitality and Tourism 110
Personal Interest Course 1	AP Physics 2: Algebra-Based (RPR)	Culinary Technology 110
Personal Interest Course 2	AP Physics C: Elec & Magnet. (RPR)	Culinary Technology 120 (RPR)
Humanities	AP Physics C: Mechanics (RPR)	Growth, Goals, and Grit 120
Civics 10 or FI Civics 10	Personal Interest Credit 1	Entrepreneurship 110
Ancient and Med. Hist. 111, 112, 113*	Personal Interest Credit 2	Business Org. & Management 120
FI Ancient & Med. Hist. 111, 112*	Personalized Well-Being: Creative Arts	Introduction to Accounting 120
Modern History 111, 112, 113*		Co-op Education 120 (3 periods)
FI Modern History 112*	Visual Arts 10	Bus.Sk. & Lead. a Venture (IC)(RPR)
Canadian History 121, 122, 123 *	Visual Arts 110 (RPR)	Intro to Teaching & Education (IC)
Indigenous Studies 120 *	Visual Arts 120 (RPR)	Welding/Metals Fabrication 110
World Issues 120*	Music 10	Metals Processing 110
Law 120	Music 112 (RPR)	Metals Processing 120 (RPR)
Sociology 120	Music 122 (RPR)	Intro. to Applied Technology 110
Political Science 120	History of Rock and Roll 110	Framing and Sheathing 110
International Cit & Understanding 110	Graphic Art and Design 110	Mill and Cabinet Work 120
AP African Studies (beginning 2024)	Fashion Tech. & Design 110	Residential Finishing 120
AP Comparative Gov & Politics	Dramatic Arts 120	Housing & Interior Des 120 (RPR)
AP European History	Media Studies 120	AP Computer Science A (RPR)
AP Human Geography	Photography 120 (RPR)	Personal Interest Course 1
AP Macroeconomics	AP 2-D Art and Design	Personal Interest Course 2
AP Microeconomics	AP 3-D Art and Design	Flex Credit Hours Options
AP US Government & Politics	AP Drawing	Children's Literature 120 (LD)
AP US History	AP Art History	History of Popular Music 120 (LD)
AP World History: Modern	AP Music Theory	Human Anatomy 120 (LD) (RPR)
Personal Interest Course 1	Personal Interest Course 1	Intro. to Engineering Tech 110 (LD)
Personal Interest Course 2	Personal Interest Course 2	Intro. to Kinesiology 120 (LD)
Mathematics	Personalized Well-Being: Wellness and Physical Education	Leadership 120 (LD)
GMF 10 or FI GMF 10	Physical Education 10	Lit. through Graphic Novel 120 (LD)
NRF 10 or FI NRF 10	Basketball Academy 10	Marine Biology 120 (LD) (RPR)
Financial & Workplace Math 110	Outdoor Education 110	Pathology 120 (LD) (RPR)
Foundations of Math 110 (RPR)	Wellness through Phys. Ed. 110	Police Foundations 120 (LD)
Pre-Calculus 110 (RPR)	Yoga 110	Sport and Society 120 (LD)
NBCC Skilled Trades Math 120	Dance 110	Writing 120 (LD)
Pre-Calculus A 120 (RPR)	Sport and Rec. Leadership 120	Young Adult Literature 120 (LD)
Pre-Calculus B 120 (RPR)		

Notes:

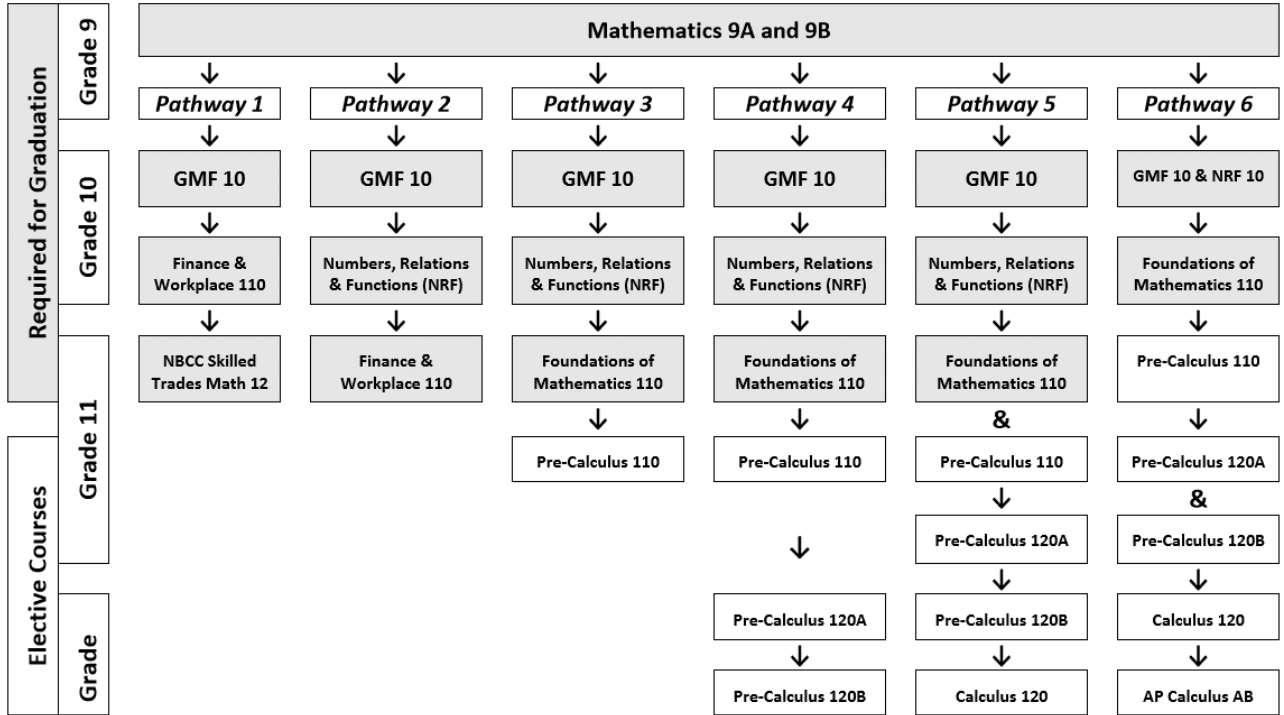
- Bold Text** Courses in bold print are compulsory for graduation
- *** Must complete 1 of the humanities courses marked with *
- FI** Course is for students in the French Immersion Program only
- (RPR)** This course has a recommended prerequisite course
- (LD)** Locally developed course option
- (IC)** IDEA Centre courses

Simonds High School Recommended Course Prerequisites

Course	Recommended Prerequisite
Agriculture 110	Science for Sustainable Societies 10
AP Biology	Biology 111/112 and Chemistry 111/112
AP Calculus AB	Calculus 120
AP Calculus CD	Calculus 120
AP Chemistry	Chemistry 111/112 and Chemistry 121/122
AP Chinese Language and Culture	For grade 12 students
AP Computer Science A	NRF 10
AP Computer Science Principles	Foundations of Mathematics 110
AP English Literature & Composition	English 121/122
AP Environmental Science	2 of: Biology, Chemistry, Physics Plus: Foundations of Math 110
AP European History	Modern History 111/112
AP French Language and Culture	For grade 12 students, FILA 120
AP German Language and Culture	For grade 12 students
AP Italian Language and Culture	For grade 12 students
AP Japanese Language and Culture	For grade 12 students
AP Latin	For grade 12 students
AP Music Theory	Read music, basic voice or instrument skills, Music 112
AP Physics 1	Foundations of Mathematics 110
AP Physics 2	AP Physics 1
AP Physics C: Electricity and Magnetism	Calculus 120
AP Physics C: Mechanics	Calculus 120
AP Precalculus	Foundations of Math 110
AP Psychology	Psychology 120
AP Research	AP Seminar
AP Spanish Language and Culture	For grade 12 students
AP Spanish Literature and Culture	For grade 12 students
AP Statistics	Pre-calculus 110
AP World History: Modern	Modern History 111/112
Business Skills & Leading a Venture (IC)	For gr.12 students, (Entrepren. 110 is preferred pathway)
Calculus 120	Precalculus A 120 and Precalculus B 120
Chemistry 111, 112	Science for Sustainable Societies 10
Chemistry 121, 122	Chemistry 111 or 112
Co-op Education 120	For grade 12 students
Culinary Technology 120	Culinary Technology 110
ELA Extended 10	ELA Foundations 101, 102, or 103
ELA Literary Texts 111, 112, 113	ELA Foundations 101, 102, or 103
ELA Info. Texts 111, 112, 113	ELA Literary Texts 111, 112, 113
ELA 121, 122, 123	ELA Lit. Text & ELA Info. Text 111, 112, 113
Financial and Workplace Math 110	GMF 10 or FI GMF 10
Foundations of Math 110	GMF 10 or FI GMF 10 and NRF 10 or FI NRF 10
Housing and Interior Design 120	2 of: Framing & Sheathing 110, Mill Cabinet Work 120, Residential Finishing 120
Human Anatomy 120 (LD)	Biology 111/112
Introduction to Electronics 110	Science for Sustainable Societies 10
Intro to Teaching & Education (IC)	For grade 12 students
Marine Biology 120 (LD)	Biology 111/112
Metals Processing 120	Metals Processing 110
Music 112	Music 10
Music 122	Music 112
Pathology 120	Biology 111 or 112
Physics 111, 112	Science for Sustainable Societies 10
Physics 121, 122	Physics 111 or 112
PIF 110 or FILA 110	PIF 10 or FILA 10
PIF 120 or FILA 120	PIF 110 or FILA 110
Pre-Calculus 110	Foundations of Math 110
Pre-Calculus A 120	Pre-Calculus 110
Pre-Calculus B 120	Pre-Calculus 110
Visual Arts 110	Visual Arts 10
Visual Arts 120	Visual Arts 110

Graduation Pathways for Mathematics

Each pathway is designed to provide students with the mathematical competencies and critical thinking skills they will need after high school. Students should select courses in the pathway that best fits their interests and plans for after high school. Each pathway provides students with a different focus on math concepts and skills. Students may choose to take additional mathematics courses beyond the graduation requirements to better prepare them for what they want to do following high school. Please note that Pathways 5 & 6 require students to take two math courses in one semester.



Opportunities for each Pathway	Pathways 1 & 2	College Diplomas: Early Childhood Education, Firefighting, Drafting, Welding, Plumbing, Carpentry, Art and Design, Forest Technology, and Practical Nursing Bachelor's Degrees: Arts, Applied Arts and Fine Arts
	Pathway 3	College Diplomas: Medical Technology, Business Administration, Civil Technician, Engineering Technology, Computer Technician, Pharmacy Technology Bachelor's Degrees: Arts, Applied Arts, Fine Arts, Nursing, Recreation & Sport Sciences
	Pathways 4,5 & 6	Bachelor's Degrees: Business, Science, Computer Science, Engineering, Forestry, Health Sciences, Kinesiology, Medical & Laboratory Sciences Note: Calculus is not required for acceptance to any of the above programs. However, it is recommended for any student entering Engineering or Sciences.
	Note: It is important to confirm entrance requirements for the specific program(s) in which you are interested. Requirements may vary between institutions and programs of study.	



Advanced Placement at Simonds High School

What does a Simonds AP student look like? Students should have honours or high honours. AP students should be independent thinkers who are curious learners, hardworking, and self-motivated.

What is AP? Advanced Placement courses enable willing and academically prepared students to pursue introductory university level studies while still in high school and, if successful on the standardized exam, earn a university credit. Students can take AP courses in a variety of subject areas to enrich student interest and engagement.

Why take AP? Students who pursue AP courses stand out on college applications. Students with AP courses on their transcript show they have challenged themselves with the most rigorous courses available to them and indicate they are ready for university level coursework. Students who participate in AP courses are ahead of their peers when they enter post-secondary studies, and those who successfully challenge the exam receive a free university credit.

AP Capstone Diploma Program – AP Capstone is a diploma program based on two yearlong AP courses: AP Seminar and AP Research. Rather than teaching subject-specific content, AP Seminar and AP Research develop students' skills in research, analysis, evidence-based arguments, collaboration, writing, and presenting. Students must successfully pass the exams for the required courses in addition to passing four other AP Course exams of their choice. The AP Capstone Diploma Program is valued by post-secondary institutions around the world.

AP is for everyone – While students are free to take a selection of whatever AP courses they like, we offer AP pathways in several subject areas to enrich students who have a passion in a particular subject. Pathways are available in English, Math, Science, French, and History.



AP Subject Pathways

	Grade 9	Grade 10	Grade 11	Grade 12
Capstone		AP Seminar	AP Research AP Choice	AP Choice AP Choice AP Choice
English	ELA 9A ELA 9B	ELA 10 Foundations ELA 10 Extended	ELA 111/112 Foundations ELA 111/112 Extended	ELA 121/122 AP English Language AP English Literature
Mathematics	Math 9A Math 9B	GMF 10 & NRF 10 Foundations 110	Pre-Calculus 110 Pre-Calculus 120A Pre-Calculus 120B	Calculus 120 AP Calculus AB
History	Social Studies 9	Civics 10	Modern History 111/112 AP European History	AP Comparative Government
French	FILA 9 or PIF 9	FILA 10 or PIF 10	FILA 110 or PIF 110	FILA 120 or PIF 120 AP French Language
Science (Biology)	Science 9 Science 10	Biology 111/112 Chemistry 111/112	Biology 121/122 Chemistry 121/122	AP Biology
Science (Chemistry)	Science 9 Science 10	Chemistry 111/112	Chemistry 121/122	AP Chemistry

Course Descriptions for Simonds High School

AP COURSE DESCRIPTIONS

AP Art History

AP Art History is an introductory college-level art history course. Students cultivate their understanding of art history through analyzing works of art and placing them in historical context as they explore concepts like culture and cultural interactions, theories and interpretations of art, the impact of materials, processes, and techniques on art and art making, and understanding purpose and audience in art historical analysis.

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. *Prerequisite:* Biology 11 and Chemistry 12

AP Calculus AB

AP Calculus AB and AP Calculus BC focus on students' understanding of calculus concepts and provide experience with methods and applications. Using big ideas of calculus (e.g., modeling change, approximation and limits, and analysis of functions), each course becomes a cohesive whole, rather than a collection of unrelated topics. Both courses require students to use definitions and theorems to build arguments and justify conclusions. The courses feature a multi-representational approach to calculus, with concepts, results, and problems expressed graphically, numerically, analytically, and verbally. Exploring connections among these representations builds understanding of how calculus applies limits to develop important ideas, definitions, formulas, and theorems. A sustained emphasis on clear communication of methods, reasoning, justifications, and conclusions is essential. *Prerequisite:* Calculus 120

AP Chemistry

AP Chemistry is an introductory college-level chemistry course. Students cultivate their understanding of chemistry through inquiry-based lab investigations as they explore the four Big Ideas: scale, proportion, and quantity; structure and properties of substances; transformations; and energy. *Recommended Prerequisite:* Chemistry 111/112 and Chemistry 121/122

AP Chinese Language & Culture

AP Chinese Language and Culture is equivalent to an intermediate-level college course in Chinese. Students cultivate their understanding of Chinese language and culture by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and community, personal and public identity, beauty and aesthetics, science and technology, contemporary life, and global challenges.

AP Comparative Government and Politics

AP Comparative Government and Politics introduces students to the rich diversity of political life outside the United States/Canada. The course uses a comparative approach to examine the political structures; policies; and political, economic, and social challenges of six selected

countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students compare the effectiveness of approaches to many global issues by examining how different governments solve similar problems. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments.

AP Computer Science Principles

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems - including the internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. *Recommended Prerequisite:* Foundations of Math 110

AP Drawing

AP Drawing is an introductory college-level drawing course. Students refine and apply drawing skills to ideas they develop throughout the course.

AP English Language and Composition

The AP English Language and Composition course focuses on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they read and analyze rhetorical elements and their effects in nonfiction texts - including images as forms of text, from a range of disciplines and historical periods.

AP Environmental Science

Students cultivate their understanding of the interrelationships of the natural world through inquiry-based lab investigations and field work as they explore concepts like the four Big Ideas; energy transfer, interactions between earth systems, interactions between different species and the environment, and sustainability. *Recommended Prerequisite:* 2 of: Biology, Chemistry, Physics Plus; Foundations of Math 110

AP English Literature and Composition

The AP English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students engage in close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. *Recommend:* English 121/122

AP European History

In AP European History, students investigate significant events, individuals, developments, and processes from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course also provides seven themes that students explore throughout the course to make connections among historical developments in different times and places: interaction of Europe and the world, economic and

commercial development, cultural and intellectual development, states and other institutions of power, social organization and development, national and European identity, and technological and scientific innovations. *Recommend:* Modern History 111/112

AP French Language and Culture

The AP French Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP French Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in French. The AP French Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). *Recommend:* FILA 12

AP German Language & Culture

AP German Language and Culture is equivalent to an intermediate level college course in German. Students cultivate their understanding of German language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and communities, personal and public identities, beauty and aesthetics, science and technology, contemporary life, and global challenges.

AP Human Geography

AP Human Geography is an introductory college-level human geography course. Students cultivate their understanding of human geography through data and geographic analyses as they explore topics like patterns and spatial organization, human impacts and interactions with their environment, and spatial processes and societal changes.

AP Italian Language & Culture

AP Italian Language and Culture is equivalent to an intermediate level college course in Italian. Students cultivate their understanding of Italian language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and community, personal and public identity, beauty and aesthetics, science and technology, contemporary life, and global challenges.

AP Japanese Language & Culture

AP Japanese Language and Culture is equivalent to an intermediate-level college course in Japanese. Students cultivate their understanding of Japanese language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and community, personal and public identity, beauty and aesthetics, science and technology, contemporary life, and global challenges.

AP Latin

AP Latin is equivalent to an upper-intermediate level college course in Latin focusing on the in-depth study of selections from two of the greatest works in Latin literature: Vergil's *Aeneid* and Caesar's *Gallic War*. Students cultivate their understanding of classics through preparing and

translating readings and considering themes in the context of ancient literature as they explore concepts like literary techniques, Roman values, war and empire, leadership, views of non-Romans, history and memory, and human beings and the gods.

AP Music Theory

The AP Music Theory course corresponds to one-to-two semesters of typical, introductory college music theory coursework that covers topics such as musicianship, theory, and musical materials and procedures. Musicianship skills, including dictation and listening skills, sight singing, and harmony, are an important part of the course. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of tonal music that are heard or presented in a score. Development of aural (listening) skills is a primary objective. Performance is also part of the curriculum through the practice of sight-singing. Students learn basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed, and fluency with basic materials are emphasized.

Recommend: Music 11

AP Macroeconomics

AP Macroeconomics is an introductory college-level macroeconomics course. Students cultivate their understanding of the principles that apply to an economic system as a whole by using principles and models to describe economic situations and predict and explain outcomes with graphs, charts, and data as they explore concepts like economic measurements, markets, macroeconomic models, and macroeconomic policies.

AP Microeconomics

AP Microeconomics is an introductory college-level microeconomics course. Students cultivate their understanding of the principles that apply to the functions of individual economic decision-makers by using principles and models to describe economic situations and predict and explain outcomes with graphs, charts, and data as they explore concepts like scarcity and markets; costs, benefits, and marginal analysis; production choices and behavior; and market inefficiency and public policy.

AP Physics 1: Algebra-Based

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, and waves. *Recommended prerequisite:* Foundations of Math 110

AP Physics 2: Algebra-Based

AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, waves, and probability. *Recommended prerequisite:* AP Physics 1

AP Physics C: Elec & Magnet

AP Physics C: Electricity and Magnetism is a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in one of the physical sciences or engineering. Students cultivate their understanding of physics through

classroom study and activities as well as hands-on laboratory work as they explore concepts like change, force interactions, fields, and conservation. *Recommended prerequisite:* Calculus 120

AP Physics C: Mechanics

P Physics C: Mechanics is a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in one of the physical sciences or engineering. Students cultivate their understanding of physics through classroom study and activities as well as hands-on laboratory work as they explore concepts like change, force interactions, fields, and conservation. *Recommended prerequisite:* Calculus 120

AP Psychology

The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation, and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatments of psychological disorders, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, evaluate claims, and evidence, and effectively communicate ideas. *Recommend:* Psychology 120

AP Research

AP Research allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000–5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

AP Seminar

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Students learn to investigate a problem or issue, analyze arguments, compare different perspectives, synthesize information from multiple sources, and work alone and in a group to communicate their ideas.

AP Spanish Language & Culture

AP Spanish Language and Culture is equivalent to an intermediate level college course in Spanish. Students cultivate their understanding of Spanish language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and communities, personal and public identities, beauty and aesthetics, science and technology, contemporary life, and global challenges.

AP Spanish Literature & Culture

AP Spanish Literature is equivalent to a college level introductory survey course of literature written in Spanish. Students continue to develop their interpretive, interpersonal, and

presentational skills in Spanish language as well as critical reading and analytical writing as they explore short stories, novels, plays, essays, and poetry from Spain, Latin America, and U.S. Hispanic authors along with other non-required texts.

AP Statistics

The AP Statistics course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes evident in the content, skills, and assessment in the AP Statistics course: exploring data, sampling and experimentation, probability and simulation, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

Prerequisite: Pre-calculus 110

AP World History: Modern

In AP World History: Modern, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. *Recommend:* Modern History 111/112

AP 2-D Art and Design

AP 2-D Art and Design is an introductory college-level two-dimensional design course. Students refine and apply 2-D skills to ideas they develop throughout the course.

AP 3-D Art and Design

AP 3-D Art and Design is an introductory college-level three-dimensional design course. Students refine and apply 3-D skills to ideas they develop throughout the course.

APPLIED TECHNOLOGY & SKILLED TRADES COURSE DESCRIPTIONS

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

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.

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 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 instructible to journal their progress and present their results to not only their peers but also invited guests.

Cybersecurity and Tech. Support 110

The Cybersecurity and Technical Support 110 (CSTS110) course will inspire students through the experiential learning of the fundamentals of computer and network systems, the activities and processes involved in technical support, and the defensive strategies from cybersecurity. In CSTS110, students will be actively engaged in the design, development and evaluation of technical support and cybersecurity projects, including awareness, concepts and challenges.

Cybersecurity 120

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

Robotics and Automated Technology 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.

Early Childhood Services 110

Early Childhood Services 110 helps students understand the role of the caregiver as well as the parent in a child's development. It prepares students with the skills needed for entry-level jobs in the childcare profession through knowledge of physical, social, emotional, and intellectual development. This course will focus on the skills to prepare young people to understand and work with children in large group settings at an Early Learning Centre. This is a "how to" program applying basic theory to hands-on activities including preparing for and running our 8-week preschool program.

Child Studies 120

Child Studies 120 The purpose of this course is to develop in students the personal skills for successful relationships with children as a caregiver and as a parent. The students explore how children develop physically, socially, emotionally, and intellectually to gain an understanding of human development **from**

birth to school age. In addition, we are equipped to run the “Baby Think it Over Program,” and since we run a preschool program with our Early Childhood 110 course, this course participates in preparing for and running our program too.

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.

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.

Fashion Technology and Design 110

This course is primarily skills based and project based. As such, the “process” is just as important as the “product”. Teachers will act as an instructor but also as a facilitator. Assessments should reflect what students know as well as what they can do.

Introduction to Applied Technology 110

The Introduction to Applied Technology course introduces students to a variety of careers in trades, providing opportunities to explore and research practices and skills required for employment in trades/technology sectors. This course utilizes small group instruction, placing an emphasis on student directed learning and is structured to reflect the reality of work. Problem identification, teamwork and leadership skills are reinforced.

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.

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.

Housing and Interior Design 120

The overall aim of this course is to provide students with lifelong learning skills that are transferable to future learning related to the housing environment and interior décor. Students will: develop awareness of architectural aesthetics, understand the motivating factors that have an impact on the economy and environment, utilize the elements and principles of design as they apply to interior décor, encourage individual creativity through interior design, incorporate technology options in the living environment, and identify issues related to human needs and their impact on future housing trends.

Health Care 110

Welcome to Health Care 110. This course was first developed here at Simonds High in 2009, and it has been offered here since then. It is now offered throughout the province. During this course, you will learn about and experience many different aspects of our healthcare system in New Brunswick. You will explore various Health Care careers, different medical cases, and supplies used by healthcare personnel. As well, you will have hands-on practice where you will learn basic skills such as: making a hospital bed, using a wheelchair, taking vital signs, and applying tensor bandages and slings. We will also have guests visit from different healthcare professions. It is truly an interactive experience.

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.

Welding/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

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 designed to articulate with Music 122.

Music 122

Music 122 is a performance-based course designed to encourage students to develop their musical skills through exposure to a variety of musical challenges and problems requiring creative and higher order thinking skills. Students will be required to work individually, independently, in small groups and in larger ensembles. Projects and research activities are encouraged to be activity based experiential learning. Students are encouraged to assume a large responsibility for their learning. Students will be exposed to a wide range of music for purposes of analysis, listening, historical research and performance. Students may be required to work outside the music classroom (Individual/ensemble) practice, local concerts, studio rehearsal, etc.) as the manifestations of musical activities are many and varied. It is hoped that students will experience many of these opportunities. *Recommended prerequisite:* Music 112

Visual Arts 10

While being engaged in art activities, students learn more than art content and skills. As with any creative endeavour, many thought processes, learning strategies, and ways of expression are refined and transferred to other aspects of life. Like other art forms, visual art offers unique experiences from which a better understanding of the world can emerge.

Visual Arts 110 & 120

These courses offer students a deeper understanding of the elements and principles of drawing, painting and sculpture. There is an emphasis on studio work and portfolio production. Art history and contemporary art will also be studied. *Recommended prerequisites:* Visual Arts 10 and Visual Arts 110

Photography 120

Photography 120 gives you the opportunity to sharpen your camera skills and harness your creativity through visual storytelling. Some topics explored include: Camera Basics, Composition Techniques, Elements and Principles of Design, Film and Digital Techniques, Photo Editing Software, Analyzing/Critiquing Photographs, History of Photography, Developing a Portfolio, Creating an Exhibit. * Having your own DSLR camera would be an asset but is not required.

LANGUAGE ARTS COURSE DESCRIPTIONS

English Language Arts 9A & B

Students will build understanding by listening to, reading, and viewing a range of spoken, written, and visual texts representing all voices. They will respond personally and critically to the works of authors, creators, illustrators, and speakers. They will speak, write, and create texts to learn about self, others, and the world. Students will also write the English Language Proficiency Assessment (ELPA) and it is compulsory for graduation.

English Language Arts Foundations & Extended 10

Students meet learning tasks by listening to, viewing, reading, and discussing increasingly complex texts, representing a variety of voices, for enjoyment, learning and personal understanding, collaboratively and independently. Increasing sophistication in selecting specific strategies to meet their needs as readers/listeners/viewers and text creators will be modelled and acquired. They will understand the learning processes and strategies that work for them when creating a variety of texts.

English Language Arts 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: English 111A and English 111B or 75% in English 112A and English 112B)

English Language Arts Foundations & Extended 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 encompass a study of literary and informational texts focusing on argument, persuasion, fact and opinion, and critical analysis. Students will respond critically to texts and demonstrate an awareness of writing strategies and processes that work for them. English 122 will concentrate on critical comprehension and evaluation skills of Canadian and world literature. Students will demonstrate proficiency in speaking, writing, and listening to explore and reflect on challenging texts and issues. *Prerequisites* for English 112: 60% in English 10; English 122, 60% in Eng 112A and Eng 112 B

English Language Arts Foundations & Extended 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. *Prerequisite* for English 123 is Eng 113A (1 Credit) and Eng 113B (1 Credit)

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, and activity based.

Dramatic 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

This course offers students opportunity to reinforce and enrich their writing skills through a “writing lab” approach where exploring, drafting, revising, proofreading, sharing and reflection 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.

Writing 120 (LD)

Take your writing to the next level with this intense writing course. Do you have pages and pages of unedited poetry and short fiction and now you wonder how to make it better? You’re interested in getting published? Writing 120 is a workshop course that encourages you to share your work with others and polish it until it gleams.

Literacy through Graphic Novels 120 (LD)

Graphic novels can be fiction, non-fiction, history, fantasy, or anything in-between. Graphic novels are similar to comic books because they use sequential art to tell a story.

Children’s Literature 120 (LD)

Do you love reading? Do you ever think about where your love of reading began? For many of us, it began when we were children through the reading of many children’s classics. In this course we will explore the history of children’s literature, how images and text work together to create meaning, and social representation in children’s books. Hopefully, we will get to use our knowledge and read/lead discussions with groups of younger students at neighboring schools.

Young Adult Literature 120 (LD)

Do you LOVE to read? YAL is dedicated to bringing the joy back to reading. This course will appeal to avid readers who enjoy introspective writing and lively discussion. We will look at some of the most popular genres in YA literature: dystopian, realistic, supernatural, novels written in verse etc.

FRENCH COURSE DESCRIPTIONS

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 111/112

FI Ancient & Medieval History 111/112

FI Biology 111/112

AP French Language and Culture

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

Certificate of Oral Proficiency

All students in Grade 12 enrolled in **any** French second language course will be interviewed by a professional interviewer from the Department of Education. Those students will be presented a certificate at graduation indicating their level of oral proficiency.

Post Intensive French 10

Intensive French is a literacy-based approach to teaching French as a second language in which students are required to use French to speak, read and write for authentic purposes. Skills are developed in an integrated fashion through interactive learning experiences built around age appropriate and interesting themes. Intensive French programs focus on oral language (fluency and accuracy) first, helping students to develop an internal grammar of correct forms and structures; reading and writing are integrated to help students learn aspects of written language (i.e., external grammar).

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:* 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

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 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 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 Arts 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 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.

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

HUMANITIES COURSE DESCRIPTIONS

Social Studies 9

This course provides opportunities for students to understand and investigate geography, history, economics, sociology, and political science. Students will explore the impact of Canada's vast and diverse geography on identities, how historical events, trends, and peoples have contributed to the development of Canadian identities, as well as how Canadian political institutions, laws, rights, and responsibilities have affected and reflected Canadian identities.

Civics 10/FI Civics 10

By the end of this course, students will be able to articulate personal rights and responsibilities and interplay among authority systems, citizens, and public policy. They will be able to express their understandings of various ideologies and forms of power as well as how those are operationalized and lived out in governments, civil society organizations, and the lives of individuals. They will be able to articulate the origins, functions, and sources of government power and how the roles played by individuals and groups is critical to informed citizenship and decision-making. This course pairs classroom learning with experiential learning opportunities so that students can use their civic skills to engage with issues that impact them and their communities. Students will be able to exercise their civic agency within the four domains of civic engagement (Peck & Sears, 2019) and explore the benefits and limits of power and governance. students will be able to articulate and act on personal rights and responsibilities and the interplay among authority systems, citizens, and public policy.

Modern History 111

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

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.

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.

Ancient and Medieval History 111/112/113

Ancient and medieval histories have an influence on popular culture, public discourse, and academic curricula. The roots of the present lie deep in the past. An understanding of ancient and medieval societies will not only give students the ability to think critically about that influence and about many other issues but also foster the development of historical thinking. Students should have opportunities to examine ancient societies to understand what happened in the past and what characteristics have endured. From Egyptian hieroglyphics to the Roman Colosseum and from the archaeological evidence for everyday life around the world to oral traditions that have been passed down over thousands of years, ancient and medieval histories provide students great opportunities to consider how we know what we think we know and why certain interpretations carry more weight than others.

Canadian History 121/122

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.

Indigenous Studies 120

This course primarily designed to promote understanding of Mi'kmaq and Wolastoqiyik perspectives on life in the Maritime Provinces. Past, present and future implications are explored through an often intersectional and interdisciplinary approach that looks at elements such as land, language, sport, story, sovereignty, and various artistic forms. Awareness is also enhanced by evaluating Indigenous contexts within the National and Global spheres.

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.

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.

Sociology 120

This course is an academic social science which focuses on the study of society and human behaviour in groups. The main topics of study will include culture, socialization, social structure,

inequality, discrimination and racism, stereotyping and prejudice as well as deviance and crime. There will be an expectation of an in-depth research project.

Individual & Family Dynamics 120

This course is an elective that provides students with skills and information relating to personal development, healthy relationships, mental illnesses, lifestyle choices, budgeting, and the differences in family dynamics. The curriculum touches on aspects of psychology, sociology and economics and will help prepare students to better understand themselves, their families and the world around them. The knowledge and skills in this course will benefit students who wish to pursue careers in law enforcement, social services, counseling, and family medicine.

Entrepreneurship 110

This course is an introductory course to the world of owning your own business. Students will study various types of businesses, consumer wants and needs, marketing and advertising, competition in business and organizing a professional business plan. This class is a project-based class and presentations are mandatory. Students will be expected to create their own business, write a business plan, and sell their products/services to students and staff.

IDEA Centre

The IDEA Centre is a co-op style program designed to develop student-led businesses in the Anglophone South School District ASD-S in Saint John, New Brunswick. Students from various schools gather for 2 periods each day during the school year in a dynamic, supportive workspace in uptown Saint John to develop and grow their business and social enterprises. They receive mentorship and expertise from entrepreneurs, social innovators and community builders while receiving school credits for their work. *Preferred pathway:* Entrepreneurship 110

Business Organization and Management 120

This course will allow students to work successfully in small business, by providing the students with 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 21st century skills which will help students to become more creative innovators who will be able to quickly adapt to an ever-changing business environment.

Hospitality & Tourism 110

This course is an introductory course providing students with an awareness of career opportunities in a dynamic and growing industry sector. Students are made aware of potential social and economic benefits. Emphasis is placed on Tourism in Atlantic Canada. A combination of sound business principles and vision are demonstrated throughout the course

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.

Co-operative Education 120

Cooperative Education 120 is an experiential course that offers youth in grades 11/12 the opportunity to engage in a work placement in a chosen area of career interest. A detailed

workplace skills learning plan is developed to support a focused learning experience in the workplace.

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.

Police Foundations 120 (LD)

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.

History of Popular Music 120 (LD)

This course will cover the major styles of popular music from the 1950's to the present, from rhythm and blues to hip hop, from Elvis Presley to The Beatles to Eminem. The course will examine the musical elements, major artists, and social, political, and economic aspects related to each style and era in popular music. Some of the styles cover as well as the respective artists include: Rhythm and Blues, Country and Western, Pop Rockabilly, Folk, Rock, Fusion, Disco, Rap, Punk, Grunge, Motown, and Alternative.

MATHEMATICS COURSE DESCRIPTIONS

Geometry, Measurement and Finance 10 (GMF 10) and FI GMF 10

This is a one semester course that includes the following topics: unit pricing and currency exchange, earning an income (net income, deductions), financial services (such as choosing an account, simple and compound interest, credit cards), measurement involving surface area and volume, angles and parallel lines, and right triangular trigonometry. This course is a pre-requisite for Financial and Workplace Math 110 and Foundations of Math 110.

Numbers, Relations and Functions 10 (NRF 10) and FI NRF 10

This is a one semester course that includes the following topics: factors and multiples of whole numbers, perfect squares and cubes and their roots, common factors of a polynomial, factoring, irrational numbers, mixed and entire radicals, fractional and negative exponents, relations and functions, graphs, linear functions, and systems of linear equations. This may be used as a credit toward graduation and is a pre-requisite for Foundations 11.

Financial & Workplace Mathematics 110

This course is the first course in the Financial and Workplace pathway that is 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 related to financial mathematics and personal budgets. Students manipulate and apply formulas in a variety of ways and solve problems using proportional reasoning and unit analysis.

Prerequisite: Geometry, Measurement & Finance 10

Foundations of Mathematics 110

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 inequalities in two variables and explore characteristics of quadratic functions. Costs and benefits of renting, leasing and buying are explored in relation to financial mathematics. *Prerequisites:* Geometry, Measurement and Finance 10 AND Number, Relations, and Functions 10. This is a pre-requisite or co-requisite for Pre-Calculus 11.

Pre-Calculus 110

This is a one semester course designed for students who are interested in attending university or community college and taking post-secondary programs that require mathematics. Specifically, this pathway is designed to provide students with the mathematical understandings and critical thinking skills identified for entry into postsecondary programs that require the study of theoretical calculus. Topics include algebra and numbers, trigonometry, relations and functions, and more. The pre or co-requisite for this course is Foundations of Mathematics 110. This course is a pre-requisite for Pre-Calculus 12A.

NBCC Skilled Trades and Work-Ready Math 120

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

Prerequisite: Financial & Workplace Math 110

Pre-Calculus 120A

The Pre-Calculus pathway is designed for entry into post-secondary programs that require the study of theoretical calculus. Topics include in-depth study of trigonometry and various functions both graphically and algebraically. This course will allow students demonstrate and apply an understanding of the effects of transformations on graphs of functions and their related equations. It includes an introduction to inverses of functions, logarithms, and the relationship between logarithmic and exponential functions to solve problems. This course is a pre-requisite for Pre-Calculus 12B. *Prerequisite:* Pre-Calculus 11

Pre-Calculus 120B

The Pre-Calculus pathway is designed for entry into post-secondary programs that require the study of theoretical calculus. Topics include sequences and series, factoring analyzing and graphing polynomial functions, rational and reciprocal functions. Students will also be introduced to the concept of limits and determine the limit of a function at a point both graphically and analytically. *Prerequisite:* Pre-Calculus 12A

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. *Prerequisites:* Pre-Calculus 12A & 12B

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.

PHYSICAL EDUCATION COURSE DESCRIPTIONS

Physical Education 9/10

The goal of the Physical Education and Health Grade 9/10 curriculum is to promote healthy active living for life. These courses are comprised of 3 “blocks”. Physical Education 9 covers block one, and Physical Education 10 covers blocks 2 and 3. Students are assessed on personal growth throughout the duration of the courses.

Physical Education 10 – Basketball Academy

This course will cover the outcomes required for HPE 10 but with basketball specific elements. Training will focus on improving individual skills such as shooting, ball handling, passing and one on one moves. Defensive and offensive team tactics will also be taught, but the emphasis will be on the individual skills required to perform at game speed. Physical fitness training will also be included and will emphasize how to train in season with students following their own plans to improve flexibility, strength, aerobic and anaerobic capacity.

Outdoor Pursuits 110

Outdoor Pursuits allows students to step outside of their comfort zone to take part in various outdoor activities such as snowshoeing, hiking, skiing, and canoeing in a safe and respectful environment. They will learn the values of intelligent risk taking, perseverance and resilience.

Wellness through Physical Education 110

This course is designed to promote physical and mental well-being. Topics covered: mental health, stress, strategies for coping with stress/anxiety, how to identify the signs of anxiety/mental health issues, risky behaviours and the implications (substance abuse, addictive behaviors, sexual decision-making, etc.), proactive decision-making, healthy relationships, fitness, and how to evaluate and address personal wellness needs.

Yoga 110

Do you want to: Increase your flexibility? Increase your strength? Learn to meditate? Sleep better? Find peace and quiet in your busy life? Then Yoga is the course for you! No experience required!

Dance 110

Do you love moving and being active? Do you love music and hearing the different beats? Would you like to explore the history of dance while learning the different styles yourself? Would you enjoy learning: Tap, Jazz, Hiphop, The Tango, and so much more? Then this class is for you!

Sport and Recreation Leadership 120

This course is designed to improve Leadership Skills through physical activity in recreational settings. Participants learn the various forms/styles of Leadership, teaching/coaching theory, how to work in a group, strengths and limitations of those we lead, and interpersonal skills.

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.

Advanced Training Principles 120

This course develops physical fitness of students as they learn practical (power lifting techniques, body building, plyometric exercises, cross-, endurance-, alternative and speed-training) and theoretical (sport nutrition, supplementation issues, physiology, biomechanics, sport specific training programs) aspects of physical training.

Leadership 120 (LD)

Leadership 120 will help build the skills necessary for becoming a successful leader. It will help build your resume and improve your post-secondary applications. This course is a blend of learning leadership theory and putting it into practice. Activities included in this course are: planning various school and community events, gaining valuable volunteer hours, working with students in elementary schools.

Sport and Society 120 (LD)

It examines how culture and values influence sports, how sports influences culture and values, and the relationship between sports and the media, politics, economics, religion, race, gender, youth, etc. It also looks at the relationship between sports and social inequality and social mobility.

Introduction to Kinesiology 120 (LD)

How does physical activity affect the aging process? What physiological changes characterize the relaxation response? How do humans adapt to environmental stresses? Kinesiology involves the multidisciplinary study of human movement and function.

SCIENCE COURSE DESCRIPTIONS

Science for Sustainable Societies 10

The social and environmental contexts of advancement of science and technology are the central focus of the course. A contemporary approach for teaching physical sciences is applied so that students may become familiar with evolving theories and principles shaping how science is applied to design creative solutions. The connections that exist between matter and energy are

explored through a systems thinking frame. Systems thinking will help students determine ways to connect chemical reactions to planetary cycles, and to weave core chemistry concepts into sustainability discourse. 1 Using systems thinking to consider the complex interplay of chemical processes with scientific, societal and environmental systems provide students with critical knowledge required for upper-level high school science courses; specifically, chemistry, environmental science and physics.

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.

Environmental Geoscience 110

Geoscience, the study of planet Earth, can include geochemistry, geology, geomatics, geophysics, hydrogeology, palaeontology, physical geography, etc. Environmental geoscience can also include environmental sciences, meteorology, soil sciences, oceanography, etc. In Environmental Geoscience 110, learners will consider how Earth systems change over time. Geographic science is applied to the arrangement, interaction, and change of physical/natural features and human activity on and near Earth's surface including safer and more sustainable ways of searching for Earth resources, disposing of waste, selecting places to live and constructing new buildings, etc. Geomatics, a subset of geographic science, allows learners to explore technologies for collecting, managing, and analyzing data about Earth and phenomena arranged on and near its surface.

Agriculture 110

Agriculture is the art and science of cultivating the soil, growing crops and raising livestock. It includes the preparation of plant and animal products for people to use and their distribution to markets. Students will learn about how agriculture provides most of the world's food and fabrics. Recommended prerequisite: Science for Sustainable Societies 10

Biology 112

This introductory Biology course covers a wide variety of topics including cell structures and processes, microscopes, body systems (digestive, excretory, 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.

FI Biology 112

The same outcomes that are taught in Biology 112 are taught in FI Biology 112, except in French. This introductory Biology course covers a wide variety of topics including cell structures and processes, microscopes, body systems (digestive, excretory, 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.

Biology 111

This introductory Biology course covers a wide variety of topics including cell structures and processes, microscopes, body systems (digestive, excretory, circulatory, respiratory, immune) with a focus on maintaining homeostasis, biodiversity, and classification. Biology 111 includes more outcomes than Biology 112 and is most appropriate for an 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.

FI Biology 111

The same outcomes that are taught in Biology 111 are taught in FI Biology 11, except in French. This introductory Biology course covers a wide variety of topics including cell structures and processes, microscopes, body systems (digestive, excretory, circulatory, respiratory, immune) with a focus on maintaining homeostasis, biodiversity, and classification. FI Biology 111 includes more outcomes than FI Biology 112 and is most appropriate for an 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.

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, the nervous system, the reproductive system, the endocrine system, and evolution. There is also a focus on lab work involving microscope use and dissections. Background in chemistry is an asset.
Prerequisite: Biology 112

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.

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.

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

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

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.

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.

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

Physics 121

This course covers the same topics as in Physics 122, but to a greater depth. 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 111, each of these topics is studied in its societal context. Students will complete laboratory investigations. *Prerequisite:* Physics 111

Human Anatomy 120 (LD)

This course will explore beyond the basics of the systems of the human body (Bio 11 & 12) and delve into the medical aspects associated with each. It will explore the design of the human body in substantial detail. This course will provide an introduction to educational content associated with pre medicine, the health sciences, and even animal sciences. *Prerequisite:* Biology 111 or 112

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, the biology of pathogens, how various diseases affect the human body, and how diseases are diagnosed and treated. There is also a lab component.

Introduction to Environmental Science 120

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

Marine Biology 120 (LD)

The marine environment and more particularly the local dynamics of such ecosystems will be studied. Those organisms that make these areas their habitat will be researched and those related factors that impact upon them will also be studied through lecture, laboratory work and hands-on lab activities. Further discovery will take place during a field trip to St. Andrew's Huntsman Marine Science Centre. How these environments are impacted by other environmental 'forces' will also be a major focus, as well as study of other marine ecosystems such as coral reefs.

Prerequisite: Biology 111 or 112

Intro to Engineering Tech 110 (LD)

This course will be of interest to any students interested in pursuing a career in the engineering field [Professional or Engineering Technologist]. The course consists of a two-period block. Approximately half the time will be spent on Computer Aided Design [common to all engineering programs] and the other half will be spent exploring topics related to engineering. Topics will include: types of Engineering, types of work done, entrance requirements, job demographics, guest speakers from mature and recent graduates, and research projects.

Simonds High School Graduation Average Policy

A grade 12 student's graduation average is based upon the marks received in the courses they have taken in their grade 12 year.

Note: Any student who had taken *fewer* than 9 courses in their grade 12 year is considered a part-time student and will **not** be considered for the titles of valedictorian, salutatorian, nor the high-honors or honors list.

Graduation Average Calculation

To calculate a student's graduation average, the lowest mark from their grade 12 year is dropped (not English 12), and the remaining marks are averaged together.

Additional percentages will be added to the graduate's calculated average as follows:

- 1.25% per Advanced Placement course taken in the grade 12 year
- 1% per level one course taken in the grade 12 year
- 1% per FI course taken in the grade 12 year
- 1% per Calculus 120, PIF 110, PIF 120 course taken in the grade 12 year

Graduation High Honor Roll and Honor Roll

Students achieving a graduation average of 90% and above will be listed on the High Honor Roll.

Students achieving a graduation average of 80% to 89.99% will be listed on the Honor Roll.

Valedictorian and Salutatorian

The valedictorian and salutatorian are usually the graduates with the first and second highest marks of their graduating class, respectively.

A student may not wish to receive the honor of being their class valedictorian or salutatorian, and in this case, the school principal will usually offer the honor to the next ranking student.

The school principal reserves the right to alter the selection of the graduating class valedictorian and salutatorian should there be extenuating circumstances.