



DISTANT EDUCATION COURSE DESCRIPTIONS – NEW BRUNSWICK OFFERED AT ISSL

ACCOUNTING 120

PREREQUISITE – INTRO TO ACCOUNTING 110

COURSE CONTENT – Accounting 120, a one-semester course, examines the electronic application of accounting for merchandising or service businesses. Students will learn to establish/convert a company from a manual to an electronic system, the routine accounting procedures and the preparation of financial documents.

BIOLOGY 112

PREREQUISITE – SCIENCE 10

COURSE CONTENT – Biology 112 emphasizes the nature of life. Lecture and demonstration methods are used together with a laboratory program. Grades 9 and 10 will prepare students for this course. Study includes biodiversity, cellular matter and energy flow, energy and matter exchange by humans and other organisms, and energy and matter exchange in ecosystems.

BIOLOGY 122

PREREQUISITE – BIOLOGY 112

COURSE CONTENT – Biology 122 is designed for students who may go to post-secondary institutions. Although previous biology or chemistry courses are not required, they are strongly recommended as preparation for this course. Laboratory and/or demonstration periods are an integral part of the course. Major topics include systems regulating change in humans and other organisms, reproduction and development, chromosomes, genes, DNA, and change in populations, communities, and species.

CALCULUS 120

PREREQUISITE – GEOMETRY 112, AND FUNCTIONS & RELATIONS 112

COURSE CONTENT – Advanced mathematics with an introduction to Calculus is an advanced course designed for students expecting to pursue significant studies in mathematics at the post-secondary level. Students are required to regularly submit assignments, write quizzes and tests and to continue to develop problem solving repertoires. The use of the TI-83 calculator is encouraged.

CHEMISTRY 112

PREREQUISITE – SCIENCE 10

COURSE CONTENT – Chemistry 112 is designed so students make observations and draw conclusions that lead directly to important principles in chemistry. Topics include matter and energy in chemical change, matter as solutions and gases, quantitative relationships in chemical changes, chemical bonding in matter, and some organic chemistry.

CHEMISTRY 122

PREREQUISITE – CHEMISTRY 112

COURSE CONTENT – Chemistry 122 is the second of the two chemistry courses that emphasize teaching chemistry using the scientific method. Experiments are designed so that students make observations and draw conclusions that lead directly to important principles in chemistry. Topics include organic chemistry, thermo-chemical changes, equilibrium, acids and bases, and electrochemical changes.

COMPUTER AIDED DESIGN 110

PREREQUISITE – NONE

COURSE CONTENT - Computer Aided Design 110 is designed to give students a solid knowledge base of drafting as well as to introduce them to the actual skills necessary to visualize and graphically represent design. The nature of the activities and the use of AutoCAD LT 2004 will interest a wide range of students beyond those preparing to pursue a career in the drafting/ technology/engineering areas.

COMPUTER SCIENCE 110

PREREQUISITE – NONE

COURSE CONTENT – Computer Science 110 teaches the fundamentals of structured programming and the program development cycle. Students will learn to use basic programming constructs to write simple programs using the Visual Basic programming language. More advanced topics, including graphics and animation, are also introduced.

COMPUTER SCIENCE 120

PREREQUISITE - Computer Science 110

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

CULINARY TECHNOLOGY

PREREQUISITE – NONE

COURSE CONTENT -Culinary Technology 110 is an entry level hands-on food service training course. Culinary skill sets include: industry organization, standards, safety and sanitation, use of tools and equipment, and food preparation. Students will study the theory of each skill and then be encouraged to practice those skills under supervised lab activities. The activities include preparation of the following foods- quick breads, yeast bread and rolls, cakes and cookies, pies and pastry, and beverages.

ECONOMICS 120

PREREQUISITE – NONE

COURSE CONTENT - Economics 120 provides students with a basic understanding of the Canadian economic system and the interacting roles of its major economic institutions. The course is designed to develop an

awareness of the concepts and techniques used in making economic decisions and to ensure a better understanding of the major economic problems of the day. Students will be required to complete several assignments as well as one major research project in this course.

ENGLISH 112 (A & B)

PREREQUISITE – ENGLISH 10

COURSE CONTENT - English Language Arts 112 is a year-long course. Semester one consists of three theme-based modules focusing on the ELA curriculum outcomes of speaking and listening, reading and viewing, writing and representing. Students will also complete three assignments in an Ongoing Reading Unit in which they read and respond to books of their choice. The course requires students to interact with a wide variety of written, spoken and visual texts and to complete assignments ranging from interviews and surveys to essays and PowerPoint presentations.

Semester two consists of three modules, two of which are theme-based and focus on the ELA curriculum outcomes of speaking and listening, reading and viewing, writing and representing. The third module consists of an interactive Literature Circle and a Writing Workshop. Students will also complete two assignments in an Ongoing Reading Unit in which they read and respond to books of their choice. The course requires students to interact with a wide variety of written, spoken and visual texts and to complete assignments ranging from interviews and surveys to speeches and PowerPoint presentations.

ENGLISH 122

PREREQUISITE – ENGLISH 112 (A & B)

COURSE CONTENT - English Language Arts 122 is a one-semester course that focuses on the ELA curriculum outcomes. The outcomes are achieved through four modules that include the study of basic writing skills, poetry, non-fiction, a novel and a Shakespearean play. Students will complete a wide variety of assignments reflecting the outcomes of reading and viewing, speaking and listening, and writing and representing. Tests will be written at the end of each module and a final exam will be written at the end of the course.

ENVIRONMENTAL SCIENCE 122

PREREQUISITE – GRADE 10 SCIENCE

COURSE CONTENT - The new Environmental Science 120 aims to help students develop the knowledge base and skills for investigating and analyzing environmental world issues and for communicating their knowledge and analysis to others. Course topics include basic ecology, environmental awareness, population growth and resource limitations, sustainable ecosystems and communities. Students also learn how to research a variety of current environmental issues and to present their findings. Assessment is based on contribution to discussions, journals, and the course blog; self-assessments and activities; assignments and tests; and the main project which includes independent research, experimental work, stewardship tasks, and a collaborative presentation.

FINE ARTS 110

PREREQUISITE – SCIENCE 10

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

FUNCTIONS & RELATIONS 112

PREREQUISITE – GEOMETRY 112

COURSE CONTENT - Functions and Relations 112 is an interactive course designed to present and develop concepts and processes from three families of mathematical functions: trigonometry, exponents and quadratics. Students are required to regularly submit journals and assignments, write quizzes and tests and participate in discussions. The use of the TI-83 calculator is emphasized.

GEOGRAPHY 110 (PHYSICAL)

PREREQUISITE – NONE

COURSE CONTENT - Physical Geography 110 is considered both a science and a social studies credit. It introduces students to the earth's physical systems. A general introduction is followed by studies of the universe, the earth in space, map reading and imagery interpretation. Students may then decide to study either climate or geology. Climate includes the study of weather systems, weather maps and forecasting as well as the world's natural regions. Geology includes, among other topics, the study of continental drift, volcanoes, earthquakes and weathering. Weekly assignments must be submitted and tests will be written as each unit is completed.

GEOMETRY 112

PREREQUISITE – MATHEMATICS 10

COURSE CONTENT - Geometry and Applications in Mathematics 112 is a four unit hands-on course. The first three units are designed to present and develop concepts and processes from three fields of mathematics: circle geometry, probability and statistics. The fourth unit is an independent study that the student will present through Internet conference. Students are required to submit work on a weekly basis. Students must also submit four assignments, write tests/quizzes and participate in discussions. Use of the TI-83 calculator and graphing software are emphasized.

HISTORY 111 (MODERN)

PREREQUISITE – HISTORY 10

COURSE CONTENT - Modern History 111 is an enriched, thematic study for those with a strong interest in, and a proven aptitude for, the study of history. The course focuses on revolutionary changes in Western society since the eighteenth century while requiring students to practice research, writing and discussion skills in a series of major assignments. Topics from the French and Industrial Revolutions through the nineteenth century revolution in ideas

to the left and right-wing revolutions of the twentieth century will be studied. Students are also required to participate in an asynchronous online discussion of topics related to war and peace in the modern world.

HOSPITALITY & TOURISM 110

PREREQUISITE – NONE

COURSE CONTENT -

Tourism 110 is a three-unit course. The general aim of the Tourism 110 program for New Brunswick is to develop an understanding of the tourism industry, create an appreciation for New Brunswick and to prepare students for work in the industry. Each unit has one major project and students will be required to work in groups. Students will have regular Live Events in Adobe Connect.

INTRODUCTION TO ACCOUNTING 120

PREREQUISITE – NONE

COURSE CONTENT - Introduction to Accounting 120 introduces students to skills necessary for general accounting and bookkeeping. The nine-module course, both academic and practical, will emphasize: steps of the service industry's accounting cycle, accounting processes from a business event to year-end reporting and the basics of spreadsheets. Students will receive a solid grounding for post-secondary study in business as well as skills for employment and/or personal finance.

INTRODUCTION TECHNOLOGY 110

PREREQUISITE – NONE

COURSE CONTENT – This course introduces students to the use of information technology in the business environment. Students will learn how to use information technology in a work environment, perform electronic research, communicate electronically, and use common business software. Students will be able to transfer the skills and understand acquired in this course to activities in other courses and outside the classroom. Through a variety of activities, students will have opportunities to develop interpersonal skills to interact with people from the business community and organizations within the school.

INTRODUCTION TECHNOLOGY 120

PREREQUISITE – ITT 110 RECOMMENDED

COURSE CONTENT - This course introduces students to the use of information technology in the business environment. Students will learn how to customize Microsoft “Windows” to work for them, use new features such as the active desktop. Become Internet savvy, create professional looking documents with Word, use Excel spreadsheet features, create multimedia slideshows with Power Point, send email and use your daily planner and address book with Outlook Web Access, design a custom database and manipulate data with Access.

MEDIA STUDIES 120

PREREQUISITE – NONE

COURSE CONTENT -Media Studies 120 introduces students to the evolution and impact of mass media on the individual and society. The course, both academic and practical, emphasizes the content and processes of media. Students will study six modules, four compulsory: Introduction to Media, Film/Video, Television and Advertising and two optional ones to be chosen from a teacher-created listing. Some topics and assignments will depend upon local resources. Access to the text *Mass Media and Popular Culture*, Barry Duncan et al. Version 2. Toronto: Harcourt Brace & Canada Ltd., Canada may be helpful but is not required.

NUTRITION FOR HEALTHY LIVING 120

PREREQUISITE – NONE

COURSE CONTENT - Nutrition for Healthy Living is designed to make students aware of how to contribute to overall wellness, make healthy food choices and maintain a balance between eating habits and physical activity. Current issues relating to food technologies will also be discussed. Students will be encouraged to use reliable information to examine their eating habits and lifestyle choices.

PHYSICS 112

PREREQUISITE – SCIENCE 10

COURSE CONTENT - Physics 112 is the first of two physics courses designed for students who intend to go to university or technical school. Topics include one-dimensional kinematics and dynamics, wave motion, sound and light, introduction to electromagnetic radiation and a study of work/energy/power. The course aims to engage students in relating physics concepts to societal contexts and applications. A student-centred approach to theoretical and practical investigations is the basis of the curriculum.

PHYSICS 122

PREREQUISITE – PHYSICS 112

COURSE CONTENT - Physics 122 is the second of two physics courses designed for students who intend to go to university or technical school. Topics include linear motion, forces, two-dimensional motion, projectiles, circular motion and gravitation, fields (gravitational/electric/ magnetic), electric circuits, electric motors and generators. As with Physics 112, each of the topics is studied in its societal context. Student experiences will include library research, laboratory investigations and multiple sources of information, including print, software and video.

POLITICAL SCIENCE 120

PREREQUISITE – NONE

COURSE CONTENT - Political Science 120 is an introductory course designed to develop a basic understanding and knowledge of the world's political ideologies and systems. Throughout the course students will be expected to assess and compare the merits of those ideologies and systems to the Canadian system.

SPANISH 110

PREREQUISITE – NONE

COURSE CONTENT - Spanish 110 employs an interactive tutorial method of course delivery to introduce students to the basic elements of the Spanish language and Hispanic culture. Students will have the opportunity to practice

the language and learn through live, online group sessions. Course themes, including Who Am I?, My friends, This Is my Family, My House Is Your House and My Town, and topics for virtual partner projects have been selected with the interests of the student in mind.

SPANISH 120

PREREQUISITE – SPANISH 110

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

TRIGONOMETRY 120

PREREQUISITE – GEOMETRY 112 AND FUNCTIONS & RELATIONS 112

COURSE CONTENT - The course is divided, as indicated in the title into two main topics: the mathematics of 3-dimensional space and an extensive study of trigonometry.

The on-line version of this course has been laid out so that you will be led to discover new relationships and patterns. Some of the material will require further investigation or development that will be left to the learner.

The online version of the Trigonometry and 3-Space 122 course has been divided into the following four units:

- Unit 1: The Algebra of 3-Space
- Unit 2: Trigonometric Functions
- Unit 3: Trigonometric Equations and Identities
- Unit 4: Further Trigonometric Topics

VISUAL ARTS 110

PREREQUISITE – NONE

COURSE CONTENT - Visual Art 110 is a studio course aimed at helping students to improve their skills in Art. The course consists of 5 Units, each of which focuses on a specific medium &/or skill (Drawing, Watercolor Painting, Linear perspective, Sculpture, Oil Pastel). Students do not need to have a high skill level to be successful in this course, but do need to have a willingness and desire to apply themselves and to work hard. Students will be engaged in discussions and critiques on work by famous artists, their own work, and the work of their peers.

WORLD ISSUES 120

PREREQUISITE – NONE

COURSE CONTENT - World Issues 120 examines various current events that are global in nature and that require a global solution. The concept of the global village is studied, as is the relationship between nations as players in the global community. Various issues are examined to acknowledge the fact that events in any part of the world have a global impact

WRITING 110

PREREQUISITE – ENGLISH 10

COURSE CONTENT - Writing 110 explores the craft of writing, which focuses on the process as well as the final product. The workshop approach is employed; students engage in writing conferences with the Writing 110 instructor to work through stages of the writing process. Students choose their own writing topics, and their own writing resources to pre-write, draft, revise, edit, and proofread several kinds of writing: Personal narrative (from which students create a digital story), descriptive, editorial, public service announcement, speech, and a procedure. Students work in writing communities with their peers to exchange feedback and encourage progress. The course culminates with the compilation of a writing portfolio in which students showcase and reflect upon their progress during the semester