University of Northern British Columbia
Dual Credit Initiative

January 2020 Semester Course Choices

The following list is a summary of courses available for registration by UNBC Dual Credit students. Courses for the September and January semesters are open for registration each year beginning April 1. All students are encouraged to access the UNBC Undergraduate Academic Calendar prior to registration to ensure they have met required prerequisites and are aware of course preclusions and other necessary course information. UNBC Student Advisors are available to help you.

Please note that there is one course offering below beginning in February of 2020: ***COMM 100: Introduction to Canadian Business***

UNBC Course Schedule: http://www.unbc.co/current-students
UNBC Course Descriptions: http://www.unbc.ca/colendor/undergraduote/course-descriptions

ANTH 102-3 Anthropology: A World of Discovery

Using a thematic approach, this course explores what defines the human species. Some of the themes explored may include human evolution and our primate biological kin; archaeology and digging for the past; culture in a global world; communication or the essentials of being a talking and increasingly texting primate; health as a social and biological; production and consumption, from the first stone tools to the Big Mac; and other topics that deal with humanity past and contemporary.

Schedule: *Monday & Wednesday 11:30am –11:20am*
Instructor: *Angele Smith*

ASTR 121-3 Introduction to Astronomy II: The Universe

This is a one-semester introductory course in Astronomy that is general enough to be of interest to science and non-science majors with a proper background in mathematics. This course is complementary to ASTR 120-3. Topics include: the origins of stars and planetary systems; the sun; properties and structures of stars; stellar interiors; the evolution of stars; stellar remnants; white dwarfs; neutron stars; black holes, worm holes and warped spacetime; the Milky Way; the universe of galaxies; distance scales and indicators; active galaxies and quasars; cosmology: past, present, and future of the universe, "Is 'Anyone' Out There?". ASTR 121 and ASTR 120 may be taken in either order.

Prerequisite: Foundations of Math 11 or Principles of Math 11 or Precalculus 11 or Principles of Math 12 (50% or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday, Wednesday & Friday 9:30am – 10:20am*
Instructor: *George Jones*

BIOL 104·3 Introductory Biology II

This lecture-based course is a survey of living organisms, plant and animal form and function, ecology and population biology.

Prerequisite: Biology 11 or Biology 12 (50% or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.
Schedule: *Monday, Wednesday, & Friday 10:30am – 11:20am*
or *Monday, Wednesday, & Friday 11:30am -12:20pm*
Instructor: *Roy Rea*

Note: Students may register in the corresponding BIOL 124-1 lab; however, it is not required.

BIOL 124-3 Introductory Biology II

This laboratory-based course introduces students to plant and animal diversity, form and function and ecological relationships among organisms, closely following the lecture organization in BIOL 104-3. Students normally take this course concurrently with BIOL 104-3 as the lab component complements the lecture, but should check the relevant program requirements to see if the lab is required. (Note: not all programs require both the lecture and lab components.)

Schedule: *Numerous 3 hour lab sections available*
Instructor: *Lab Instructors*

Biology 110-3 Introductory Ecology

This course is designed to introduce non-science majors to ecological systems. Principles of ecology, biotic and abiotic conditions, population, community and ecosystem structure, human impacts on these systems, and basic concepts of conservation and preservation of ecosystems.

Schedule: *Monday, Wednesday, & Friday 12:30am – 1:20pm*
Instructor: *Lisa Wood*

CHEM 100-3 General Chemistry I

The first course in a two-course lecture-based sequence of chemistry courses emphasizing the basic principles of chemistry. Topics include: classification of matter, periodic properties of elements, atomic and molecular structure, stoichiometry, chemical reactions, thermochemistry, chemical bonding and an introduction to organic chemistry. Students requiring the first year laboratory courses in their program of study are encouraged to enroll in CHEM 120-1 concurrently.

Prerequisite: MATH 115 Minimum Grade of D- or PreCalculus 12 (50%) or Principles of Math 12 (50%)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: Tuesday & Thursday 11:30m – 12:50pm
Instructor: TBA

CHEM 101·3 General Chemistry II

The second course in a two-course lecture-based sequence of chemistry courses emphasizing the basic principles of chemistry. Topics include: intermolecular forces, properties of solutions, reaction kinetics, chemical equilibrium, acids and bases, applications of aqueous equilibria, entropy and free energy, and electrochemistry. Students requiring the first year laboratory courses in their program of study are encouraged to enroll in CHEM 121-1 concurrently.

Prerequisite: CHEM 100 (D- or Better) and Principles of Math 12 or Precalculus 12 (50% or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: Monday, Wednesday, & Friday 10:30 – 11:20am
or *Monday, Wednesday, & Friday 11:30am -12:20pm*
Instructor: Kerry Reimer

Note: Students may register in the corresponding CHEM 120-1 lab; however, it is not required

CHEM 121-1 General Chemistry Laboratory II

A laboratory half-course designed to accompany CHEM 101-3 and introduce basic chemistry laboratory procedures. Experiments will be performed which complement the material presented in CHEM 101-3.

Prerequisite: CHEM 120-1 (D- or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: Numerous 3 hours lab sections available
Instructor: Lab Instructors

COMM 100-3 Introduction to Canadian Business

This course is an overview of the Canadian business environment, forms of organizations, the management function, and an introduction to the functional areas of business management. This course includes the challenges and opportunities facing small business.

Schedule: Tuesday & Thursday 8:30am – 9:50am
or *Wednesday 6:00pm – 8:50pm*
or *Tuesday & Thursday 2:30pm – 4:30pm* ***Note: this third lecture section will start in February and conclude in May – ideal for Dual Credit Students***
Instructor: Charles Scott or Julius Bankole

CPSC 101-4 Computer Programming II

This course is a continuation of CPSC 100-4. Objects, classes, inheritance and polymorphism are discussed in depth. Other topics include object-oriented program design and development using principles of software engineering; modeling with UML; GUI components and graphics; dynamic storage allocation, the heap, and garbage collection; run-time support for program execution; and the use of standard libraries. Students work cooperatively to complete a medium-sized project. This course requires both tutorial and laboratory components.

Prerequisite: CPSC 100 (C- or Better) and CPSC 141 (C- or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday, Wednesday & Friday 3:30pm –4:20pm*
Instructor: *David Casperson*

Note: There is a lab and tutorial requirement for this course (3 additional hours/week)

CPSC 110-3 Introduction to Computer Systems and Programming

The course provides an introduction to computer systems and programing, concepts in computer architecture including the central processing unit, buses, memory units, input/output and communication devices. The introduction to operating systems emphasizes the file system and program development utilities. Programing concepts and techniques include problem analysis, program design, coding, and testing, as well as language elements such as data types, variables and assignment statements, expressions, mixed-mode arithmetic, input/output operations, basic data structures and control structures, procedures and abstract data types. Basic database management concepts will also be introduced. Students will develop small applications programs.

Prerequisite: Principles of Math 12 or PreCalculus 12 (50% or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday, Wednesday & Friday 8:30am – 9:20am*
Instructor: *Fan Jiang*

Note: There is a lab and tutorial requirement for this course (3 additional hours/week)

ECON 100-3 Microeconomics

The interactions of households, firms and government policies. An analysis of how different economic agents interact to determine what is produced, how it is produced and to whom it is distributed.

Schedule: *Tuesday & Thursday 8:30am – 9:50am*
Instructor: *Amarjit Singh Bhullar*

ECON 101·3 Macroeconomics

The determinants of unemployment, inflation and growth focusing on Canada's macroeconomics performance.

Schedule: *Tuesday & Thursday 8:30am – 9:50am*
Instructor: *Leandro Freylejer*

ENGL 100-3 Introduction to Literary Structures

This course provides an introduction to the reading of the three major genres: poetry, fiction, and drama. The course introduces the students to the basic structural principles and rhetorical strategies of literary texts by observing structural and rhetorical theory applied to specific poems, fictions, and plays.

Schedule: *Tuesday & Thursday 1:00pm – 2:20pm*
Instructor: *Monica Matfield*

ENGL 103 – Introduction to Fiction

This course provides an introduction to the reading of fiction through a detailed examination of a range of narrative texts (e.g., the novel, short fiction).

Schedule: *Tuesday & Thursday 10:00am – 11:20am*
Instructor: *Blanca Schorcht*

ENGL 170-3 Writing and Communication Skills

Students will be taught how to construct an argument, and how to assemble and present an academic essay. There will be regular practice in writing well. The course includes library research and an oral presentation, and may also include computer skills.

Schedule: *Tuesday & Thursday 8:30am – 9:50am*
or *Monday, Wednesday, & Friday 9:30am – 10:20am*
Instructor: *Kevin Hutchings*

FNST 100-3 The Aboriginal Peoples of Canada

This course is an introduction to the languages, history, culture, and enduring presence of the aboriginal people of Canada, intended to explore the range of aboriginal social formations, both past and present, and to consider the future. Oral, written, and archaeological records will be examined. Special attention will be given to the crucial economic, social, and spiritual contacts that exist within aboriginal societies, as well as to materials on the changes that have occurred since contact with Europeans.

Schedule: *Tuesday 11:30am – 2:20pm*
Instructor: *Tannis Reynolds*

Note: There is a tutorial requirement for this course (1 hour/week)

FNST 131-3 A First Nations Language: Level I

This course provides an introduction to the conversational and written elements of one First Nations language. It may be taught in a number of different sections, each of which may focus on a different language, e.g. Gitxsanimx , Tlingit, Sekani, Beaver, Slavey, Tahltan, Chilcotin, or other Athabaskan language, Cree or Shushwap. Student transcripts will indicate the specific language studied.

Schedule: *Monday 2:30pm – 5:20pm*
Instructor: *Leona Nielson*

GEOG 102-3 Earth from Above

This course explores the earth from above, through the eyes of satellites, aircraft, and drones. We have the unique ability to see our planet from different angles and perspectives. When viewed from above, patterns, processes, systems, and human/environmental change on the surface of the planet become highly visible. This course is delivered through lectures and in-class tutorials. Topics include: oceans, rivers, and lakes; landscapes, mountains, and snow and ice; forests and ecosystems; weather and climate; and urban and industrial activity.

Schedule: *Monday & Wednesday 2:30pm – 3:50pm*
Instructor: *Joseph Michael Shea*

HHSC 102-3 Introduction to Health Sciences II: Rural and Aboriginal Issues

Introduction to Health Sciences II: Rural and Aboriginal Issues. This course will provide an overview of individual and population health, health care systems, legislation, and the roles of the various health care professions in rural and aboriginal communities. Models of interdisciplinary cooperation, models of community health, and ethical issues are also covered.

Schedule: *Monday & Friday 1:00pm – 2:20pm*
Instructor: *Mamdouh M. Shubair*

HHSC 103-3 Heath Care Systems

This course examines health care systems from a public versus private perspective and explores how various systems impact the health and well-being of patients.

Schedule: *Tuesday & Thursday 4:00pm – 5:20pm*
Instructor: *TBA*

Note: Some seats in this section are reserved for Health Science majors.

HHSC 105-3 Functional Anatomy

This introductory anatomy course provides a macroscopic examination of the human body. Lecture topics include musculoskeletal system and mobility, major organ systems including cardiovascular, digestive and neurological, with emphasis on how these systems integrate for body function. A laboratory component is included. This course is appropriate for students who intend to enter health profession fields.

Prerequisite: Biology 12 (50% or better) and Chemistry (50% or better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday & Wednesday 4:00am – 5:20am*
Instructor: *Chelsea Pelletier*

Note: There is a lab requirement for this course (1 hour/week)

HIST 191-3 World History Since 1550

This course examines the history of the world from the mid-sixteenth century through the end of the twentieth. The global movement of people, ideas, and economic practices receives particular attention, as do processes of imperialism and colonialism. Students are also introduced to the discipline of History and to the skills of document analysis, historical writing, and primary source research.

Schedule: *Monday & Wednesday 12:30pm – 1:20pm*
Instructor: *Ben Bryce*

Note: There is a required one-hour tutorial each week. There are numerous choices.

INTS 122-3 Beginning Japanese II

INTS 122-3 is a continuation of INTS 121-3. Students continue to develop their Japanese language skills in listening, speaking, reading, and writing. They are also given a deeper introduction to Japanese culture. This course is more grammar intensive than INTS 121-3, strengthening the foundations set up in that course. Sixty additional kanji are introduced (for a cumulative total of 120). This course is not open to native speakers. Students must achieve a minimum grade of C in INTS 121-3 or obtain permission of the instructor to continue.

Permission of the instructor is also required for students who have completed Grade 11 Japanese, or who have prior knowledge of Japanese or who have at least one Japanese speaking parent.

Prerequisite: INTS 121 (C or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Tuesday & Thursday 11:30am – 12:50pm*
Instructor: *Ami Hagiwara*

Note: There is a one-hour language lab each week associated with this course.

INTS 172-3 Beginning French II

INTS 172 is a continuation of INTS 171. Communication abilities continue to be emphasized, along with application of grammatical rules in short compositions. Students acquire a deeper knowledge of the French culture. This course is not open to native speakers. Students must achieve a minimum grade of C in INTS 171, or obtain permission of instructor to continue. Permission of instructor is required for students who have completed grade 11 French, or some French immersion education.

Prerequisite: INTS 171 (C or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Tuesday 6:00pm – 8:50pm*
Instructor: *TBA*

Note: There is a one-hour language lab each week associated with this course.

INTS 182-3 Beginning Spanish II

INTS 182 is a continuation of INTS 181. This course introduces more complex grammatical structures, along with a broader vocabulary. Students also explore cultural aspects of the Spanish-speaking world. This course is not open to native speakers. Students must achieve a minimum grade of C in INTS 181, or obtain permission of instructor to continue. Permission of instructor is also required for students who have prior knowledge of Spanish.

Prerequisite: INTS 181 (C or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday & Wednesday 10:30am – 11:20am*
Instructor: *Janine Bleaney*

Note: There is a one-hour language lab each week associated with this course.

MATH 100-3 Calculus I

This course is an introduction to the calculus of one variable, primarily for majors and students in the sciences. Functions of one variable, rules for differentiation, differentiability, the mean value theorem, the differential as a linear functional, L'Hopital's rule, Newton's method, area between curves, applications of Integration and integration by substitution are discussed. All sections of this course are taught using Maple software.

Prerequisite: Principles of Math 12 or Precalculus 12 (50% or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday, Wednesday & Friday 10:30am – 11:20am*
Instructor: *TBA*

Note: There is a one-hour lab each week associated with this course

MATH 101-3 Calculus II

This course is a continuation of Math 100. Areas of study Include the definition of the natural logarithm as an integral and of the exponential function as its inverse, integration by parts, miscellaneous techniques of integration, improper integrals, volumes by slicing and by shell techniques, the trapezoidal rule and Simpson's rule, infinite sequences and series, Taylor series, masses, volumes, moments, centre of mass, first order linear differential equations, definition of partial derivatives. All sections of this course are taught using Maple software.

Prerequisite: MATH 100 (C- or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday, Wednesday & Friday 9:30am – 10:20am*
Instructor: *Alia Hamieh*
Note: There is a 1-hour lab each week associated with this course

MATH 150-3 Finite Mathematics for Business and Economics

This course is offered primarily for students in the School of Business and the Economics Program. The course covers functions and graphs, linear systems of equations, matrix notation and properties, matrix inversion, linear programming, sets, counting and probability, and an introduction to actuarial mathematics.

Prerequisite: Foundations of Math 12 or Principles of Math 12 or Precalculus 12 (50% or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday, Wednesday & Friday 1:30pm – 2:20pm*
Instructor: *Erin Beveridge*

MATH 152-3 Calculus for Non-majors

Limits, the derivative, techniques of differentiation, exponential functions and exponential growth, maxima and minima, curve sketching, first order linear differential equations, definite and indefinite integrals, partial derivatives, optimization of functions of several variables, Lagrange multipliers, with applications in the social and physical sciences. Applications may vary somewhat from section to section, depending on student's discipline. Not open to mathematics or computer science majors.

Prerequisite: Principles of Math 12 or Precalculus 12 (50% or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday, Wednesday & Friday 11:30am – 12:20pm*
Instructor: *TBA*

MATH 190-4 Math for Elementary Educators

This course develops an understanding of mathematical concepts and relationships used in the elementary school curriculum. The content focus is on numbers and number systems, patterns and relationships, shapes and space, and statistics and probability. Problem solving and deductive reasoning are stressed throughout the course. Students who have taken MATH 100, MATH 105, MATH 152 or equivalent require permission of the Chair.

Prerequisite: Foundations of Math 11 or Principles of Math 11 or Precalculus 11 (50% or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday & Wednesday 4:30pm – 5:50pm*
AND *Monday 2:30pm – 3:20pm*
Instructor: *Jean Bowen*

NRES 100-3 Communications in Natural Resources and Environmental Studies

This course will provide a basic understanding of human behavioural responses as well as develop learning skills in oral and written communications. Emphasis will be on determining the nature of an audience, accessing appropriate material, report writing, oral presentation and literature relevant to natural resources and environmental disciplines.

Schedule: *Monday & Wednesday 8:30am – 9:50am*
or *Tuesday & Thursday 10:00am – 11:20am*
Instructor: *TBA*

NREM 101-3 Introduction to Natural Resources Management and Conservation

This course introduces past, present and future issues in natural resources management and conservation. Guest speakers share their professional experiences working in various fields of natural resources management. Students learn to think critically about the multidisciplinary nature of resource management and they provide solutions to complex, real-world problems.

Schedule: *Tuesday & Thursday 2:30 – 3:50pm*
Instructor: *TBA*

PHYS 100-4 Introduction to Physics I

First part of an algebra-based introductory physics course for majors in life and environmental sciences: physics and measurement, the laws of motion, applications of Newton's second law, work and energy, linear momentum and collisions, static equilibrium, elasticity, law of universal gravitation, laws of thermodynamics, fluid mechanics, sound waves.

Prerequisite: Physics 12 (50% or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday, Wednesday & Friday 8:30am – 9:20am*
Instructor: *Elie Korkmaz*

Note: There is a 3 hour lab/week associated with this course (numerous choices of times)

PHYS 101-4 Introduction to Physics II

Second part of an algebra-based introductory physics course for majors in life sciences. Covers: electric charge, electric field, electric potential, DC circuits, magnetic field, sources of magnetic fields, magnetic induction, electromagnetic waves, geometrical optics, elements of modern physics.

Prerequisite: PHYS 100 or PHYS 110 (D- or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday, Wednesday & Friday 1:30pm – 2:20pm*
Instructor: *Dennis Straussfogel*

Note: There is a 3 hour lab/week associated with this course (numerous choices of times)

PHYS 111·3 Introductory Physics II: Waves and Electricity

Second part of the calculus-based introductory physics course for majors in physical and mathematical sciences, including oscillatory motion, wave motion, sound waves, superposition and standing waves, electric field, Gauss's law, electric potential, capacitance and dielectrics, current and resistance, DC circuits, magnetic fields, sources of magnetic fields.

Prerequisite: PHYS 100 (B or Better) or PHYS 110 (D-or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.

Schedule: *Monday, Wednesday & Friday 1:30pm – 2:20pm*
Instructor: *Bridget Costello*

Note: There is a 3 hour lab/week associated with this course {numerous choices of times)

POLS 100-3 Contemporary Political Issues

An introduction to the basic concepts of political science through an examination of contemporary political issues: local, provincial, national and international.

Schedule: *Monday & Wednesday 10:00am – 11:20am*
Instructor: *Tracy Summerville*

Note: There is a 1 hour tutorial associated with this course (numerous times to choose from)

PSYC 101-3 Psychology as a Science

This course describes psychology as a basic science in two logical modules: psychology as a natural science and psychology as a social science.

Schedule: *Monday & Wednesday 1:00pm – 2:20pm*
Instructor: *Paul Siakaluk*

PSYC 102-3 Psychology and Human Problems

This course describes how psychological science has been applied to understanding and dealing with many of the practical problems of human existence. Topics addressed include the promotion of healthy human development, health science applications of psychology, including the description and treatment of psychological disorders and the contribution of psychology to the understanding and modification of social problems.

Prerequisite: PSYC 101 (D- or Better)
Prerequisite course must be completed prior to the beginning of dual credit course.
Schedule: *Monday, Wednesday & Friday 9:30am – 10:20am*
Instructor: *TBA*