

COURSES FOR FIRST-YEAR STUDENTS

Timetable Information

Not every course listed in this *Calendar* is offered every year. For the most up-to-date information on course offerings, students are advised to view the **2025-2026 course timetable on SOLUS** or consult with the appropriate department.

The **First-Year Registration Guide** (<https://www.queensu.ca/artsci/undergrad-students/first-year-students/registration-guide/>) can be found on the Arts and Science website.

Anatomy (ANAT)

ANAT 100 Anatomy of the Human Body Units: 3.00

This anatomy course is designed to introduce students to the basic structure and functional relationship of the human body. Through a series of weekly learning modules, students will learn about the basic language of Gross Anatomy and Histology in order to understand the working of various body systems. This course is also suitable for individuals who have a general interest in human anatomy.

Requirements: Exclusion ANAT 101/3.0; IDIS 150/6.0 One-Way Exclusion May not be taken with or after: ANAT 215/3.0; ANAT 216/3.0; ANAT 312/3.0; ANAT 315/3.0; ANAT 316/3.0

Offering Faculty: Faculty of Health Sciences

Course Learning Outcomes:

1. Analyze the gross (macroscopic) and histology (microscopic) anatomy of the tissues and organs that constitute the human body
2. Apply appropriate anatomical terms and concepts for the purpose of identification, effective communication, and critical reading of relevant literature
3. Demonstrate the ability to collaborate and work effectively and respectfully with diverse teams
4. Describe the integrated relationship between histology and gross anatomy with respect to structure and function, and be able to extend that knowledge to various aspects of development and function
5. Employ a systematic logical thinking process to help you recognize anatomical structures and predict the physiological functions of body systems

ANAT 101 Introductory Human Anatomy Units: 3.00

A basic anatomy course with an emphasis on clinical relevance of structure and function of human body systems. RECOMMENDATION 4U Biology.

Requirements: Exclusion ANAT 101/3.0; IDIS 150/6.0 One-Way Exclusion May not be taken with or after: ANAT 215/3.0; ANAT 216/3.0; ANAT 312/3.0; ANAT 315/3.0; ANAT 316/3.0

Offering Faculty: Faculty of Health Sciences

Animation (ANIM)

ANIM 123 Introduction to Animation Studies Units: 3.00

This course offers an introduction to the study of animation from a historical and global perspective. Both mainstream and experimental animation is considered. The course places animation within the history of cinematic production, while also examining it as a distinct form. A wide range of works, from the emergence of animation in the early twentieth century to contemporary global production shall be examined.

Learning Hours: 108 (36 Lecture, 12 Tutorial, 24 Practicum, 36 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Understand the global history of animation.
2. Distinguish different forms and techniques in animation practice.
3. Engage in animation history from the form's emergence in the early twentieth century to the most recent achievements in the field.
4. Understand principles germane to the illusion of movement.
5. Investigate topics of interest within animation studies, from formal and aesthetic perspectives to social, cultural, and political ones.



Anishinaabe (ANSH)

ANSH 101 Beginning Anishinaabe Language and Culture I Units: 3.00

An introduction to the language and culture of the Anishinaabe people. This course is designed for those who have neither been exposed to Anishinaabemowin nor its traditional societal practices. Gain a rich understanding of the Anishinaabe people and their language at the beginning level.

NOTE Students can self-enrol during the course registration period. However, for students with previous knowledge of the language, final approval of enrolment is at the discretion of the instructor, pending an assessment of a student's language competency. Students can contact the instructor for an assessment anytime during the academic year (September-May). Please note that instructors may not be available for language competency assessments in May, June, July, and early August. Non-disclosure of previous knowledge of the language is considered a departure from academic integrity.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion LLCU 101/3.0* (Topic Title: Anishinaabemowin I).

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Engage in everyday conversations using common vocabulary and basic grammatical structures, allowing them, for example, to introduce themselves, ask and answer simple questions, and express their basic needs and preferences in the language.
2. Understand spoken language on familiar topics, such as personal information, basic descriptions, and daily routines, delivered at a slow to moderate pace and using beginner-level vocabulary.
3. Read and comprehend short texts related to everyday life, employing basic reading strategies to understand sentence structure, main ideas, and key details with limited use of a dictionary.
4. Write simple messages, notes, and paragraphs employing correct syntax and basic vocabulary to express personal experiences, daily activities, and simple opinions.
5. Cultural Context: Throughout the course, students will gain an introductory understanding of the cultural context of the target language, including significant customs, traditions, and social norms associated with the regions where the language is spoken.

ANSH 102 Beginning Anishinaabe Language and Culture II Units: 3.00

A continuation of ANSH 101. Students will participate and begin to develop the ability to read, write and speak some basic Anishinaabemowin and further their understanding of the rich culture, traditions and worldviews of the Anishinaabe people.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite ANSH 101/3.0. Exclusion LLCU 102/3.0* (Topic Title: Anishinaabemowin I).

Offering Faculty: Faculty of Arts and Science

Arabic Language (ARAB)

ARAB 100 Introductory Arabic (Modern Standard) Units: 6.00

Introduction to the basic structures of Modern Standard Arabic. This course gives intensive training equally in listening, speaking, reading, and writing.

Learning Hours: 240 (72 Lecture, 168 Private Study)

Requirements: Prerequisite Permission of the Instructor.

Offering Faculty: Faculty of Arts and Science

Art History (ARTH)

ARTH 101 Introduction to Visual Studies Units: 3.00

Course provides an introduction to interdisciplinary theories and concepts in the study of visual culture, to critically interrogate our increasingly visual world.

Learning Hours: 126 (36 Lecture, 36 Online Activity, 54 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Build knowledge in the area of visual studies and acquire a basic competency in key texts and concepts in visual studies.
2. Enhance cross-disciplinary writing skills.
3. Enhance social responsibility, through a better understanding of the way images and other visual representations have an impact upon social relations in the contemporary world.
4. Enhance student's capacity to critically analyze the visual world.
5. Improve self-management and promote respect for diverse ways of knowing.

ARTH 120 Art in the West from Antiquity to Modernity Units: 6.00

A survey of famous and lesser-known works of painting, sculpture, architecture, and other art forms from Antiquity, the Middle Ages, the Renaissance, the Baroque, and the Modern Age. Themes include politics, religion, mythology, gender roles, techniques, conservation and intersections with non-western cultures.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

Learning Hours: 240 (48 Lecture, 12 Tutorial, 48 Online Activity, 132 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 9.0 units from ARTH 116/3.0; ARTH 117/3.0; ARTH 120/6.0. Note Students who are considering a plan in Art History should complete ARTH 121/3.0 and/or ARTH 122/3.0.

Course Equivalencies: ARTH 120/120B

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. State basic facts about art from different periods and cultures of the western world and define basic art historical terminology.
2. Recognize and identify qualities of art associated with different styles and cultures of the western world.
3. Demonstrate an understanding of artistic development across time from the prehistoric to the current era.
4. Compare and contrast different works of art from various times and cultures in order to draw meaningful connections.
5. Implement visual analysis in order to understand and interpret meaning and intention embodied in works of art.
6. Independently research, analyze, and contextualize works of art not presented in lecture or textbook.

ARTH 121 Introduction to Global Art Histories Units: 3.00

An introduction to art, architecture, visual and material culture from a global perspective. Organized around themes, it draws parallels and connections between artworks and buildings from across history. Case studies consider art's relationship to religion, colonialism, Indigeneity, and self-representation. Students will develop fundamental skills of analysis, written communication, and research.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 24 Online Activity, 60 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe and analyze works of art, architecture, and material culture from different historical periods, geographic contexts, and cultural contexts using discipline appropriate terminology.
2. Demonstrate intercultural competence through visual and material analysis of works of art, architecture, and material culture from diverse contexts. Engage students in the study and analysis of artworks that represent the perspectives of different societies and cultural traditions.
3. Analyze differing narratives about the history of art and architecture to identify and evaluate the social, political, and cultural values that shape them.
4. Make connections between works of art, architecture, and material culture and the broader social world by discussing how their production and reception is shaped by historical contexts such as colonialism, social and political issues, and geographic locations.
5. Develop foundational research skills by learning how to use the tools (e.g., catalogue, database) available through Queen's University Libraries.
6. Demonstrate critical reading skills by summarizing the core arguments of art historical texts. Actively and effectively communicate arguments in writing by crafting short texts on art.

**ARTH 122 Curating Art Worlds Units: 3.00**

This course introduces students to key "art world" institutions, such as museums, artist-run centres, biennales, and auction houses, by examining their histories, current practices, and future challenges. Using a case study approach, the course provides students with introductory professional skills, concepts and ideas to think and work in a diversity of arts careers while gaining transferable skills.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 24 Online Activity, 60 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe and analyze key art institutions and their distinctive professional practices, including museums, art galleries, artist-run centres, art fairs, art exhibitions, art markets, and art criticism.
2. Demonstrate intercultural competence and empathy through an analysis of colonial histories and current colonial legacies of "art worlds". Recognize and compare the work of artists, curators, and administrators seeking to decolonize "art worlds".
3. Identify the role of art and artists within the institutional structures of "art worlds".
4. Describe and analyze the histories, current practices, and future challenges of key art institutions, making connections between historical contexts such as colonialism, social and political issues, and geographic locations.
5. Develop foundational professional skills that contribute towards a career in the cultural sector, or transferable skills for careers outside the arts, including improving critical thinking, observation/documentation, and writing skills.
6. Demonstrate critical reading skills by summarizing the core arguments of historical, theoretical, or practical texts. Actively and effectively communicate arguments in writing by crafting short texts on art.
7. Practice competent and sensitive engagements with museums, galleries or artist-run centres, by visiting them in person in their original locations.

Artificial Intelligence (ARIN)**ARIN 100 Fundamentals of Artificial Intelligence Units: 3.00**

A general introduction to how modern Artificial Intelligence technology works and how to work with it. Topics will range from the effective and ethical use of AI to how it is changing the landscape of education and industry. The history of automated technology and AI will be covered, and students will gain both an appreciation for, and an understanding of, how modern AI came to be.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Explain foundational concepts in artificial intelligence and the historical evolution of AI technologies, while critically reflecting on the ethical and societal impacts of these technologies.
2. Evaluate the role of AI in shaping modern industries and education, analyzing both the benefits and potential dangers of AI systems in various sectors.
3. Identify both the opportunities and limitations of AI in their respective fields (e.g., business, healthcare, engineering, arts, science, etc.).
4. Communicate, through written and oral presentations, informed perspectives on the ethical implications of AI technologies, engaging in debates about privacy, bias, and the potential dangers of AI in decision-making processes.

ARIN 101 Artificial Intelligence in Society Units: 3.00

A non-technical overview of what artificial intelligence is (and isn't) and how it affects society. "Algorithms" in social media and elsewhere. Generative AI. Bias, fairness, and ethics. Social, legal and commercial aspects. Public perceptions and reactions. A brief history and the potential future.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Assess current media reporting about AI, especially basic uses, capabilities, and limitations of AI.
2. Situate current AI systems within a broader historical and social context.
3. Critically assess current controversies in the uses and effects of AI.

Arts and Science: Interdisciplinary (ASCX)

ASCX 150 Learning and Working in a Digital World Units: 3.00

The future is uncertain. Information is expanding at an exponential rate. Jobs that were formerly done by humans are being taken over by artificial intelligence and automation. This course will ask what it means to be a human learner and worker in a rapidly changing digital world. Students will develop a transferable and flexible toolbox of skills.

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 120 (12 Seminar, 12 Group Learning, 48 Online Activity, 48 Private Study)

Requirements: Prerequisite Registration in an Arts and Science Degree Program. Equivalency ASCX 101/3.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Understand how knowledge is created and what ethical obligations we have to the preservation and dissemination of knowledge.
2. Work in effective teams, exemplifying collaboration and cooperation.
3. Be aware of intercultural difference and apply principles of equity and inclusion.
4. Implement a productive and healthy writing practice.
5. Establish frameworks getting things done in ways that support curiosity, motivation, and focus.
6. Evaluate the fair and accurate presentation of qualitative and quantitative information and argumentation.

Astronomy (ASTR)

ASTR 101 Astronomy I: Solar System Units: 3.00

A non-mathematical introduction to the science of astronomy for non-specialist students. Topics to be covered include the fundamentals of astronomy; and introduction to the tools and techniques of modern observational astronomy; the historical development of our understanding of the Earth, Moon, and Solar System; space exploration of Mars, Jupiter, and other planets; the nature of the Sun; and the origin and uniqueness of our Solar System.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 120 (36 Lecture, 24 Online Activity, 60 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Identify and explain the fundamental scientific principles that underlie the dynamical behaviour and structure of the solar system, and apply these principles on all physical scales.
2. Report and explain variable astronomical phenomena visible in the night sky and seasonally.
3. Identify the instruments used by astronomers (e.g., specialized telescopes) and explain their purpose and use.
4. Contrast and critique the ancient and modern understandings of the nature of our Solar System.



ASTR 102 Astronomy II: Stars, Galaxies, and the Universe Units: 3.00

This course, intended for non-specialist students, will provide an overview of astronomy beyond the Solar System. Topics will include: the formation, nature, and evolution of the stars; stellar deaths, including novae, supernovae, white dwarfs, neutron stars, pulsars, and black holes; the interstellar medium; the Milky Way Galaxy; normal and active galaxies and large scale structure in the universe; and modern ideas in cosmology and the early universe.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

Learning Hours: 120 (36 Lecture, 24 Online Activity, 60 Private Study)

Requirements: Prerequisite (ASTR 101/3.0 or PHYS 104/6.0 or PHYS 106/6.0 or PHYS 117/6.0 or PHYS 118/6.0 or [APSC 111/3.3 and APSC 112/3.3]) or permission of the Department.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Identify and explain phenomena beyond the solar system (i.e., the formation, nature, and evolution of the stars; stellar deaths, including novae, supernovae, white dwarfs, neutron stars, pulsars, and black holes).
2. Use models to explain large-scale structure in the universe.
3. Critically assess modern ideas in cosmology and the early universe including the origin and fate of our universe and the concept of multiplicity of universes.

Biochemistry (BCHM)

BCHM 102 Introduction to Biochemistry Units: 3.00

Chemical principles as applied to biochemistry, human and clinical biochemistry.

NOTE Primarily intended for students in Nursing, Life Sciences, or Biochemistry programs. Other Arts and Science students require permission of the Department to enrol.

Learning Hours: 118 (24 Lecture, 16 Tutorial, 6 Group Learning, 36 Online Activity, 36 Private Study)

Requirements: Prerequisite None. Recommended 4U Chemistry. Exclusion BCHM 270/3.0. One-Way Exclusion May not be taken with or after BCHM 310/9.0; BCHM 315/3.0; BCHM 316/3.0.

Offering Faculty: Faculty of Health Sciences

Biology (BIOL)

BIOL 102 Fundamentals of Biology: Molecular and Cell Biology Units: 3.00

The essential biochemistry, genetics, cell biology, and metabolic pathways underlying the survival and success of all living organisms. Themes and case studies could range from the application of genetic engineering in biotechnology to the role of cellular dysregulation in inheritable diseases.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 111 (24 Lecture, 6 Laboratory, 9 Group Learning, 12 Online Activity, 60 Private Study)

Requirements: Prerequisite None. Recommended 4U Biology and Chemistry, or equivalent high school background.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Apply strategies for time management and collaboration.
2. Complete assignments using analytical skills to synthesize results in order to communicate biological questions, concepts, and results in the context of the primary scientific literature.
3. Explain and interpret cellular processes, including how cells respond to external signals and how they process energy.
4. Explain and interpret DNA in the context of molecular genetics, inheritance, and DNA technologies.
5. Explain and interpret the cellular chemistry of living organisms and how this relates to cellular function, diversity, and evolution.
6. Use group activities to establish and hone your ability to work on a team.

BIOL 103 Fundamentals of Biology: Organisms to Ecosystems Units: 3.00

The origins and diversification of multicellular organisms, their form, function and adaptation to stress and a changing world. Themes and case studies include energy flow from molecules to ecosystems, organismal interactions including parasitism and disease dynamics, and the impacts of human activity.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 123 (36 Lecture, 24 Laboratory, 24 Online Activity, 39 Private Study)

Requirements: Prerequisite None. Recommended BIOL 102/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Apply knowledge of tissue and organ system functioning and integration to diagnose or predict common diseases and organismal dysfunctions.
2. Compare the nature of interactions between organisms at the level of the population, the community and the ecosystem.
3. Describe the main cycles governing the flow of nutrients and energy through communities and ecosystems and recognize the importance of ecological interactions and biodiversity in building a sustainable future.
4. Describe the structure and function of nerves and muscles and explain how they contribute to physiological and behavioural processes.
5. Discuss the mechanisms by which evolution shapes biological diversity, citing examples from the history of life captured in the fossil record, in extant diversity, or through direct observation of evolution in action.
6. Identify the roles of the major physiological systems in diverse animals and how they are regulated through electrical and chemical signals to achieve change or maintain homeostasis.

BIOL 110 Human Genetics and Evolution Units: 3.00

Introductory genetics and evolutionary processes as they relate to the human condition - genetic diseases, medical techniques, inheritance and ethical issues such as cloning and genetically modified foods.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

Learning Hours: 118 (26 Lecture, 10 Tutorial, 10 Group Learning, 36 Online Activity, 36 Private Study)

Requirements: Prerequisite None. One-Way Exclusion May not be taken with or after BIOL 102/3.0; BIOL 103/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Appreciate the role of genetics in contemporary medical issues such as stem cell research, longevity research, genetic testing, and cancer.
2. Describe the role of genetic variation and its interaction with the environment in human evolution.
3. Distinguish between "older-school" research approaches and cutting edge approaches and evaluate how life might be affected by these new technologies in the Genomics Age.
4. Identify and define basic concepts and structures in basic biology such as the gene, chromosomes, genome, inheritance and the cell.
5. Recognize how genetic concepts apply to both individuals and to populations.

**BIOL 111 Ecology and the Environment Units: 3.00**

Introduces the basic concepts of ecology and shows how they relate to environmental issues such as population growth, resource management, biodiversity, agriculture, air and water pollution, energy, and climate change, and to solutions leading to a sustainable environment.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

Learning Hours: 108 (36 Lecture, 72 Private Study)

Requirements: Prerequisite None. One-Way Exclusion May not be taken with or after BIOL 300/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Analyze the factors controlling human population growth in developed and developing countries.
2. Describe the basic principles of community ecology and population ecology.
3. Describe the earth's renewable and non-renewable resources, their current status, the factors that influence them and explain how humans can use them in more sustainable ways.
4. Identify the main biomes on Earth and explain the factors that influence them.
5. Predict most likely future trends of current environmental problems and formulate potential solutions.

Chemistry (CHEM)**CHEM 110 General Chemistry II: Thermodynamics and Kinetics Units: 3.00**

A quantitative treatment of chemical phenomena and materials. Critical thinking and problem solving are emphasized. Topics include thermodynamics, chemical equilibria, acids and bases, kinetics, electrochemistry and organic reactions. Using information technology, labs, and problem-solving strategies, students will develop an appreciation for the relevance of chemistry to the solution of modern-day societal challenges.

NOTE Laboratory Equipment (Lab Coat, Goggles, Blue Lab Book): estimated cost \$70.

NOTE CHEM 109/3.0 and CHEM 110/3.0 together, are equivalent to CHEM 112/6.0.

Learning Hours: 144 (36 Lecture, 18 Laboratory, 18 Group Learning, 24 Online Activity, 48 Private Study)

Requirements: Prerequisite CHEM 109/3.0. Recommended 4U Chemistry or equivalent. Exclusion CHEM 112/6.0; CHEM 114/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Understand equilibrium theory and manipulate equilibrium conditions, calculate K and understand how activities are used in the ICE table.
2. Know the second and third laws of thermodynamics, work with and manipulate equations related to entropy and Gibbs energy changes in systems under standard and non-standard conditions.
3. Recognize different types of acids and bases, understand how to manipulate acid/base systems using the ICE table, know the concepts of strong and weak acids and bases.
4. Recognize and calculate first, second and third order rate laws and understand how to manipulate systems to study the kinetics of systems and reaction mechanisms.
5. Understand the basic concepts of oxidation/reduction, electrochemistry and calculate the cell potential of standard and non-standard systems.

CHEM 112 General Chemistry Units: 6.00

A survey of modern chemistry: structure and bonding, phases of matter, thermodynamics, acids, bases, electrochemistry, equilibria, kinetics and organic chemistry. Using information technology, labs, and problem-solving strategies, students will develop an appreciation for the relevance of chemistry to the solution of modern-day societal challenges.

NOTE Laboratory Equipment (Lab Coat, Goggles, Blue Lab Book): estimated cost \$70.

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 288 (72 Lecture, 36 Laboratory, 36 Group Learning, 48 Online Activity, 96 Private Study)

Requirements: Prerequisite None. Recommended 4U Chemistry or equivalent. Exclusion CHEM 109/3.0; CHEM 110/3.0; CHEM 113/3.0; CHEM 114/3.0; CHEM 117/1.5.

Course Equivalencies: CHEM 112B/116B / APSC 131/132

Offering Faculty: Faculty of Arts and Science

CHEM 113 General Chemistry I (with Virtual Laboratory): From Atoms to Matter Units: 3.00

A quantitative treatment of chemical phenomena and materials. Critical thinking and problem solving are emphasized. Topics include atomic structure and molecular bonding, nomenclature, thermodynamics, phase-transitions and condensed phases. The virtual laboratory provides basic practice in different types of chemistry.

NOTE Only offered online, consult Arts and Science Online.

Learning Hours: 126 (72 Online Activity, 54 Private Study)

Requirements: Prerequisite None. Exclusion CHEM 112/6.0. Recommended 4U Chemistry. Note Not normally intended for on-campus degree plans and certificates. Not appropriate for pre and upper level courses that have a laboratory component.

Offering Faculty: Faculty of Arts and Science

CHEM 114 General Chemistry II (with Virtual Laboratory): Thermodynamics and Kinetics Units: 3.00

A quantitative treatment of chemical phenomena and materials. Critical thinking and problem solving are emphasized. Topics include thermodynamics, chemical equilibria, acids and bases, kinetics, electrochemistry and organic reactions. The virtual laboratory provides basic practice in different types of chemistry.

NOTE Only offered online, consult Arts and Science Online.

Learning Hours: 126 (72 Online Activity, 54 Private Study)

Requirements: Prerequisite CHEM 113/3.0. Exclusion CHEM 112/6.0. Note Not normally intended for on-campus degree plans and certificates. Not appropriate for pre and upper level courses that have a laboratory component.

Offering Faculty: Faculty of Arts and Science

CHEM 117 General Chemistry Laboratory Units: 1.50

Laboratory course intended for students who have taken CHEM 113/3.0 and CHEM 114/3.0 online and wish to add a laboratory component (i.e., that of CHEM 112/6.0) that affords foundational experience in different types of chemistries (physical, analytical, etc.) through experiments in thermodynamics, neutralization, electrochemistry, equilibria, kinetics, and organic chemistry.

NOTE Laboratory Equipment (Lab Coat, Goggles, Blue Lab Book): estimated cost \$70.

Learning Hours: 84 (36 Laboratory, 48 Private Study)

Requirements: Prerequisite CHEM 114/3.0. Exclusion CHEM 112/6.0.

Course Equivalencies: CHEM 117, CHEM 117B

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Analyze experimental data critically.
2. Do error analysis and reporting.
3. Better understand some of the first-year chemistry material.
4. Understand equipment principles and limitations.
5. Understand and use concepts of equilibrium systems including acid/base, solubility, oxidation/reduction and precipitation systems.
6. Determine and describe the kinetics of a system using different experimental procedures and relate the results to reaction mechanisms.



Chinese (CHIN)

CHIN 100 Introductory Mandarin Chinese I Units: 6.00

For students with no previous knowledge of Chinese.

Students familiar with Cantonese or Mandarin will not be permitted to enroll. Introduction to the basic structural patterns and functional usage of the language including an emphasis on oral communication (both listening and speaking), reading and writing basic Chinese characters, as well as Chinese culture.

NOTE Students can self-enrol during the course registration period. However, for students with previous knowledge of the language, final approval of enrolment is at the discretion of the instructor, pending an assessment of a student's language competency. Students can contact the instructor for an assessment anytime during the academic year (September-May). Please note that instructors may not be available for language competency assessments in May, June, July, and early August. Non-disclosure of previous knowledge of the language is considered a departure from academic integrity.

Learning Hours: 240 (72 Lecture, 24 Tutorial, 144 Private Study)

Requirements: Prerequisite Level 1 or (Level 2 or above and a cumulative GPA of 1.90 or higher). Note Students will have their level of competence assessed by the instructor during orientation week in September.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Engage in everyday conversations using common vocabulary and basic grammatical structures, allowing them, for example, to introduce themselves, ask and answer simple questions, and express their basic needs and preferences in the language
2. Understand spoken language on familiar topics, such as personal information, basic descriptions, and daily routines, delivered at a slow to moderate pace and using beginner-level vocabulary.
3. Read and comprehend short texts related to everyday life, employing basic reading strategies to understand sentence structure, main ideas, and key details with limited use of a dictionary.
4. Write simple messages, notes, and paragraphs employing correct syntax and basic vocabulary to express personal experiences, daily activities, and simple opinions.
5. Cultural Context: Throughout the course, students will gain an introductory understanding of the cultural context of the target language, including significant customs, traditions, and social norms associated with the regions where the language is spoken.

Classical Studies (CLST)

CLST 102 Introduction to Greek Civilization Units: 3.00

An introduction to major themes in the development of Greek civilization using the evidence of literature, history and archaeology. Some attention will be given to those aspects of ancient cultural and intellectual growth that are of significance in the western tradition.

Learning Hours: 126 (36 Lecture, 90 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

CLST 103 Introduction to Roman Civilization Units: 3.00

An introduction to major themes in the development of Roman civilization using the evidence of literature, history and archaeology. Some attention will be given to those aspects of ancient cultural and intellectual growth that are of significance in the western tradition.

Learning Hours: 126 (36 Lecture, 90 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

CLST 130 Great Discoveries in Archaeology Units: 3.00

Development of the discipline and most important discoveries; analysis of historic and prehistoric cultures and sites with emphasis on the ancient Mediterranean. **NOTE** Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 126 (36 Lecture, 90 Private Study)

Requirements: Prerequisite None. Exclusion CLST 129/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate an understanding of the history of archaeological research on the ancient Mediterranean world.
2. Recognize the development of the discipline of archaeology in its historical and cultural context.
3. Develop a general understanding of the main sites and cultures of the ancient Mediterranean.
4. Evaluate the potential and the limitations of archaeological evidence for the study of past societies.
5. Relate aspects of the ancient past to similar aspects of the modern world.

CLST 131 Introduction to Archaeology: Methods and Analysis Units: 3.00

Current theoretical issues; excavation and field research; analysis of material evidence for the study of ancient societies; heritage conservation and cultural property. NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 126 (36 Lecture, 90 Private Study)

Requirements: Prerequisite None. Exclusion CLST 129/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Evaluate the strengths and limitations of archaeological techniques for fieldwork and analysis and identify the most appropriate ones in different situations.
2. Recognize the scientific and ethical importance of correct protocols for fieldwork and analysis.
3. Examine and compare different attitudes towards ownership and display of the material remains of other cultures.
4. Recognize the importance of archaeology in the modern world.
5. Recognize the importance of material remains as a non-renewable resource of cultural significance to present and future generations.

CLST 150 Warfare in the Ancient World Units: 3.00

Warfare of all kinds, from large scale conflict between states to raids of pirates and brigands. The course will seek a wider cultural understanding of war exploring a range of perspectives and topics, from the social ideology of war to the role of women, children and other non-combatants.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Cognitive Science (COGS)**COGS 100 Introduction to Cognitive Science Units: 3.00**

A multidisciplinary approach to the study of the mind combining approached from philosophy, psychology, linguistics, neuroscience, anthropology, and artificial intelligence. Logic, rules, concepts, and other mental representations used to generate thought and behaviour. Implementation of computational and cognitive models of mental processes.

NOTE Also offered online. Consult Arts and Science Online. Learning Hours may vary.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Situate cognitive models in a practical context.
2. Apply information-processing models to cognitive processes.
3. Compare computer models to human behaviour.
4. Clearly convey cognitive models to a non-technical audience.

Computer and Information Science (CISC)**CISC 101 Introduction to Computer Programming Units: 3.00**

Introduction to algorithms: their definition, design, coding, and execution on computers. Intended for students who have no programming experience.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion APSC 142/3.0; APSC 143/3.3; CISC 110/3.0; CISC 151/3.0. One-Way Exclusion May not be taken with or after CISC 121/3.0; CISC/CMPE/COCA/COGS/SOFT at the 200-level or above.

Offering Faculty: Faculty of Arts and Science

**CISC 102 Discrete Structures I Units: 3.00**

Introduction to mathematical discourse and proof methods with a focus on discrete structures. Sets, sequences, and relations. Properties of the integers. Induction. Counting with permutations and combinations, pigeonhole principle. Principle of Inclusion-Exclusion. Introduction to graphs and graph terminology.

NOTE Also offered online. Consult Arts and Science Online (Learning Hours may vary).

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Analyze and/or solve problems using discrete structures.
2. Construct mathematical proofs using basic proof methods.
3. Apply graph theory to solve basic problems.
4. Use concepts for discrete structures to produce correct computer code to solve problems.
5. Communicate concepts and/or solutions using discrete structures to a technical audience.

CISC 110 Creative Computing Units: 3.00

Introduction to fundamental programming concepts in the context of visual, interactive media. Students may develop applications in any domain (e.g., fine art, education, commerce, physical or social sciences) while learning about algorithms, program design, logic, program control flow, functions, testing, etc.

NOTE Sufficient preparation for CISC 121; alternative to CISC 101 and CISC 151.

NOTE With permission of the School, students with programming experience may take this concurrently with CISC 121.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion APSC 142; APSC 143; CISC 101; CISC 151. One-Way Exclusion May not be taken with or after CISC 121; CISC/CMPE/COCA/COGS/SOFT at the 200-level or above. Note No computing or art background required.

Offering Faculty: Faculty of Arts and Science

CISC 121 Introduction to Computing Science I Units: 3.00

Introduction to design, analysis, and implementation of algorithms. Recursion, backtracking, and exits. Linear data structures (stacks and queues). Elementary searching and sorting. Order-of-magnitude complexity. Documentation, iterative program development, translating natural language to code, testing and debugging.

NOTE Also offered online. Consult Arts and Science Online. Learning Hours may vary.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Corequisite (CISC 102/3.0 or MATH 110/6.0 or MATH 111/6.0* or MATH 112/3.0 or MATH 120/6.0 or MATH 121/6.0 or MATH 123/3.0 or MATH 124/3.0 or MATH 126/6.0 or MATH 130/3.0 or APSC 171/3.3 or APSC 172/3.3 or APSC 174/3.3 or COMM 161/3.0 or COMM 162/3.0). Exclusion APSC 143/3.3. Recommended Some programming experience (such as high-school level programming or CISC 101/3.0 or CISC 110/3.0 or CISC 151/3.0).

Offering Faculty: Faculty of Arts and Science

CISC 124 Introduction to Computing Science II Units: 3.00

Introduction to software design and development with the object-oriented paradigm, and its effect on abstraction and component re-use. Working in groups using incremental development and version management. Test driven development. Numerical computation.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

Learning Hours: 120 (36 Lecture, 12 Group Learning, 72 Private Study)

Requirements: Prerequisite A minimum grade of C- (obtained in any term) or a 'Pass' (obtained in Winter 2020) in CISC 121/3.0. Corequisite (CISC 102/3.0 or MATH 110/6.0 or MATH 111/6.0* or MATH 112/3.0 or MATH 120/6.0 or MATH 121/6.0 or MATH 123/3.0 or MATH 124/3.0 or MATH 126/6.0 or MATH 130/3.0 or APSC 171/3.3 or APSC 172/3.3 or APSC 174/3.3 or COMM 161/3.0 or COMM 162/3.0).

Offering Faculty: Faculty of Arts and Science

CISC 151 Elements of Computing with Data

Analytics Units: 3.00

Introduction to algorithms: their definition, design, coding, and execution on computers, with applications drawn from data analytics, including simple prediction and clustering. Intended for students who have no programming experience. All or most assignment work will be completed during lab time.

NOTE Sufficient preparation for CISC 121; alternative to CISC 101 and CISC 110.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion APSC 142; APSC 143; CISC 101; CISC 110. One-Way Exclusion May not be taken with or after CISC 121; CISC/CMPE/COCA/COGS/SOFT at the 200-level or above.

Offering Faculty: Faculty of Arts and Science

CISC 171 Computational Probability and Statistics Units: 3.00

Introduction to the theory of probability. Discrete and continuous random variables, expectation, and variance. Independent random variables, conditional probability, and Bayes Theorem. Discrete and continuous probability distribution functions, including joint distribution functions. One-variable and two-variable statistical measures and hypothesis testing. Applications of statistics in computing. This course may contain group work at the discretion of the instructor.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite Registration in a Bachelor of Computing Program. Corequisite CISC 101/3.0 or CISC 102/3.0 or CISC 121/3.0. Exclusion Maximum of one course from: BIOL 243/3.0; CHEE 209/3.5; CISC 171/3.0; COMM 162/3.0; ECON 250/3.0; GPHY 247/3.0; HSCI 190/3.0; KNPE 251/3.0; NURS 323/3.0; POLS 285/3.0; POLS 385/3.0*; PSYC 202/3.0; SOCY 211/3.0; STAM 200/3.0; STAT 161/3.0; STAT 263/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Apply probability theory to determine whether events are independent; apply Bayes Theorem when appropriate.
2. Analyze statistical measures, including single variable variance and two variable correlation, to draw reasonable conclusions from the data.
3. Apply theory of probability distributions to determine an appropriate related distribution for a set of data.
4. Compute statistical measures and perform hypothesis testing to determine statistical significance.

CISC 181 Digital Societies Units: 3.00

This introductory course provides a broad overview and ethical implications of technological topics and trends in the digital world such as the Internet of Things (IoT), Social Networks, Security and Privacy, Data Analytics, and Artificial Intelligence (AI). No programming experience is required. NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Equivalency CISC P81/3.0*.

Offering Faculty: Faculty of Arts and Science

Creative Writing (CWRI)

CWRI 100 Introduction to Creative Writing Units: 3.00

This course focuses on four major literary forms: fiction, non-fiction, poetry, and writing for young adults, with brief explorations of graphic novels, writing for children, playwriting, screenplays, comedy writing, and performance. It provides strategies, techniques, and terminology to help students develop their craft.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Perform close readings of various literary forms.
2. Provide thoughtful and constructive criticism on peers' drafts.
3. Employ techniques and strategies used in creative writing.
4. Employ discipline-specific terminology to effectively discuss creative writing.



Drama (DRAM)

DRAM 100 Introduction to Drama, Theatre, and Performance Studies Units: 6.00

An exploration of theatre as a live performing art that seeks to engage, document, and affect communities. Topics may include theatre and society, theatrical representation, performance, and the work of actors, directors, designers, technicians, and playwrights. Opportunities given for practical projects.

NOTE Transportation/Live Performance: estimated cost \$70.

Learning Hours: 228 (48 Lecture, 24 Laboratory, 36 Online Activity, 120 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Discuss theatre as both a creative medium and a vital mode of human cultural communication.
2. Accurately use basic concepts from theatre studies (including ideas about audiences, reception, dramaturgy, scenography, performance, and history) to investigate and analyze relevant examples from theatrical productions and/or prior learning towards realizing new insights and knowledge.
3. Apply a thoughtful approach to the creative process that blends both intuitive and structural impulses.
4. Use a similar process to unpack, analyze, and thoughtfully critique the theatrical choices of peers and other artists. #Deliver and receive feedback in a way that is productive, insightful, and that promotes positive development and exploration.
5. Embrace the uncertainty of creating work in the theatre by realizing the value of Version 2.0, both in terms of how it influences creative development, but also in how it offers the freedom to fail.
6. Encounter new, challenging, and/or unfamiliar artistic work with an open, inquisitive attitude and a willingness to engage with, rather than reject the work because it is unfamiliar.
7. Question how theatrical choices impact the world around us (asking 'why' and 'so what' for those choices).
8. Explain what the point is, if any, to making theatre in this day and age.

DRAM 103 Theatre and Pop Culture Units: 3.00

Explores collisions between theatre and pop culture in media including film, theatre, pop music, television, and social media. Concepts including but not limited to theatricality, liveness, affect, and performativity will provide students with critical analysis skills applicable to pop culture.

NOTE Also offered online; consult Arts and Science Online (Learning Hours may vary).

Learning Hours: 114 (18 Lecture, 18 Online Activity, 78 Private Study)

Requirements: Prerequisite None. Equivalency DRAM 205/3.0*.

Course Equivalencies: DRAM 103/3.0, DRAM 205/3.0*

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Define key concepts from theatre studies applicable to analyzing performance in pop culture and media, including theatricality, affect, performativity and representation.
2. Reflect upon your personal experience as a spectator/consumer of popular culture and media using insights from theatre studies (and without extrapolating or universalizing your experience).
3. Identify and develop productive and well-grounded connections between course concepts and examples of performance in popular culture and media.
4. Apply course concepts to critically analyze performance in popular culture and media with an emphasis towards Equity, Diversity, Inclusivity, and Indigeneity (EDI).
5. Communicate connections worth sharing with others in an accessible, engaging and concise way that is well-supported by analysis.

Economics (ECON)

ECON 110 Principles of Economics Units: 6.00

An introduction to economic analysis of a modern mixed economy, including the roles of government. The microeconomics part of the course analyzes the behaviour of individual consumers and producers and the functioning of the market price system. The macroeconomics part examines the functioning of the economy as a whole, including the determination of national income, the price level, interest rates, the money supply, and the balance of payments.

Learning Hours: 240 (72 Lecture, 24 Online Activity, 144 Private Study)

Requirements: Prerequisite None. Exclusion ECON 111; ECON 112; COMM 171; COMM 172.

Offering Faculty: Faculty of Arts and Science

ECON 111 Introductory Microeconomics Units: 3.00

An introduction to microeconomic analysis of a modern mixed economy. The course analyzes the behaviour of individual consumers and producers, the determination of market prices for commodities and resources, and the role of government policy in the functioning of the market system. NOTE ECON 111 and ECON 112 together, are equivalent to ECON 110.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 120 (36 Lecture, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None. Exclusion ECON 110; COMM 171; COMM 172.

Offering Faculty: Faculty of Arts and Science

ECON 112 Introductory Macroeconomics Units: 3.00

An introduction to macroeconomic analysis of the economy as a whole, including the determination of national income, the price level, interest rates, the money supply, and the balance of payments. The principles of monetary and fiscal policy are also examined.

NOTE ECON 111 and ECON 112 together, are equivalent to ECON 110.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 120 (36 Lecture, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None. Exclusion ECON 110; COMM 171; COMM 172.

Offering Faculty: Faculty of Arts and Science

Employment Relations (EMPR)**EMPR 100 Introduction to Employment Relations Units: 3.00**

This is a survey course designed to introduce students to contemporary challenges and the primary academic fields in the study and practice of employment relations: Human Resource Management, Organizational Behaviour, Labour Relations, Negotiations and Conflict Resolution, Labour and Employment Law, and Workplace and Labour Market Policies.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Identify and describe the core academic fields which study and inform the practice of employment relations.
2. Describe the role of Human Resource Management in organizations.
3. Assess the contributions of organizational behavior to the practice of employment relations.
4. Describe the characteristics of employment relations in unionized workplaces.
5. Identify the sources of labour and employment legislation.
6. Describe the key features of workplace policies and governance in Canada.



EMPR 110 Workplace Communication and Interpersonal Skills Units: 3.00

This first year course introduces students to the critical interpersonal competencies and communication skills required in contemporary workplaces. Students will gain and apply knowledge of foundational theories in communication and organizational behaviour to develop their professional written, oral, and interpersonal skills.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

Learning Hours: 120 (36 Lecture, 12 Group Learning, 12 Online Activity, 60 Private Study)

Requirements: Prerequisite None. Exclusion COMM 105/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate effective and appropriate verbal and written communication skills in professional workplace settings.
2. Identify barriers to effective communication and strategies to overcome those barriers.
3. Apply knowledge of interpersonal behaviours to work effectively in teams.
4. Describe strategies for building and maintaining professional relationships.
5. Explain the role and importance of communication and interpersonal skills to promote inclusion and equity in diverse workplaces.

English Language and Literature (ENGL)

ENGL 100 Introduction to Literary Study Units: 6.00

An introduction to literary study, with an emphasis on the formal analysis of a diverse range of poetry and prose. Specific content and approach vary from section to section, but all sections share the goals of developing sensitivity to genre, cultivating writing skills, and providing students with a set of literary terms and critical techniques as a foundation for further literary study.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 240 (48 Lecture, 24 Tutorial, 168 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Course Equivalencies: ENGL100;ENGL100B

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe the theoretical basis of the academic study of literature, including what it involves, what methods it uses, and why it is done in the first place.
2. Identify and analyze the main characteristics of three major forms of literary writing (poetry, prose fiction, and drama) and related genres (e.g., sonnet, short story, tragedy, comedy, etc.).
3. Employ close reading techniques to analyze the ways in which various forms of literature state, imply, or complicate meaning, and produce effects upon readers.
4. Plan, write, and revise analytical essays that include argumentative claims, the use of convincing supporting evidence, and the effective analysis of evidence.
5. Apply appropriate literary terminology in analyzing works of literature.
6. Demonstrate effective writing skills, including clear and grammatical sentences, unified and coherent paragraphs, and a tone and vocabulary that are appropriate to the writer's goals.

ENGL 101 What Is Literature? Units: 3.00

What is literature and why does it matter? Explore the range of language arts that have come to be called literature, whether in print, manuscript, performance, or new media, and how they shape ideas and imaginations. Cultivate your analytic writing and discover new methods and language for scholarly study. Reading lists vary.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe diverse ways that literature has been experienced and defined as an art.
2. Identify and describe different forms, media and genres of literary writing.
3. Explain the relevance of the social contexts of writers or audiences to literary expression.
4. Collaborate in analysis via discussion.
5. Analyze and write about literature using appropriate forms of argument, disciplinary terminology, and interpretive methods.

ENGL 102 Great Books Units: 3.00

A sampling of English-language literary masterpieces from various periods and places, each of which had a significant impact on how their contemporary cultures understood massive social, political, and cultural change, and each of which remain influential today.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Assess the significance of literary texts to their cultural moment.
2. Evaluate the continued influence that transformative texts have in the present.
3. Evaluate the process of literary canon-formation, identifying which social groups control this process and which are excluded.
4. Evaluate the function of literature both as an expression of social power and as a way to resist power.
5. Use textual evidence effectively to support interpretations.

ENGL 103 Reading Race in Canada Units: 3.00

This course examines contemporary literature written in Canada that addresses some of the most urgent issues today: the portrayal of identity, racism, and reconciliation with Indigenous Peoples.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Analyze texts of different forms and genres using discipline-specific terminology.
2. Demonstrate familiarity with the work of BIPOC writers.
3. Evaluate themes of race, trauma, resistance, and cultural celebration in literary texts.
4. Use textual evidence effectively to support interpretations.
5. Demonstrate close reading and critical thinking skills.

ENGL 104 Horror, Sci Fi, Fantasy Units: 3.00

An exploration of three foundation pop culture genres, focusing both on how they work and how they have developed. Themes may include the role of technology, the supernatural, portrayals of gender and race, among others. This course also interrogates the boundary between genre fiction and elite genres.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe key features of the horror, sci fi, and fantasy genres, and explain how those features develop over time.
2. Identify the storytelling techniques writers use to elicit particular responses from audiences (fear, wonder, etc.).
3. Assess the relationship between escapist genres and contemporary controversies or crises.
4. Evaluate the significance of the term genre fiction, and explain the stereotypes, value judgements, and identity politics that the term evokes.
5. Analyze literary texts using discipline-specific terminology.

**ENGL 106 The Boundaries of the Human Units: 3.00**

A survey of texts that deal with fantastic, imaginary, or artificially constructed creatures, investigating how such beings help us think about what it means to be human. We will read texts by writers of myth, fantasy and science fiction that introduce us to humanoid, shapeshifting, or uncanny creatures, thereby asking us to consider what makes a being human.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Identify and describe important themes from assigned texts.
2. Assess the role played by representations of humanity or monstrosity in contemporary social debates.
3. Analyze literary texts using discipline-specific terminology.
4. Formulate, develop and construct persuasive arguments based on evidence from the texts.
5. Convey arguments in clear, coherent, and grammatical prose.

ENGL 111 How to Do Things with Words Units: 3.00

This course explores language and literature as a field in which people struggle, create communities, and play, and meaning as negotiated, context-dependent, and mobile. Assignments will invite students to disrupt presumptions of single meanings, and to devise deliberate strategies for communicating with specific audiences.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Identify literary genres as a way of classifying and inferring or resisting the kind of claims they make to truth or power.
2. Analyze texts from an array of forms, including poetry, prose fiction, political discourse, social media, conversation, laws and constitutions, protest, etc.
3. Compose well-structured, thesis-driven essays.
4. Use discipline-specific terminology, especially terminology related to meaning and power.
5. Demonstrate knowledge of the work of BIPOC writers, especially contemporary Indigenous Canadian writers.

ENGL 112 How to Listen to a Poem, How to Read a Song Units: 3.00

This course aims to unlock poetry for students as an urgently relevant form of artful communication by focusing on the fundamental tools poets use to make meaning: form, style, tone, intertext. It includes song lyrics to demonstrate that poetry remains a vital part of popular culture.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Explain what poetry is, and what distinguishes it from other cultural forms.
2. Identify the formal elements of a text and explain why they are significant.
3. Demonstrate the interconnection between form and meaning.
4. Identify the similarities and differences between literary and popular forms of poetry.
5. Explain the role poetry plays as an expression of identity and aspiration, with special attention paid to marginalized voices (e.g. BIPOC writers).

ENGL 113 Reading for the Planet Units: 3.00

This course explores how human relationships with the planet have been represented, and how they vary across space and time. It responds to our age of ecological crisis by tracking planetary concerns across a variety of literary genres and modes. Assignments invite students to reflect on their own beliefs and actions vis-à-vis the planet.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Analyze texts from an array of forms, including poetry, prose fiction, political discourse, social media, conversation, laws and constitutions, protest, etc.
2. Identify basic assumptions about human relationships to the planet that underlie authors' (and their own) understanding of environmental concerns (e.g. nature/culture binary, ideologies of progress, etc.
3. Compare/contrast different representations of human/environment relationships across cultures and over time.
4. Challenge prevailing ideas about "the planet" and explore alternatives.
5. Communicate their understanding of environmental challenges using analytical and reflective modes.
6. Communicate their experience of the tangible world.

ENGL 114 Gender, Race, and Sexuality in Literature Units: 3.00

This course examines the unique perspectives that literary works offer on urgent questions of race, sexuality, queerness, feminism, and ability. Focusing on texts from the past and the contemporary era, it explores how literature can complicate and enrich existing vocabularies for thinking about identity, difference, and solidarity.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Use discipline-specific terminology in the analysis of portrayals of race, gender, and sexuality in literary texts of various genres.
2. Demonstrate a historical and critical understanding of literary portrayals of race, gender, and sexuality.
3. Assess the role literature plays in constructing and expressing identities.
4. Deploy a methodological approach to close reading and critical thinking.
5. Develop interpretations in thesis-driven essays supported by appropriate textual evidence.

ENGL 117 Troubled Romance Units: 3.00

This course explores how love and eros in literature express truths and troubles of gender and sexuality for diverse individual lives and social worlds. Either or both of the related literary meanings of romance, as magical adventure and as love story, may provide a focus for the syllabus.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Compare the ways in which various literary genres portray different aspects of identity, love, and desire.
2. Explain how different representations of love, gender, and sexuality are imagined to affect social life and social change.
3. Identify literary genres as a way of classifying texts.
4. Compose well-structured, thesis-driven essays and learn to revise with critical feedback.
5. Analyze literary texts using discipline-specific terminology.

**ENGL 118 Literature and Mental Health Units: 3.00**

How do representations of mental health shift across time and genre, and what is the role of narrative in building our tolerance for a life of deferral, ambiguity, and loss? This course explores the relationship between literature and psychical life, inviting students to investigate the meaning of madness, and what its opposite might be.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Analyze the relationship between literary art and mental health.
2. Explain how representations of mental health shift across genres and periods.
3. Assess the role of narrative in enabling people to confront loss.
4. Demonstrate familiarity with the work of BIPOC writers, especially contemporary Indigenous Canadian Writers.
5. Analyze texts using discipline-specific terminology, and presenting ideas in clear and effective prose.

ENGL 161 Modern Prose Fiction I: The Elements of Fiction Units: 3.00

A study of the Elements of Fiction (plot, conflict, character, setting, viewpoint, language, tone, and theme) in a selection of short stories and novels written in the twentieth century. This course will equip students with a critical vocabulary for reading, interpreting, and writing about modern and contemporary prose fiction. NOTE ENGL 161 is offered in the Fall term, and is linked to ENGL 162, which is offered in the Winter; although students are encouraged to enrol in both 161 and 162, these are separate courses that can be taken on their own.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Identify and describe the various hallmarks or elements of fiction.
2. Identify, analyze, and employ the language of literary analysis and close reading when discussing short fiction and novels (e.g., metaphor, irony, pathos, parody, rhetoric, ideology, etc.).
3. Demonstrate a sound knowledge of grammar, punctuation, diction, and syntax.
4. Compose original arguments that evaluate, analyze, and synthesize primary texts, and that do so within a structural framework that includes a thesis statement, strong topic sentences, textual evidence, a compelling conclusion, and other characteristics of analytical literary essays.
5. Demonstrate familiarity with a range of literary works by diverse authors from around the globe.

ENGL 162 Modern Prose Fiction II: Pathways Through Fiction Units: 3.00

A study of critical Pathways through Fiction (including historical, gender, sociological, mythological, and postmodernist) in a selection of short stories and novels written in the twentieth century. This course will acquaint students with various critical approaches for reading, interpreting, and writing about modern and contemporary prose fiction. NOTE ENGL 162 is offered in the Winter term, and is linked to ENGL 161, which is offered in the Fall; although students are encouraged to enrol in both 161 and 162, these are separate courses that can be taken on their own.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units of ENGL at the 100-level.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Identify and describe a selection of critical approaches to, or pathways through, fiction.
2. Identify, analyze, and employ the language of literary analysis and close reading when discussing short fiction and novels (e.g., metaphor, irony, pathos, parody, rhetoric, ideology, etc.).
3. Demonstrate a sound knowledge of grammar, punctuation, diction, and syntax.
4. Compose original arguments that evaluate, analyze, and synthesize primary texts, and that do so within a structural framework that includes a thesis statement, strong topic sentences, textual evidence, a compelling conclusion, and other characteristics of analytical literary essays.
5. Demonstrate familiarity with works by diverse authors from around the globe.

Entrepreneurship and Innovation (ENIN)**ENIN 140 Design Thinking Units: 3.00**

This course teaches design thinking techniques and their application to real-life case studies. Design Thinking takes a cross-disciplinary approach wherein students from various academic and professional backgrounds engage in co-creation, peer review, online discussions, brainstorming, and prototyping activities.

NOTE Also offered online. Consult Arts and Science Online.

Learning Hours may vary.

Learning Hours: 120 (72 Online Activity, 48 Private Study)

Requirements: Prerequisite None. Equivalency FILM 140.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Communicate ideas creatively with digital presentation styles and content in an aesthetically pleasing, artistic, storyboard that captures the imagination of the reader.
2. Demonstrate knowledge of the steps of Design Thinking as an Innovation Tool, including how and what is involved in the steps of Empathy, Design, Ideation, Test, and Iterate.
3. Demonstrate the innovation skills of brainstorming multiple solutions, decision-making, creating a prototype, assumption rating, and designing tests or experiments to learn from your customer group by completing the tasks and showing your work in a presentation document.
4. Differentiate between the intellectual standards for creative thinking (originality, adaptability, appropriateness, and contribution to the domain)
5. Research, analyze, and write a report on chosen problems and customers to demonstrate empathy, root problem identification, the systems in which the problem lives, and how to segment your customer group into a persona.



Environmental Science/Studies (ENSC)

ENSC 103 Environment and Sustainability Units: 3.00

An interdisciplinary approach to complex environmental issues, and diverse perspectives on environmental management and sustainability. The course considers the social and scientific aspects of environmental problems and the production of environmental knowledge alongside global linkages, human health implications and barriers to sustainability.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 24 Online Activity, 60 Private Study)

Requirements: Prerequisite None.

Course Equivalencies: ENSC103; ENSC203

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Adopt and make accurate use of disciplinary language to communicate on environmental issues with a variety of audiences.
2. Apply concepts and practices of ecological citizenship.
3. Competently explain key terms for course (e.g. Sustainability, Indigeneity, etc.)
4. Critique constructively the dominance of individualism and voluntary action as core social beliefs in mainstream society.
5. Evaluate the impact of the intersection of scientific and social aspects of a variety of environmental issues.
6. Explore personally the possibilities and/or limitations of individual actions in relation to sustainability.
7. Identify and explain the contested aspects of environmental knowledge (e.g. Around climate change, scientific uncertainty, etc.).
8. Identify relative importance and verifiability of scientific and social aspects of environmental issues.

Film and Media (FILM)

FILM 111 Introduction to Film Studies: Approaches to Film Form Units: 3.00

This course introduces students to the close analysis of form and meaning in film and moving image art. Through case studies from the history of cinema, the course will focus on methods of film analysis and the production of meaning in film in connection to the elements of form, narrative, and style.

Learning Hours: 108 (36 Lecture, 12 Tutorial, 60 Private Study)

Requirements: Prerequisite None. Exclusion FILM 110/6.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Interpret the formal aspects of cinema and explain how they contribute to making meaning in films from different genres, cultures, and historical eras.
2. Analyze how narrative is constructed and organized in a film.
3. Identify the key social and technological components of the cinema and related media.
4. Examine the legacies of film style and techniques within a broader visual culture.
5. Formulate interpretive responses to films.
6. Demonstrate an understanding of issues pertaining to film form across different modes (narrative, documentary, experimental film) and genre (e.g. comedy, horror, science fiction).

FILM 112 Introduction to Film History: Genres and Movements Units: 3.00

This course introduces students to film studies through a survey of film movements and genres from the beginnings of the 20th century to the present. Through the study of the history of cinema as both technology and artform, this course will examine key historical sites of formal development, experimentation, generic codification, social transgression, and political and ideological expression.

Learning Hours: 108 (36 Lecture, 12 Tutorial, 60 Private Study)

Requirements: Prerequisite None. Exclusion FILM 110/6.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Interpret elements of narrative, style, and rhetoric of films of multiple genres and historical periods.
2. Analyze films according to historical conventions of form and genre.
3. Identify key moments in the social, cultural, and technological history of film.
4. Examine the formal, cultural and social legacies of film movements, genres and cultures in a historical context.
5. Formulate interpretive responses to films from different social and historical settings.

FILM 113 Introduction to Media Studies: Cultures and Technologies Units: 3.00

This course offers an introduction to media studies by focusing on the impacts of new technologies on global cultures throughout history. The course focuses on the nature of mediated communication, the role of media, and the critical approaches we can mobilize to understand its forms and functions. The course examines various media through lenses such as political discourse and the rise of globalization.

Learning Hours: 108 (36 Lecture, 12 Tutorial, 60 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate an understanding of a variety of media and critical and historical approaches to global media studies.
2. Summarize development of media studies theory and concepts and their contextual specificity.
3. Develop academic and creative skills to engage, research, and write on topics in the field of media history.
4. Deploy the formal tools, terms, critical terms and definitions of media studies in the analysis of local and global media technologies.



FILM 114 Introduction to Media Studies: Arts and Practices Units: 3.00

This course offers an introduction to media studies by focusing on the ways that cultures make use of media. The course focuses on the nature of mediated communication, the roles of media, and the critical approaches we can mobilize to understand media arts and practices through a comparative survey of global media practice and networks of production, circulation, and consumption.

Learning Hours: 108 (36 Lecture, 12 Tutorial, 60 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate an understanding of a variety of media and approaches to global media studies.
2. Analyze specific uses of media technologies in global contexts.
3. Develop academic and creative skills to engage, research, and write on topics in the field pertaining to media arts and practices.
4. Deploy the formal tools, terms, critical terms and definitions of media studies in the analysis of contemporary global media practices.

Fine Art (ARTF)

ARTF 100 Introductory Drawing Units: 6.00

A basic introduction to the principles of line and form, intended as a foundation for further studies in the visual arts.

NOTE Offered during Spring-Summer Sessions only. Not available for credit towards a B.F.A. program.

Requirements: Prerequisite None. Exclusion ARTF 127/6.0; ARTF 128/6.0. Note This course cannot be used as credit towards a BFA Program.

Offering Faculty: Faculty of Arts and Science

ARTF 101 Fundamentals of Drawing and Painting Units: 3.00

A foundation course aimed at developing basic skills in drawing and painting, embracing a variety of subjects, materials and techniques.

NOTE Materials: estimated cost \$300.

Learning Hours: 144 (48 Laboratory, 96 Private Study)

Requirements: Prerequisite Permission of the Instructor. Exclusion ARTF 106/3.0; ARTF 127/6.0; ARTF 128/6.0.

Recommended ARTH 120/6.0. Note This course cannot be used as credit towards a BFA Program.

Offering Faculty: Faculty of Arts and Science

ARTF 102 Fundamentals of Drawing and Sculpture Units: 3.00

A foundation course in drawing and sculpture aimed at examining the visual, tactile and structural characteristics of various materials in relation to 3 dimensional space.

NOTE Materials: estimated cost \$300.

Learning Hours: 144 (48 Laboratory, 96 Private Study)

Requirements: Prerequisite ARTF 101/3.0 or permission of the Instructor. Recommended ARTH 120/6.0. Exclusion ARTF 127/6.0; ARTF 128/6.0. Note This course is only available to students in the Faculty of Education.

Offering Faculty: Faculty of Arts and Science

ARTF 125 Introduction to Studio Art in Printmaking Units: 3.00

This survey course introduces various Printmaking techniques including monoprint, relief, etching, digital and hybrid methods. Students focus on applying the various methods to personal research interests to create original print based imagery that demonstrates formal, conceptual, historical and contemporary consideration.

NOTE Materials: estimated cost \$100.

Requirements: Prerequisite None. Recommended Some drawing experience. One-Way Exclusion May not be taken with or after ARTF 227/6.0; ARTF 265/3.0. Note This course is not open to BFAH students.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Adapt learned skills to ones own artistic practice and assess the potential for advanced course work.
2. Analyze and evaluate printworks through the process of critique using terms and concepts appropriate to the medium.
3. Create original and editioned printworks that demonstrate technical, conceptual and critical consideration.
4. Demonstrate the ability produce a print based body of work that meets professional, exhibition and curatorial practices.
5. Describe and employ low and non toxic methods/ substitutes in regards to traditional materials, techniques and equipment.
6. Recall and describe the four major printmaking processes, their visual properties, historical and contemporary significance.

ARTF 127 Introductory Fine Art I Units: 6.00

A foundation course that offers two of the sections from the four media areas available at this level: painting, drawing, two-dimensional fundamentals, and three-dimensional fundamentals. One class per week will be devoted to learning safe procedures and technical skills in the wood-shop. There will be a half-day WHMIS safety training workshop.

NOTE Materials: estimated cost \$630 (includes technical skills fee of \$25).

Learning Hours: 288 (144 Laboratory, 144 Private Study)

Requirements: Prerequisite Registration in a BFA Program.

Exclusion ARTF 100/6.0; ARTF 101/3.0; ARTF 102/3.0; ARTF 106/3.0. One-Way Exclusion May not be taken with or after ARTF 125/3.0; ARTF 260/3.0; ARTF 265/3.0.

Course Equivalencies: ARTF 127, ARTF 127B

Offering Faculty: Faculty of Arts and Science

ARTF 128 Introductory Fine Art II Units: 6.00

A continuation of ARTF 127, this course offers two of the sections from the media available at this level: painting, drawing, two-dimensional fundamentals, and three-dimensional fundamentals.

NOTE Materials: estimated cost \$525.

NOTE A \$250 deposit is required by students who intend on participating in the voluntary 2nd year field trip to New York.

Learning Hours: 288 (144 Laboratory, 144 Private Study)

Requirements: Prerequisite Registration in a BFA Program and a minimum grade of C- in ARTF 127/6.0 and a cumulative GPA of 1.60 or higher. Exclusion ARTF 101/3.0; ARTF 102/3.0; ARTF 106/3.0.

Course Equivalencies: ARTF 128, ARTF 128B

Offering Faculty: Faculty of Arts and Science

French Language and Literature (FREN)
FREN 106 Communication et culture I Units: 3.00

This online French course is designed for students with little or no knowledge of French and aims to provide them with basic language skills to enable them to understand and use familiar everyday expressions and basic phrases in everyday situations. Intended for students with no background in French or with no more than grade nine Core French or equivalent. Students will need to sign a solemn declaration to this effect at the start of the course.

NOTE Only offered online, consult Arts and Science Online.

Learning Hours: 144 (132 Online Activity, 12 Private Study)

Requirements: Prerequisite None. One-Way Exclusion May not be taken with or after any FREN or FRST course (exception - FREN 106/3.0 can be taken after FRST 105/3.0). Note This course cannot be used as credit towards any FREN Plan.

Offering Faculty: Faculty of Arts and Science

FREN 107 Communication et culture II Units: 3.00

This online French course is designed for students with a basic knowledge of French to supplement their language skills by enabling them to engage in everyday interactions. For students with up to three years of high school Core French or equivalent with no immersion background. Students will need to sign a solemn declaration to this effect at the start of the course.

NOTE Only offered online. Consult Arts and Science Online.

Learning Hours: 144 (132 Online Activity, 12 Private Study)

Requirements: Prerequisite None. One-Way Exclusion May not be taken with or after any FREN or FRST course (exception - FREN 107/3.0 can be taken after FREN 106/3.0). Note This course cannot be used as credit towards any FREN Plan.

Offering Faculty: Faculty of Arts and Science

FREN 118 Communication et culture III Units: 3.00

This French course is designed for students who have completed beginner level French. Students will further develop their written and oral communication skills as well as acquire the means to competently engage in a range of everyday common social and professional situations.

NOTE Students who are fluent French speakers cannot enrol in this course, and will need to sign a solemn declaration to this effect at the start of the course.

NOTE Only offered online, consult Arts and Science Online.

Learning Hours: 144 (36 Lecture, 48 Online Activity, 60 Private Study)

Requirements: Prerequisite None. One-Way Exclusion May not be taken with or after FREN 150/6.0. Note This course cannot be used as credit towards any FREN Plan.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate knowledge of the essential grammar rules of the A2 proficiency level.
2. Determine appropriate strategies to understand and respond to short written or audio documents relating to daily activities and common social situations.
3. Write short, grammatically accurate texts which communicate ideas, opinions, and summarize information to solve common communicative problems.
4. Communicate orally about familiar topics and express feelings, opinions, and desires, employing low-intermediate level vocabulary and grammatical concepts.
5. Describe aspects of societies and cultures in French-speaking countries, especially with regards to interpersonal relationships, health and well-being, leisure activities and travelling, arts and media.

**FREN 150 Français intermédiaire Units: 6.00**

Practice in reading, writing, grammar review, and literary analysis.

NOTE A placement test is recommended prior to registering in this course, please visit the French Studies webpage for more information.

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 240 (72 Lecture, 24 Tutorial, 36 Online Activity, 108 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units from: FREN 150/6.0; FREN 151/3.0; FREN 152/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Identify the structure of a sentence in order to apply rules of agreement and to select appropriate verb tenses.
2. Justify these choices in the context of producing basic analyses of literary texts and films studied in class.
3. Extract the principal ideas from a text or from a film sequence.
4. Appreciate and describe the different francophone cultures under study.

FREN 151 Français intermédiaire I Units: 3.00

This course, offered entirely in French, is designed for non-native French speakers at the intermediate level (approximately B1) seeking to enhance their grammar, reading, listening, writing, and speaking skills.

NOTE Students who have completed Grade 12 Core French, International Baccalaureate French, French Immersion, French-as-a-Foreign Language (or the equivalent of these) should take the Placement Test prior to registering for the course to assess for possible placement in FREN 152 or upper-year French courses (200-level and above).

Learning Hours: 120 (36 Lecture, 12 Tutorial, 18 Online Activity, 54 Private Study)

Requirements: Prerequisite None. Exclusion FREN 150/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate knowledge of the main rules of French grammar.
2. Choose appropriate strategies to improve your understanding of a written or oral text, and evaluate the effectiveness of these strategies.
3. Compose structured descriptive or narrative written texts with correct use of verb tenses, using the indicative and imperative modes.
4. Interpret a literary text by developing reading and analytical strategies.
5. Express your opinion, in writing or orally, on a given issue or on cultural themes covered in class and/or in your tutorials.
6. Express yourself orally in both informal and formal settings.

FREN 152 Français intermédiaire II Units: 3.00

This course, delivered entirely in French, is designed for non-native French speakers at the intermediate level (approximately B1 to B2) seeking to enhance their grammar, reading, listening, writing and speaking skills, with an introduction to literary analysis.

Learning Hours: 120 (36 Lecture, 12 Tutorial, 18 Online Activity, 54 Private Study)

Requirements: Prerequisite FREN 151/3.0 or permission of the Department after completion of a Placement Test. Exclusion FREN 150/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate knowledge of the main rules of French grammar.
2. Compose complex sentences, including subordinate clauses.
3. Choose appropriate strategies to improve your understanding of a written or oral text, and evaluate the effectiveness of these strategies.
4. Compose structured descriptive or narrative written texts with correct use of verb tenses and different modes (indicative, infinitive, subjunctive, etc.).
5. Interpret a literary text by developing reading and analytical strategies.
6. Express your opinion, in writing or orally, on a given issue or on cultural themes covered in class and/or in your tutorials.
7. Express yourself orally in both informal and formal settings.

French Studies (FRST)**FRST 101 French Global Units: 3.00**

This course, given in English, is an overview of Francophone culture (since 1789) from a global perspective. Various historical events are observed through films, novels, and short essays.

Learning Hours: 120 (36 Lecture, 12 Group Learning, 72 Individual Instruction)

Requirements: Prerequisite None. One-Way Exclusion May not be taken with or after any FREN course (online or in class). Note This course cannot be used as credit towards any FREN Plan or FREN Certificate.

Offering Faculty: Faculty of Arts and Science

FRST 105 Reading French Units: 3.00

An online course for students with little or no previous knowledge of French. Students will need to sign a solemn declaration to this effect at the start of the course. Learners will identify the key elements of a French sentence, the structure of sentences, and the devices used to combine sentences and paragraphs in French, as well as translate texts from subject areas including humanities, social sciences, business, and sciences. Explanations are given in English; all materials to be analyzed are in French.

NOTE Only offered online. Consult Arts and Science Online.

Learning Hours: 120 (90 Online Activity, 30 Private Study)

Requirements: Prerequisite None. One-Way Exclusion May not be taken with or after any FREN or FRST course.

Offering Faculty: Faculty of Arts and Science

Gender Studies (GNDS)**GNDS 120 Women, Gender, Difference Units: 3.00**

This course explores women, gender, and difference from feminist and anti-racist perspectives. It identifies the ways in which women's activism, politics, and experiences intersect with other gendered identifications such as race, location, class, (dis)ability, and sexuality. Lessons and texts will introduce feminism, the body, colonialism, gender performance, and strategies of resistance.

NOTE Also offered online. Consult Arts and Science Online. Learning Hours may vary.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

GNDS 125 Gender, Race, and Popular Culture Units: 3.00

Explores popular culture from feminist and anti-racist perspectives, with attention to sexuality, gender, race and nation in a variety of media.

NOTE Also offered online. Consult Arts and Science Online. Learning Hours may vary.

NOTE Film Screening: estimated cost \$15.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science



Geography (GPHY)

GPHY 101 Human Geography Units: 3.00

The fundamentals of human geography including the meanings of place, the impacts of globalization, multiculturalism, population change and movement, environmental history and politics, cultural geography, issues of uneven resource distribution, the role of colonialism in the modern shape of the world, agricultural geography, and urban geography.

NOTE Field Trip: estimated cost \$30.

Learning Hours: 120 (24 Lecture, 18 Tutorial, 42 Online Activity, 36 Private Study)

Requirements: Prerequisite None. Exclusion BADR 100/3.0; BISC 100/3.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Articulate the distinctiveness of Geography as a discipline.
2. Describe key concepts of place, space, scale and location, and the relationships between these as they relate to Human Geography.
3. Demonstrate an applied understanding of place and space-based approaches to contemporary issues and events.
4. Identify core causes of social and geographical inequalities that shape our world (e.g., distribution of resources, migration controls, health disparities, etc.) and explain the impacts of these inequalities across multiple scales.
5. Learn and apply a variety of research methods used in the study of Human Geography.

GPHY 102 Physical Geography and Natural Resources Units: 3.00

This course introduces the major concepts studied in physical geography and natural resources. The processes and interrelationships between the atmosphere, hydrosphere, biosphere, and lithosphere, particularly at, or near the Earth's surface, are investigated to serve as a basis for understanding the nature and distribution of natural resources.

NOTE Field Trip: estimated cost \$30.

Learning Hours: 120 (36 Lecture, 12 Tutorial, 72 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Gain knowledge of key concepts and laws governing physical geography / Earth system science.
2. Understand the processes giving rise to patterns and phenomena observed in the Earth system at local, regional, and global scales.
3. Discover the use and implementation of basic tools and techniques used by geographers to study spatial and temporal patterns.
4. Appreciate the way humans are linked to, as well as impact, the Earth's systems.

Geology (GEOL)

GEOL 102 Gemstones: Their Art, History, and Science Units: 3.00

Gemstones have played an important role in society throughout history. The role of gemstones and other precious materials will be illustrated through the study of works of art and popular literature. The physical properties that make gems attractive are explained. Gemstone marketing and ethical considerations of mining methods will be explored.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 36 Online Activity, 48 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

GEOL 104 The Dynamic Earth Units: 3.00

Introduction to the internal structure of the Earth and the processes that have shaped its surface. Global tectonics and continental movement, rock genesis, mountain building, glaciations and geological time. Laboratories include rock and mineral identification, and problem solving in historical geology, earthquakes, groundwater flow and coastal erosion. NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 108 (36 Lecture, 12 Laboratory, 60 Private Study)

Requirements: Prerequisite None.

Course Equivalencies: GEOL 104/105 / APSC 151

Offering Faculty: Faculty of Arts and Science

GEOL 106 Environmental Geology and Natural Hazards Units: 3.00

The relationship between human-kind and our ever-changing planet, with a focus on natural geologic hazards (volcanic eruptions, earthquakes, landslides, tsunamis, mass movement, floods, extraterrestrial impacts, etc.), and environmental impacts which result from population and land-use expansion and our increased use of water, energy and mineral resources. A study of the sources and impact of pollution and global climate change. Public perception of and response to geological risk.

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 120 (36 Lecture, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

GEOL 107 History of Life Units: 3.00

The history of life, from its inception four billion years ago to the present day, focusing on the inter-relationship between organic evolution and global change. Coevolution of early life and the atmosphere; development of marine animals and their ecosystems; invasion of the land; dinosaurs and their world; mass extinctions; the Age of Mammals; and hominid evolution.

Learning Hours: 120 (36 Lecture, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

German (GRMN)

GRMN 101 Beginner's German I Units: 3.00

This course is for students with no previous knowledge of German. The course concentrates on the basic language skills (listening, reading, writing and speaking) and introduces elements of German culture as recorded in its customs, history, and literature.

NOTE Students can self-enrol during the course registration period. However, for students with previous knowledge of the language, final approval of enrolment is at the discretion of the instructor, pending an assessment of a student's language competency. Students can contact the instructor for an assessment anytime during the academic year (September-May). Please note that instructors may not be available for language competency assessments in May, June, July, and early August. Non-disclosure of previous knowledge of the language is considered a departure from academic integrity.

Learning Hours: 120 (36 Lecture, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None. One-Way Exclusion May not be taken with or after GRMN 102/3.0; GRMN 201/3.0; GRMN 202/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Engage in everyday conversations using common vocabulary and basic grammatical structures, allowing them, for example, to introduce themselves, ask and answer simple questions, and express their basic needs and preferences in the language.
2. Understand spoken language on familiar topics, such as personal information, basic descriptions, and daily routines, delivered at a slow to moderate pace and using beginner-level vocabulary.
3. Read and comprehend short texts related to everyday life, employing basic reading strategies to understand sentence structure, main ideas, and key details with limited use of a dictionary.
4. Write simple messages, notes, and paragraphs employing correct syntax and basic vocabulary to express personal experiences, daily activities, and simple opinions.
5. Cultural Context: Throughout the course, students will gain an introductory understanding of the cultural context of the target language, including significant customs, traditions, and social norms associated with the regions where the language is spoken.

**GRMN 102 Beginner's German II Units: 3.00**

This course is for students with a limited background in German. The course concentrates on the basic language skills (listening, reading, writing and speaking) and introduces elements of German culture as recorded in its customs, history and literature.

Learning Hours: 120 (36 Lecture, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite (A minimum grade of a C in GRMN 101) or permission of the Department of Languages, Literatures and Cultures. One-Way Exclusion May not be taken with or after GRMN 201; GRMN 202.

Offering Faculty: Faculty of Arts and Science

Global Development Studies (DEVS)**DEVS 100 Canada and the "Third World" Units: 6.00**

Introduces basic theoretical concepts of development studies, the history of global inequality, and short histories of alternative development strategies. Case studies of Canada's ties to the so-called third world will include missionaries, military, business, and aid. Canadian colonialism over First Nations peoples will introduce basic issues in Aboriginal Studies.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 240 (48 Lecture, 24 Tutorial, 24 Online Activity, 144 Private Study)

Requirements: Prerequisite None. Exclusion DEVS 101/3.0; DEVS 102/3.0; DEVS 105/3.0*.

Course Equivalencies: DEVS100; DEVS100B

Offering Faculty: Faculty of Arts and Science

DEVS 101 Development Studies in Global Perspective Units: 3.00

Explores the relationship between global economic integration, technological change, environmental sustainability, political systems, and cultural diversity. Introduces interdisciplinary perspectives to complex global challenges, from poverty to climate change. The course builds foundations for ethical cross-cultural engagement.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 120 (18 Tutorial, 18 Online Activity, 84 Private Study)

Requirements: Prerequisite None. Exclusion DEVS 100/6.0; DEVS 105/3.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Students expand their world-views by considering diverse forms of knowledge and analytical perspectives that can help us understand contemporary global change and challenges.
2. Students engage in critical thinking by using interdisciplinary perspectives to explain a wide range of case studies.
3. Students reflect on the opportunities and challenges involved in producing and disseminating knowledge about the world, with a focus on the opportunities and challenges to cross-cultural communication.
4. Communicate effectively in written and oral format, with a focus on writing for different audiences and effective discussion and presentation strategies.
5. Students acquire the foundational breadth of knowledge to pursue more advanced courses in global engagement.

DEVS 102 Canada in the World Units: 3.00

Canada in the World will help students build knowledge and analytical capacities in global development, with a focus on Canada. The course examines how processes of global development are differentiated across borders and axes of gender, racialization, and colonization. Students will explore applications of theories of global change.

Learning Hours: 120 (18 Tutorial, 18 Online Activity, 84 Private Study)

Requirements: Prerequisite None. Exclusion DEVS 100/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Identify and explain social, political economic, and ecological axes of inequality in global development.
2. Explain key themes in Canada's role in global development.
3. Apply critical thinking to case studies in class discussion and written assignments.
4. Collaboratively develop and present strategies for addressing global problems.
5. Communicate effectively in written and oral format, with a focus on classroom discussion and presentation strategies.

Greek (GREK)**GREK 112 Introductory Greek Units: 6.00**

Fundamentals of grammar, syntax and etymology, for students with no or little knowledge of Ancient Greek; provides sufficient background to read Plato, Euripides as well as the New Testament.

Learning Hours: 252 (72 Lecture, 180 Private Study)

Requirements: Prerequisite None. Note This course is not normally open to students with 4U Greek.

Offering Faculty: Faculty of Arts and Science

Health Studies (HLTH)**HLTH 101 Social Determinants of Health Units: 3.00**

This course introduces students to basic concepts in public, population and global health, and introduces social determinants of health, such as poverty, income inequality, and racism, in Canadian and global contexts.

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 117 (18 Lecture, 24 Online Activity, 75 Private Study)

Requirements: Prerequisite None. Exclusion GLPH 171/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Recognize, define, and apply key concepts in public and population health.
2. Critically analyze the social determinants of health in Canadian and global contexts.
3. Identify policies and other interventions addressing the social determinants of health.
4. Apply course concepts in the analysis of current health issues.

HLTH 102 Personal Health and Wellness Units: 3.00

This course provides an introduction to the variety of factors which could affect a person's health and wellness.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 108 (24 Lecture, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None. Exclusion IDIS 199/3.0.

One-Way Exclusion May not be taken after 12.0 units in KNPE.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Identify and explain terminology, concepts, and assumptions related to personal health and well-being.
2. Evaluate and critically appraise information and resources relevant to personal health.
3. Apply course content to one's own personal health practices.



Hebrew (HEBR)

HEBR 101 Introduction to Modern Hebrew I Units: 3.00

For students with no (or a minimal) background in Hebrew. This course introduces elements of grammar and vocabulary of modern Hebrew.

NOTE Students can self-enrol during the course registration period. However, for students with previous knowledge of the language, final approval of enrolment is at the discretion of the instructor, pending an assessment of a student's language competency. Students can contact the instructor for an assessment anytime during the academic year (September-May). Please note that instructors may not be available for language competency assessments in May, June, July, and early August. Non-disclosure of previous knowledge of the language is considered a departure from academic integrity.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion HEBR 190/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Engage in everyday conversations using common vocabulary and basic grammatical structures, allowing them, for example, to introduce themselves, ask and answer simple questions, and express their basic needs and preferences in the language.
2. Understand spoken language on familiar topics, such as personal information, basic descriptions, and daily routines, delivered at a slow to moderate pace and using beginner-level vocabulary.
3. Read and comprehend short texts related to everyday life, employing basic reading strategies to understand sentence structure, main ideas, and key details with limited use of a dictionary.
4. Write simple messages, notes, and paragraphs employing correct syntax and basic vocabulary to express personal experiences, daily activities, and simple opinions.
5. Cultural Context: Throughout the course, students will gain an introductory understanding of the cultural context of the target language, including significant customs, traditions, and social norms associated with the regions where the language is spoken.

HEBR 102 Introduction to Modern Hebrew II Units: 3.00

For students who have basic knowledge of Hebrew and can read and write all the letters of the Hebrew alphabet. This course continues where HEBR 101 left off and proceeds to introduce elements of grammar and vocabulary of modern Hebrew.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite HEBR 101/3.0. Exclusion HEBR 190/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Enhance their ability to read and write Hebrew Script and Print with and without Nikud.
2. Write in complete and complex sentences in script.
3. Understand basic passages on a variety of topics.
4. Affectively use present and past tense verbs.
5. Affectively use prepositions and coordinators to create grammatical sentences.
6. Count, calculate, and use both masculine and feminine numbers until 100.

HEBR 190 Introduction to Modern Hebrew Units: 6.00

For students with no (or a minimal) background in Hebrew. Introduces elements of grammar and vocabulary of modern Hebrew.

Requirements: Prerequisite Permission of the Instructor.

Exclusion Maximum of 6.0 units from: HEBR 101/3.0; HEBR 102/3.0; HEBR 190/6.0.

Offering Faculty: Faculty of Arts and Science

History (HIST)

HIST 104 Pre-Confederation Canada: A History of the Present Units: 3.00

A critical survey of the main social, political, and economic developments in this place now called Canada, with an emphasis on Indigenous histories and the emergence of liberal capitalism as a history of our present. The course comprises weekly lectures, small seminars/workshops, and a major historical research project.

Learning Hours: 120 (18 Lecture, 18 Seminar, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None. Exclusion HIST 124/6.0; HIST 260/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Interpret pre-Confederation Canadian history using analytical concepts, such as social formations, settler colonialism, decolonization and the 'history of the present'.
2. Analyze and discuss primary historical sources in seminars designed to develop transferrable skills in the critical analysis of a range of formats, including textual/artifactual, visual, and audio-visual.
3. Develop the skills of active listening, notetaking, and synthesis of lectures in preparation for a final exam.
4. Hone critical research and writing skills in relation to a term project comprising a proposal, annotated bibliography, and a research paper.
5. Critique public representations of the past, identifying key issues in the relationship between the past and present, including presentism and the politics of historical representation.

HIST 105 Post-Confederation Canada: A History of the Present Units: 3.00

Beginning with the post-Confederation period, this course is a critical survey of the main social, political, and economic developments in the history of modern Canada. There are weekly lectures by the course instructor, small seminar discussions run by teaching fellows, and self-directed historical research projects.

Learning Hours: 120 (18 Lecture, 18 Seminar, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None. Exclusion HIST 124/6.0; HIST 260/6.0; HIST 279/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Develop a knowledge of and critically engage with the main themes of the post-Confederation Canadian past.
2. Demonstrate an understanding of concepts such as the 'history of the present' and historical memory and counter-memory.
3. Engage in seminar discussions aimed at analyzing and evaluating a range of primary historical sources.
4. Conduct a term project that includes a research proposal, annotated bibliography, and paper, often organized around developing the skills of a book critique.
5. Hone skills in the active listening, notetaking, and synthesis of lectures in preparation for a final exam.

**HIST 106 The Making of Modern Europe Units: 3.00**

This course charts the processes, events, and ideologies that created modern Europe and key parts of the modern world order from ca. 1650 to ca. 1950, notably political revolution and changing notions of citizenship; the emergence of global capitalism and consumerism; colonialism; fascism and communism; and world war.

Learning Hours: 120 (24 Lecture, 12 Seminar, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None. Exclusion HIST 111/3.0; HIST 121/6.0; HIST 125/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Understand the diverse processes, events, and ideologies that went into the making of modern Europe from ca. 1650 to ca. 1950.
2. Demonstrate in discussion and written work their understanding of the course material and how political, economic, social, and cultural structures changed over the time period covered in this course.
3. Develop critical reading skills and learn to analyze historical evidence and primary sources.
4. Identify and synthesize arguments presented in course lectures and reading material coherently, precisely, and concisely.
5. Practice and refine writing skills through written assignments and essay exams using material from course readings and lectures.

HIST 108 Early Globalization: Contact, Conflict, and Pandemics Units: 3.00

This course will focus on early globalization. We begin with the river valley civilizations, such as Mesopotamia and Egypt, and stop around the mid-1700s. The course is divided thematically into different processes of globalization. Some of the themes include Mongol conquests, the Silk Road, Black Death, and Crusades.

Learning Hours: 120 (24 Lecture, 12 Seminar, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None. Exclusion HIST 122/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Study historical narratives thematically.
2. Assess primary texts and learn to contextualize them within larger historical frameworks.
3. Discover ancient cartographic projects and gain knowledge of global maps.
4. Analyze ancient documents on food and agriculture.
5. Develop critical thinking through interactive workshops.
6. Acquire both popular and academic writing skills.

HIST 109 War and Revolution in the Modern World Units: 3.00

Changes in the world order and in the day-to-day lives of many ordinary people have followed wars and revolutions, from the Industrial Revolution to the ongoing militarized policing and the Black Lives Movement. This course is a survey of these transformative forces in World History.

Learning Hours: 120 (24 Lecture, 12 Seminar, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None. Exclusion HIST 122/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Develop an understanding of the social, economic, and political ramifications and consequences of the Industrial Revolution.
2. Appreciate the histories of major wars and global revolutions as defining watershed moments and turning points in modern global history.
3. Critically engage with primary sources and learn to construct historical narratives through a careful analysis of primary and secondary sources.
4. Write historical essays of varying lengths and develop the skills necessary for constructing a thesis, empirical substantiation of the thesis, and appropriate citation practice.
5. Acquire and hone the skills necessary to participate in seminar discussions, oral presentation of historical arguments, and engage in academic discussions in a group setting.

HIST 110 Europe from Antiquity to the Scientific Revolution Units: 3.00

Europe has shaped the intellectual, social, and cultural patterns of modern times. This course explores the history of Europe from antiquity through early modernity. Subjects include: the ancient world; the creation of Christendom; medieval scholastic culture; the modern state; religious war; Renaissance; Reformation; and the Scientific Revolution.

Learning Hours: 120 (24 Lecture, 12 Seminar, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None. Exclusion HIST 121/6.0; HIST 125/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Attain an introductory foundation in European history.
2. Develop critical reading skills and learn to analyze historical evidence and primary sources.
3. Acquire and demonstrate persuasive writing skills.
4. Debate the competing theories of historical analysis and demonstrate knowledge and understanding of historical methods.
5. Develop and practice effective communication skills and develop improved capacity of oral presentations and debate.



HIST 111 Modern Europe: Politics and Culture Units: 3.00

This course looks at the history of modern Europe as the interaction between politics, culture, and ideas. Narratives of the major events of modern European history, including the French Revolution, the Russian Revolution, and the two world wars will be intertwined with an in-depth look at modern philosophy, literature, and art.

Learning Hours: 120 (24 Lecture, 12 Seminar, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None. Exclusion HIST 106/3.0; HIST 121/6.0; HIST 125/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Acquire and demonstrate introductory knowledge of the political, intellectual, and cultural history of modern Europe.
2. Develop and demonstrate understanding of historical methodology through critical analysis of primary and secondary sources.
3. Develop and hone ability to read historical works and apply critical thinking skills in historical analysis.
4. Demonstrate the ability to discuss and debate historical ideas and acquire and apply research skills to sharpen historical arguments.
5. Acquire skills in persuasive writing styles and apply writing skills in historical analyses.

HIST 121 The Intellectual Origins of the Contemporary West Units: 6.00

An introduction to European intellectual history from the ancient world to the present. Concentration is on the analysis of primary sources and ideas in their historical contexts. The course offers weekly introductory lectures followed by discussion of source material in small tutorial groups where the objective is maximum student participation.

Learning Hours: 240 (36 Lecture, 36 Seminar, 168 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of one course from: HIST 106/3.0; HIST 111/3.0; HIST 121/6.0; HIST 125/6.0. Exclusion Maximum of one course from: HIST 110/3.0; HIST 121/6.0; HIST 125/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Understand the broad contours of the field of European intellectual history.
2. Develop critical reading skills by engaging with a variety of primary and secondary sources.
3. Enhance written communication skills, such as persuasive writing by completing a variety of written assessments and engaging with instructor feedback.
4. Display an improved capacity for oral presentation and debate.
5. Engage with the historical methodology by determining historical significance; assessing and marshalling primary historical evidence; explaining continuity and change over time; identifying historical cause, consequence, and context.

HIST 122 The Making of the Modern World Units: 6.00

A survey of the history of the world with an emphasis on the interconnectedness of the human experience. Themes include global processes of political change, warfare, commerce, cultural formations, biological and environmental agents, and industrial emergence as the arbiters of change that led to the formation of the modern world.

Learning Hours: 240 (48 Lecture, 24 Seminar, 24 Online Activity, 144 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of one course from: HIST 108/3.0; HIST 122/6.0. Exclusion Maximum of one course from: HIST 109/3.0; HIST 122/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate knowledge of the global processes that led to the emergence of the interconnected modern world.
2. Identify the historical processes that co-constituted global societies in the last two millennia.
3. Evaluate different kinds of historical sources, including textual, visual, aural, and multimodal sources, and adopt the ones best suited for historical analysis based on veracity and context.
4. Acquire the ability to process historical information in lectures and seminars and develop the skill of forming evidence-based historical arguments and present them orally in a group setting.
5. Practice persuasive historical writing in short and long-form essays.

HIST 124 Canada: A History of the Present Units: 6.00

A historical survey of the liberal, capitalist, and multicultural democracy we now call Canada. Through lectures, seminars, and the analysis of historical texts and heritage sites, the course explores the social-political struggles over Indigeneity and race, class and colonialism, gender and sexuality, which continue to shape contemporary Canada.

NOTE Also offered online. Consult Arts and Science Online. Learning Hours may vary.

Learning Hours: 240 (36 Lecture, 36 Seminar, 24 Online Activity, 144 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of one course from: HIST 104/3.0; HIST 124/6.0; HIST 260/6.0. Exclusion Maximum of one course from: HIST 105/3.0; HIST 124/6.0; HIST 260/6.0; HIST 279/3.0.

Course Equivalencies: HIST 124, HIST 124B

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Apply the six key concepts of historical thinking: determine historical significance; assess and marshal primary historical evidence; explain continuity and change over time; identify historical cause, consequence, and context; deploy historical perspective and avoid presentism; identify ethical dimensions in the relationship between the past and present.
2. Use historical analytical concepts, including social formations; historical memory and counter-memory; colonialism and decolonization; gender/race/class/sexuality.
3. Critique public representations of history.
4. Deploy historiographical skills: research secondary sources; place historical writing in historiographical context; critique academic historical writing. These skills will be part of the winter-term project.
5. Hone critical writing skills: develop an argument, organize a paper, demonstrate the elements of style in relation to a paper proposal, annotated bibliography, book critique, and an essay.
6. Develop skills in the critical analysis of historical sources. Seminars are designed as workshops to develop transferable skills in the critical analysis of primary documents and secondary readings.

**HIST 125 The Evolution of Modern Europe Units: 6.00**

A survey of European history from the 18th through the 21st century. The focus is on the revolutions and conflicts which produced modern Europe, notably political revolutions (1789, 1848, and 1917), industrialization, urbanization, population growth, secularization, the rise of new classes, nationalism, and imperialism, changes in ideologies and popular attitudes, rise and fall of authoritarian regimes, world wars, and European integration.

NOTE Also offered online. Consult Arts and Science Online. Learning Hours may vary.

Learning Hours: 240 (36 Lecture, 36 Seminar, 24 Online Activity, 144 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of one course from: HIST 106/3.0; HIST 111/3.0; HIST 121/6.0; HIST 125/6.0. Exclusion Maximum of one course from: HIST 110/3.0; HIST 121/6.0; HIST 125/6.0.

Course Equivalencies: HIST125; HIST125B

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Identify and state the historical significance of major trends and milestones in European history during the 18th–21st centuries.
2. Analyze issues and problems in European history in their historical context.
3. Analyze primary and secondary sources on European history to acquire historiographical skills and understand the structure of historical arguments.
4. Analyze and discuss historical problems in European history and develop the skills to identify the differences in historiographical schools of thought.
5. Apply historical research methods to analyze historical sources and apply effective essay-writing to argue that analysis.

Indigenous Knowledges and Perspectives (INDG)**INDG 101 Indigenous Knowledges and Perspectives Units: 3.00**

This course introduces Indigenous knowledge systems and perspectives on important issues facing Canada and the world. With a focus on local Indigenous peoples, you will also develop a general knowledge of Indigenous nations across North America. This course will prepare you to evaluate narratives related to Indigenous peoples and equip you to challenge the western cultural dominance arising from the history of colonization, centering Indigenous knowledge and perspectives. The course will be presented from an Indigenous perspective using both Indigenous and mainstream teaching methods.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion DEVS 220/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe historical and cultural knowledge of various Indigenous groups in Canada.
2. Apply elements of Indigenous ways of knowing to holistic learning in a supportive and intentional learning environment.
3. Recognize Indigenous connections to the land and all of creation.
4. Explore the diverse contributions of Indigenous people(s) in the academy on important contemporary issues.
5. Engage in deep and sustained self-directed, inquiry-based learning.
6. Develop appropriate strategies for engagement, solidarity, and allyship.

INDG 111 Introduction to an Indigenous Language and Culture I Units: 3.00

This course introduces students to an Indigenous Language and Culture from North America. Using appropriate grammatical features, students will develop literacy and speaking skills at the beginner level to enable basic communication. The course also introduces students to the culture of the language group through exploration of their history and stories to learn about socio-political organization, relationships with the natural world, spiritual life, and examining contemporary issues that affect its people. NOTE This course is repeatable for credit under different topic titles.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion LLCU 101/3.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Use basic grammatical features in a variety of simple situations.
2. Write using the language's own orthography (writing system, letters, etc.).
3. Accurately produce sounds and sound combinations in the Indigenous language.
4. Communicate in everyday situations at the beginning level.
5. Describe the connections between language and culture using examples from both.

INDG 112 Introduction to an Indigenous Language and Culture II Units: 3.00

Students will continue their study of an Indigenous Language and Culture from North America from INDG 111, adding additional grammar features and contexts of communication, discussing foods and food preferences, the weather and time of year, counting people and things, and discussing ownership. Students will continue to improve their oral language skills. The course will continue students' exploration of the culture with a focus on contemporary issues and the lived realities of the community.

NOTE This course is repeatable for credit under different topic titles.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite INDG 111/3.0. Exclusion LLCU 102/3.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Use basic grammatical features and vocabulary in a variety of simple situations.
2. Communicate in a limited number of situations at the beginning level.
3. Identify issues facing the community and examine various approaches taken in response.
4. Examine socio-political factors impacting Indigenous language use in North America.



Interdisciplinary Studies (IDIS)

IDIS 173 The History and Philosophy of Health and Healthcare Units: 3.00

Multidisciplinary course organized around five major fields of scientific endeavour: anatomy, physiology, pathology, pharmacology, and population and global health.

LEARNING HOURS may vary 120(480;72P)

Requirements: Exclusion PHIL 201/3.0 Equivalency BMED 173/3.0

Offering Faculty: Faculty of Health Sciences

Course Learning Outcomes:

1. Describe and analyze important people, events and trends that have influenced the development of five core subjects in the BHSc program (anatomy, physiology, pathology, pharmacology, population and global health) in order to understand what role technological developments and social values play in the construction and application of science.
2. Identify relevant sources and carry out research using traditional and web-based resources
3. Understand different perspectives on controversial issues in contemporary health science fields in order to critically assess them.

IDIS 199 The Science of Mental Health, Well-being, & Resiliency Units: 3.00

A course designed for undergraduate students across all programs. Topics include an overview of conceptual approaches to defining and measuring mental health, mental health problems and mental illness, the impact of sleep habits, distress tolerance and self-regulation on well-being, and an introduction to effective coping choices.

LEARNING HOURS 120(480;72P)

Requirements: Prerequisite None. Exclusion HLTH 102.

Offering Faculty: Faculty of Health Sciences

Course Learning Outcomes:

1. Consolidate evidence across disciplines to describe the determinants of mental health, well-being, and resiliency in emergent adults, as well as factors associated with a successful transition to university and the realization of personal goals.
2. Describe common stressors and risks encountered by emergent adults and the implications of mental health, well-being, and resiliency on success.
3. Explain the early signs and symptoms of common mental health concerns, preventative strategies, available resources, and potential barriers to accessing supports in emergent adult populations.
4. Reflect on the information covered in this course and how the information can be used to implement healthy choices that support well-being and resilience in students' own lives.

Inuktitut (INUK)

INUK 101 Beginning Inuktitut Language and Culture I Units: 3.00

An introduction to the history and culture of the Inuit of Canada with particular emphasis on their language, Inuktitut, in both writing and speaking. This course is designed for those who have little or no exposure to the Inuit language nor the history of Canada's Inuit peoples.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion LLCU 101 (Topic Title: Inuktitut).

Offering Faculty: Faculty of Arts and Science

INUK 102 Beginning Inuktitut Language and Culture II Units: 3.00

Continuation of INUK 101. This course builds on the foundation of INUK 101 expanding the student's knowledge of the vocabulary and structure which enables them to carry on limited conversation in selected everyday topics. This course will also provide an overview of the history and culture of the Inuit from the early 20th century to today.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite INUK 101.

Offering Faculty: Faculty of Arts and Science

Italian (ITLN)**ITLN 111 Beginning Italian I Units: 3.00**

Offers a basic level of Italian understanding, speaking, reading and writing for students with no knowledge of Italian whatsoever.

NOTE Students can self-enrol during the course registration period. However, for students with previous knowledge of the language, final approval of enrolment is at the discretion of the instructor, pending an assessment of a student's language competency. Students can contact the instructor for an assessment anytime during the academic year (September-May). Please note that instructors may not be available for language competency assessments in May, June, July, and early August. Non-disclosure of previous knowledge of the language is considered a departure from academic integrity.

NOTE Also offered through the Venice Term Abroad Program. Learning Hours may vary.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. One-Way Exclusion May not be taken with or after ITLN 204/3.0; ITLN 205/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Engage in everyday conversations using common vocabulary and basic grammatical structures, allowing them, for example, to introduce themselves, ask and answer simple questions, and express their basic needs and preferences in the language.
2. Understand spoken language on familiar topics, such as personal information, basic descriptions, and daily routines, delivered at a slow to moderate pace and using beginner-level vocabulary.
3. Read and comprehend short texts related to everyday life, employing basic reading strategies to understand sentence structure, main ideas, and key details with limited use of a dictionary.
4. Write simple messages, notes, and paragraphs employing correct syntax and basic vocabulary to express personal experiences, daily activities, and simple opinions.
5. Cultural Context: Throughout the course, students will gain an introductory understanding of the cultural context of the target language, including significant customs, traditions, and social norms associated with the regions where the language is spoken.

**ITLN 112 Beginning Italian II Units: 3.00**

The continuation of ITLN 111. Also for students who have some knowledge of Italian but have not completed 4U Italian or equivalent. For these students an assessment interview with the instructor is required before registration. Contact the Department of Languages, Literatures and Cultures for details.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite A minimum grade of C in ITLN 111 or ITLN P10/3.0. Exclusion A maximum of 6.0 units from ITLN 101/6.0; ITLN 111; ITLN 112; ITLN P10/3.0. One-Way Exclusion May not be taken with or after ITLN 204; ITLN 205.

Offering Faculty: Faculty of Arts and Science

Japanese (JAPN)**JAPN 100 Introductory Japanese I Units: 6.00**

For students without any previous knowledge of Japanese. Introduction to the basic structural patterns of the language and intensive training in listening, speaking, reading, and writing. Extensive use of audio-visual materials. Students are expected to study individually on a regular basis with the aid of an audio tape in addition to the four hours of classroom work per week.

NOTE Students can self-enrol during the course registration period. However, for students with previous knowledge of the language, final approval of enrolment is at the discretion of the instructor, pending an assessment of a student's language competency. Students can contact the instructor for an assessment anytime during the academic year (September-May). Please note that instructors may not be available for language competency assessments in May, June, July, and early August. Non-disclosure of previous knowledge of the language is considered a departure from academic integrity.

Requirements: Prerequisite Level 1 or (Level 2 or above and a cumulative GPA of 1.90 or higher). Note Students will have their level of competence assessed by the Department of Languages, Literatures and Cultures in September.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Engage in everyday conversations using common vocabulary and basic grammatical structures, allowing them, for example, to introduce themselves, ask and answer simple questions, and express their basic needs and preferences in the language.
2. Understand spoken language on familiar topics, such as personal information, basic descriptions, and daily routines, delivered at a slow to moderate pace and using beginner-level vocabulary.
3. Read and comprehend short texts related to everyday life, employing basic reading strategies to understand sentence structure, main ideas, and key details with limited use of a dictionary.
4. Write simple messages, notes, and paragraphs employing correct syntax and basic vocabulary to express personal experiences, daily activities, and simple opinions.
5. Cultural Context: Throughout the course, students will gain an introductory understanding of the cultural context of the target language, including significant customs, traditions, and social norms associated with the regions where the language is spoken.

Kinesiology and Physical Education (KNPE)

KNPE 125 Introduction to Human Physiology Units: 3.00

This course provides an introduction to human physiology from the cellular to the systematic level with special emphasis on the systems that adapt to exercise stress. The following areas will be covered: the cell, nervous system, skeletal muscle system, respiratory system, cardiovascular system, neuroendocrine system, and renal system.

Learning Hours: 108 (36 Lecture, 72 Private Study)

Requirements: Prerequisite Registration in a HLTH or KINE Plan. Exclusion PHGY 215/3.0; PHGY 216/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe the basic structural and functional characteristics of types of cells (e.g. neural, muscle), organs (e.g. blood vessels, lungs) and organ systems relevant to human movement.
2. Accurately recite the conceptual framework of flow (both the equation for flow and the flow model) which will be used in this course to understand the underlying causal chain of events that constitute physiological function.
3. Apply the conceptual framework of flow to predict how physiological systems adapt in response to a disturbance in the system (i.e. human movement).

KNPE 153 Introductory Biomechanics Units: 3.00

This course will present the fundamentals of biomechanics of human movement, including forces and moments, linear and angular kinematics and kinetics, and work, power, and energy.

Learning Hours: 114 (36 Lecture, 6 Tutorial, 72 Private Study)

Requirements: Prerequisite Registration in a KINE Plan. Recommended 3U or 4U Physics, or equivalent high school background.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Define concepts governing rigid-body motion, including kinematics, forces, and moments.
2. Use Newtonian's Laws to write and solve equations of motion of rigid bodies.
3. Use the mechanical principles of rigid body motion in the context of human movement to quantify forces, moments, and resulting motion of the body as a whole, as well as its individual segments.

KNPE 167 Socio-Cultural Dimensions of Sport and Physical Activity Units: 3.00

An introduction to sociological thinking about sport and physical activity. Among the topics to be discussed are: an exploration of what constitutes sport and under what conditions; how social relations of class, race, gender, and sexuality shape sport experiences; the business of sport; and the relationship between the media and sport.

Learning Hours: 120 (36 Lecture, 12 Tutorial, 72 Private Study)

Requirements: Prerequisite Registration in a KINE Plan.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Investigate the place of sport in contemporary North American society.
2. Reflect on social and personal experiences of sport.
3. Develop critical thinking skills question in order to question aspects of sport that are commonly taken-for-granted.
4. Discuss sociological concepts and reasoning.
5. Practice identifying and constructing arguments.
6. Develop effective written and oral communication skills.
7. Apply sociological thinking in analyses of social issues in sport.
8. Identify relevant academic literature and forms of writing.

Language Acquisition (LANG)

LANG 101 Language Acquisition - Beginning Level I Units: 3.00

For students studying abroad or at a Canadian University who wish to learn a modern language other than English and who have no previous knowledge of that language. A basic level of understanding, speaking, reading, and writing in the language. An introduction to elements of culture of the countries in which the language is spoken.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Equivalency LANG P10.

Offering Faculty: Faculty of Arts and Science



LANG 102 Language Acquisition - Beginning Level II Units: 3.00

For students studying abroad or at a Canadian University who wish to learn a modern language other than English and who have no previous knowledge of that language. A basic level of understanding, speaking, reading, and writing in the language. An introduction to elements of culture of the countries in which the language is spoken.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Equivalency LANG P11.

Offering Faculty: Faculty of Arts and Science

Languages, Literatures, and Cultures (LLCU)

LLCU 103 Beginning Language and Culture I Units: 3.00

A topics course on a language not already offered within the department. Offers a basic understanding, speaking, reading and writing for students with no knowledge of the language. The specific language will be announced on the Department of Languages, Literatures and Cultures web page.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

LLCU 104 Beginning Language and Culture II Units: 3.00

LLCU 104 is a topics course on a language not already offered within the department. It is a continuation of LLCU 103 building on the speaking, reading and writing of the language. The specific language will be announced on the Department of Languages, Literatures and Cultures web page.

Learning Hours: 120 (36 Lecture, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite LLCU 103.

Offering Faculty: Faculty of Arts and Science

LLCU 110 Linguistic Diversity and Identity Units: 3.00

This course explores the diversity of human languages, and the nature of linguistic identity across and within speech communities from a linguistics perspective. Topics that will be covered include: language families; linguistic typology; writing systems; language endangerment and revitalization; and situations of language contact, bilingualism, and sociolinguistic variation.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

LLCU 111 Introduction to Culture Units: 3.00

This course introduces the concept of culture and explores various ways of learning about culture and cultures. It includes discussion of academic theories about culture and cultural difference, as well as practice consideration of how to engage with cultural diversity. This course serves as the introduction to the LLCU Major. When possible, the course will incorporate a certificate in Intercultural Awareness provided by the Queen's University International Centre (QUIC). NOTE Also offered online. Consult Arts and Science Online. Learning Hours may vary.

Learning Hours: 120 (36 Lecture, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Critical discussion of the concept of 'culture' and how it relates to other important terms and ideas (like language, race, nation, or ethnicity).
2. Ability to reflect on how your own cultural context and experiences shape your expectations and daily life.
3. Understand some of the ways that structures of politics and economics affect relations among cultures and cultural groups.
4. Improve on academic skills including time management, communication with peers, and reading different types of texts.

Latin (LATN)

LATN 110 Introductory Latin Units: 6.00

Fundamentals of grammar, syntax and etymology for students with no or little knowledge of Latin; provides sufficient background to read Latin prose and poetry.

Learning Hours: 252 (72 Lecture, 180 Private Study)

Requirements: Prerequisite None. Note This course is not normally open to students with 4U Latin.

Offering Faculty: Faculty of Arts and Science

Liberal Studies (LIBS)

LIBS 100 Origins and Practices of Liberal Arts Units: 3.00

The Liberal Arts comprise three foundational disciplines: humanities, social sciences, and natural sciences. Such divisions have shaped everything from the organization of universities to the ways in which we organize and understand knowledge in our daily lives. The course will provide a background for each of the three liberal disciplines in ways that explain their historical origins and development over time, including their modern applications.

NOTE Only offered online. Consult Arts and Science Online.

Learning Hours: 120 (48 Online Activity, 72 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Summarize the historical development of humanities, social sciences and natural sciences to identify the distinctions among the three disciplines.
2. Explain each discipline's approach to scholarly study to be able to evaluate each disciplinary approach.
3. Articulate how each discipline relates to their own interest in studying the liberal arts.
4. Implement the process of gathering, assessing, interpreting information to write critically about a given topic.
5. Demonstrate the ability to consider peers' perspectives, to articulate a clear message, and to communicate effectively.

Linguistics (LING)

LING 101 Introduction to Linguistics: Words, Sentences, and Meaning Units: 3.00

An introduction to the linguistic study of language, focusing on the analysis of words (morphology), sentences (syntax), and meaning (semantics and pragmatics). We investigate patterns of similarity and difference across the languages of the world, the cognitive representation of linguistic knowledge, and social aspects of language use.

Learning Hours: 120 (36 Lecture, 12 Tutorial, 72 Private Study)

Requirements: Prerequisite None. Exclusion LING 100/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe patterns involving words, sentences, and meaning in human languages, using standard linguistic terminology.
2. Analyze data sets involving words, sentences, and meaning by applying the tools of generative linguistics.
3. Compare similar linguistic phenomena across different languages.
4. Relate linguistic phenomena involving words, sentences, or meaning to questions relating to language variation, and social aspects of language use.
5. Identify predictions made by a particular structural analysis of language, and evaluate those predictions against further data.



LING 102 Introduction to Linguistics: Sounds, Signs, and Perception Units: 3.00

An introduction to the linguistic study of language, focusing on the production and perception of both sounds and signs in human languages (phonetics), and the patterns into which signs or sounds are organized in different languages. We also review topics relating to language acquisition and social variation.

Learning Hours: 120 (36 Lecture, 12 Tutorial, 72 Private Study)

Requirements: Prerequisite None. Exclusion LING 100/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe patterns of data in language using standard linguistic terminology.
2. Analyze patterns of data (morphological, syntactic, and phonological) by applying the tools and theory introduced in class.
3. Compare similar linguistic phenomena across different languages.
4. Relate the description and analysis of a language to questions relating to language change, language acquisition, and social aspects of language use.
5. Identify predictions made by a particular linguistic analysis, and evaluate those predictions against further data.

Mathematics (MATH)

MATH 110 Linear Algebra Units: 6.00

This course is intended for students who plan to pursue a Major or Joint Honours Plan in Mathematics or Statistics. Provides a thorough introduction to linear algebra up to and including eigenvalues and eigenvectors.

Learning Hours: 264 (72 Lecture, 24 Tutorial, 168 Private Study)

Requirements: Prerequisite None. Recommended At least one 4U Mathematics course. Exclusion MATH 111/6.0*; MATH 112/3.0; MATH 212/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Understand the fundamental ideas of linear algebra, including linear systems, vector spaces, matrices, linear transformations, eigenvalues and eigenvectors, diagonalization, orthogonality, and diverse applications.
2. Give rigorous mathematical proofs of basic theorems.
3. Solve concrete problems in linear system, giving algorithmic solutions.

MATH 112 Introduction to Linear Algebra Units: 3.00

A brief introduction to matrix algebra, linear algebra, and applications. Topics include systems of linear equations, matrix algebra, determinants, the vector spaces \mathbb{R}^n and their subspaces, bases, co-ordinates, orthogonalization, linear transformations, eigenvectors, diagonalization of symmetric matrices, quadratic forms.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Recommended At least one 4U Mathematics course. Exclusion MATH 110/6.0; MATH 111/6.0*.

Course Equivalencies: MATH 110B/112 / APSC 174

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Apply the above skills to complex problems (e.g., error correcting codes, dynamical systems, games on graphs and probability).
2. Compute eigenvalues and eigenvectors and understand their utility.
3. Manipulate matrix equations and compute their determinants and inverses.
4. Solve systems of linear equations and visualize the related geometry.
5. Visualize and express algebraically the geometry of lines and planes.
6. Work with linear and affine transformations and relate them to matrices.

MATH 120 Differential and Integral Calculus Units: 6.00

This course is intended for students who plan to pursue a Major or Joint Honours Plan in Mathematics, Statistics, or Physics. A thorough discussion of calculus, including limits, continuity, differentiation, integration, multivariable differential calculus, and sequences and series.

Learning Hours: 288 (72 Lecture, 24 Tutorial, 192 Private Study)

Requirements: Prerequisite None. Recommended MHF4U and MCV4U or 4U AFIC or permission of the Department. Exclusion MATH 121/6.0; MATH 123/3.0; MATH 124/3.0; MATH 126/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Use the ideas in the course fluently. Indicators of fluency include: using the ideas in a new situation; using the ideas in a different order or manner than they have been presented; constructing minor extensions and variations of the ideas.
2. Write clear, clean, and well-reasoned mathematical arguments.
3. Understand the standards for such arguments.
4. Work through and solve more difficult problems, particularly those which may seem confusing at first and require time to digest and understand.
5. Demonstrate mastery of the underlying concepts of the course: limits, continuity, differentiation, integration, convergence.
6. Compute limits, derivatives, integrals, and infinite sums.

MATH 121 Differential and Integral Calculus Units: 6.00

Differentiation and integration with applications to biology, physics, chemistry, economics, and social sciences; differential equations; multivariable differential calculus. NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 240 (72 Lecture, 168 Private Study)

Requirements: Prerequisite None. Recommended MHF4U and MCV4U or equivalent, or 4U AFIC, or permission of the Department. Exclusion Maximum of 6.0 units from: MATH 120/6.0; MATH 121/6.0; MATH 123/3.0; MATH 124/3.0; MATH 126/6.0. Exclusion Maximum of one course from: MATH 121/6.0; MATH 130/3.0. Note This course is intended for students who wish to pursue a Major or Joint Honours Plan in a subject other than Mathematics or Statistics.

Course Equivalencies: MATH121; MATH121B; MATH122B

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Apply differential and integral calculus procedures and techniques in technical problems.
2. Extend the one-variable analysis to multi-variable functions.
3. Work with a variety of standard models and applications, using the tools of calculus to gain new understanding.
4. Communicate results in writing using appropriate mathematical format and notation.



MATH 124 Differential and Integral Calculus II Units: 3.00

Topics include techniques of integration; differential equations, and multivariable differential calculus.

NOTE For students who have credit for a one-term course in calculus. Topics covered are the same as those in the Winter term of MATH 121/6.0.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite MATH 123/3.0 or MATH 127/3.0 or MATH 130/3.0 or permission of the Department. Exclusion MATH 120/6.0; MATH 121/6.0; MATH 126/6.0; MATH 128/3.0.

Course Equivalencies: APSC172, MATH124

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Understand and perform the basic techniques of differential and integral calculus.
2. Apply these techniques to solve problems in the areas of biology, physics, chemistry, economics, and social sciences.
3. Solve basic problems in differential equations, multivariable differential calculus, and sequences and series.

MATH 126 Differential and Integral Calculus Units: 6.00

Differentiation and integration of the elementary functions with applications to the social sciences and economics; Taylor polynomials; multivariable differential calculus.

Learning Hours: 240 (72 Lecture, 24 Tutorial, 144 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units from: MATH 120/6.0; MATH 121/6.0; MATH 123/3.0; MATH 124/3.0; MATH 126/6.0. Exclusion Maximum of one course from: MATH 126/6.0; MATH 130/3.0. Note This course is primarily intended for students in the BAH program. Students in the BSCH, BCMPH or BCOM program should not enrol in this course.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Apply differential and integral calculus concepts and procedures in technical problems.
2. Extend the one-variable analysis to multi-variable functions.
3. Work with a variety of standard models and applications, using the tools of calculus to gain new understanding.
4. Communicate results in writing using appropriate mathematical format and notation.

MATH 127 Differential and Integral Calculus I Units: 3.00

Differentiation and integration of the elementary functions (mainly polynomial, rational, and exponential) with applications to the social sciences and economics.

NOTE MATH 127/3.0 and MATH 128/3.0 together, are equivalent to MATH 126/6.0.

NOTE This course is primarily intended for students in the BAH program. Students in the BSCH, BCMPH, or BCOM program should not enrol in this course.

Learning Hours: 108 (36 Lecture, 72 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units from: MATH 120/6.0; MATH 121/6.0; MATH 123/3.0; MATH 124/3.0; MATH 126/6.0; MATH 127/3.0; MATH 128/3.0. Exclusion Maximum of one course from: MATH 127/3.0; MATH 130/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Apply differential and integral calculus concepts and procedures to gain new understanding of complex systems.
2. Work with a variety of standard models from the social sciences, using the tools of calculus to solve optimization problems.
3. Communicate results in writing giving explanations that are careful, clear and elegant.

MATH 128 Differential and Integral Calculus II Units: 3.00

Multivariable functions, partial derivatives, contour diagrams, gradient, optimization, Lagrange multipliers, applications to the social sciences.

NOTE MATH 127/3.0 and MATH 128/3.0 together, are equivalent to MATH 126/6.0.

NOTE This course is primarily intended for students in the BAH program. Students in the BSCH, BCMPH, or BCOM program should not enrol in this course.

Learning Hours: 108 (36 Lecture, 72 Private Study)

Requirements: Prerequisite MATH 127/3.0 or permission of the Department. Exclusion Maximum of 6.0 units from: MATH 120/6.0; MATH 121/6.0; MATH 123/3.0; MATH 124/3.0; MATH 126/6.0; MATH 127/3.0; MATH 128/3.0. Exclusion Maximum of one course from: MATH 128/3.0; MATH 130/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Apply multivariable differential calculus concepts and procedures to gain new understanding of complex systems.
2. Work with a variety of standard models from the social sciences, using the tools of multivariable calculus to solve optimization problems.
3. Communicate results in writing giving explanations that are careful, clear and elegant.

MATH 130 Mathematics for Biochemistry and Life Sciences Units: 3.00

The course will have four topics, each approximately three weeks long. Topics include a review of functions, limits, and differentiation, antiderivatives, integration and fundamental theorem of calculus, differential equations, and probability.

Learning Hours: 120 (36 Lecture, 12 Tutorial, 72 Private Study)

Requirements: Prerequisite Registration in a BCHM or LISC Plan. Recommended 4U Calculus and Vectors (or equivalent). Exclusion MATH 121/6.0; MATH 123/3.0; MATH 126/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Use the ideas and methods of the differential and integral calculus to study living systems.
2. Work with the basic functions of differential calculus, in particular the exponential and logarithm functions, and solve optimization problems.
3. Work with the fundamental processes of integral calculus and differential equations.
4. Work with multivariable functions, contour diagrams and phase-plane analysis.
5. Work with probabilistic processes, and random variables in both discrete and continuous spaces, involving independent events and conditional probability.



Mohawk (MOHK)

MOHK 101 Beginning Mohawk Language and Culture I Units: 3.00

An introduction to the language and culture of the Kanyen'kehá:ka, the people of the Mohawk Nation. This course is designed for those who have neither been exposed to Kanyen'kéha, the Mohawk language, nor its traditional societal practices. Learn basic Mohawk language and gain a rich understanding of the Mohawk culture and tradition. NOTE Students can self-enrol during the course registration period. However, for students with previous knowledge of the language, final approval of enrolment is at the discretion of the instructor, pending an assessment of a student's language competency. Students can contact the instructor for an assessment anytime during the academic year (September-May). Please note that instructors may not be available for language competency assessments in May, June, July, and early August. Non-disclosure of previous knowledge of the language is considered a departure from academic integrity.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None. Exclusion LLCU 101/3.0* (Topic Title: Mohawk I). One-Way Exclusion May not be taken with or after MOHK 103/3.0; MOHK 104/3.0; MOHK 201/3.0; MOHK 202/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Engage in everyday conversations using common vocabulary and basic grammatical structures, allowing them, for example, to introduce themselves, ask and answer simple questions, and express their basic needs and preferences in the language.
2. Understand spoken language on familiar topics, such as personal information, basic descriptions, and daily routines, delivered at a slow to moderate pace and using beginner-level vocabulary
3. Read and comprehend short texts related to everyday life, employing basic reading strategies to understand sentence structure, main ideas, and key details with limited use of a dictionary.
4. Write simple messages, notes, and paragraphs employing correct syntax and basic vocabulary to express personal experiences, daily activities, and simple opinions.
5. Cultural Context: Throughout the course, students will gain an introductory understanding of the cultural context of the target language, including significant customs, traditions, and social norms associated with the regions where the language is spoken.

MOHK 102 Beginning Mohawk Language and Culture II Units: 3.00

A continuation of MOHK 101. Students will participate and begin to develop the ability to read, write and speak some basic Mohawk language and further their understanding of the richness of Mohawk culture, traditions, and worldviews.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite MOHK 101. Exclusion LLCU 102 (Topic Title: Mohawk II). One-Way Exclusion May not be taken with or after MOHK 103; MOHK 104; MOHK 201; MOHK 202.

Offering Faculty: Faculty of Arts and Science

MOHK 103 Oral Mohawk Language - Beginning I (TMT) Units: 3.00

This course is delivered in Tyendinaga and will offer foundational instruction in Kanyen'kéha, the language of the Mohawk People. It will build oral language skills for everyday communication and lay the groundwork for continuing study in MOHK 104. It is especially designed for those who have never been exposed to Kanyen'kéha as a living language. NOTE Only offered in Tyendinaga.

Learning Hours: 120 (108 Off-Campus Activity, 12 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

MOHK 104 Beginning Mohawk Language and Culture II Tyendinaga Units: 3.00

This course will be delivered in Tyendinaga and will be a continuation of MOHK 103. It will provide further instruction in Kanyen'kéha, the language of the Mohawk People at the beginning level. This course will allow students to continue developing their language abilities at the beginning level for continuing study in MOHK 201.

NOTE Only offered in Tyendinaga

Learning Hours: 120 (108 Off-Campus Activity, 12 Private Study)

Requirements: Prerequisite MOHK 103.

Offering Faculty: Faculty of Arts and Science

Music (MUSC)

MUSC 100 Small Ensemble Units: 1.50

Chamber music, collaborative piano, or small ensemble experience for qualified instrumentalists and singers. Topics may vary. Course includes weekly coaching and a minimum of one evaluation concert per term for all students. Credit attained only with regular attendance, active participation, and ample preparation.

NOTE Students will be registered into the course number that matches their current level of study (i.e., if a student is in their third year they will be registered in MUSC 300).

NOTE Collaborative Piano is strongly recommended for all piano and organ majors in the BMUS program.

LEARNING HOURS VARY.

Requirements: Prerequisite Permission of the School.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe current and previous experiences of musical performances, in both historical and contemporary contexts, in order to inform performance practice.
2. Describe their own performances with general descriptors of success and failure.
3. Identify and reproduce performance gestures in order to collaborate and coordinate musical performance with other musicians.
4. Show an awareness of present genres, styles, and performance traditions in order to identify appropriate professional conduct (such as rehearsal and concert etiquette) and methodologies.
5. Successfully reproduce a given musical style, reformulate a collection of available ideas, and recognize connections between previous experience and current performance in order to create a new musical interpretation.
6. Support a constructive team climate by treating other members with respect, maintaining positive attitude and interactions, and providing assistance and support for other team members in order to accomplish both regular rehearsal tasks and to create a successful final performance.

MUSC 103 Music, Meaning, and Society Units: 3.00

An introductory examination of the fundamental place of music in human identity and society as well as foundations in the critical listening, research, and writing skills used in music.

Learning Hours: 120 (36 Lecture, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe and discuss what music “is” (ontology) and what music “means” (hermeneutics) from a local and global perspective.
2. Recognize, describe and discuss how musical activities link to identity, ritual, and social life in a variety of global and local contexts.
3. Apply ideas of musical ontology, hermeneutics, and social function of various musics to current uses and practices of music.
4. Reflect on individual musical meaning and practice in terms of creating, performing and listening to music.
5. Describe and demonstrate culturally situated approaches to listening.
6. Identify and use key terminology to describe a variety of musical practices and contexts.
7. Identify, describe, and compare terminologies or elements across musical contexts, practices or genres.
8. Develop and combine skills in researching and communicating about music and meaning for a variety of audiences.

**MUSC 104 Music Fundamentals Units: 3.00**

An introduction to musical notation, ear training, theory and analysis.

NOTE Also offered online. Consult Arts and Science Online. Learning Hours may vary.

Learning Hours: 123 (36 Lecture, 3 Group Learning, 36 Online Activity, 48 Private Study)

Requirements: Prerequisite None. Exclusion MUSC P52. Note Students who hold Royal Conservatory Advanced Rudiments or higher should consult with the School for appropriate course placement. This course cannot be used as credit towards the BMUS Plan.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Identify and build scales and intervals, create progressions and cadences in order to analyze, possibly compose, and understand the basic structure of music.
2. Learn to reproduce by singing and playing on a keyboard, the elements of music (scales, chords and intervals) that you have learned in order to reinforce what is written through sound.
3. Memorize fundamental elements of musical notation such as the grand staff, notes in treble and bass clefs, accidentals, and note values/rests in order to read/write/perform simple printed music.

MUSC 105 Foundations in Tonal Music Units: 3.00

An exploration of the theoretical and practical applications of the rudiments of tonal music. Students gain fluency and competency in basic musicianship skills by completing modules in areas such as harmonization, ear-training, composition, arranging, music analysis, writing concert reviews, group performances and singing in the class choir.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite MUSC 104 or completion of a recognized music conservatory examination in advanced rudiments.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Develop a vocabulary for describing music that can be applied in situations of musical performance, musical pedagogy, writing about music, concert attendance, and working with other musicians.
2. Gain fluency and confidence in working with diatonic harmony and voice-leading as found in classical and popular music.
3. Identify and analyze music appropriate to the course content, showing where applicable, how diatonic harmony and smooth voice-leading underlies this music.
4. Master foundational concepts in rudiments and harmony, through written work, performance and/or listening, that can be applied in situations of composition, arranging, performing and/or improvising.
5. Synthesize and apply foundational concepts of diatonic harmony by replicating their knowledge in a variety of musical situations.

MUSC 112 Medium Ensemble Units: 1.50

Mid-size ensemble experience for qualified performers.

Topics vary. Course includes weekly rehearsals of a wider variety of repertoire, and a minimum of one concert per term for all students. Credit attained only with regular attendance, active participation, and ample preparation.

NOTE Students will be registered into the course number that matches their current level of study. (i.e. if a student is in third year they will be registered in MUSC 312).

Learning Hours: 168 (72 Practicum, 96 Private Study)

Requirements: Prerequisite Permission of the School upon audition.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe current and previous experiences of musical performances, in both historical and contemporary contexts, in order to inform performance practice.
2. Describe their own performances with general descriptors of success and failure.
3. Identify and reproduce performance gestures in order to collaborate and coordinate musical performance with other musicians.
4. Show an awareness of present genres, styles, and performance traditions in order to identify appropriate professional conduct (such as rehearsal and concert etiquette) and methodologies.
5. Successfully reproduce a given musical style, reformulate a collection of available ideas, and recognize connections between previous experience and current performance in order to create a new musical interpretation.
6. Support a constructive team climate by treating other members with respect, maintaining positive attitude and interactions, and providing assistance and support for other team members in order to accomplish both regular rehearsal tasks and to create a successful final performance.

MUSC 114 Introduction to Teaching Music to Children Units: 3.00

Hands-on, blended approach to the theory and practice of teaching and engaging with children through music. Students will be introduced to concepts through educational activities and will learn to identify and describe musical characteristics heard in a variety of repertoire as well as perform short pieces appropriate for novice performers.

NOTE Purchase of Instrument (Ukulele): estimated cost \$65.

Learning Hours: 120 (36 Lecture, 24 Online Activity, 60 Private Study)

Requirements: Prerequisite None. Recommended MUSC 104/3.0. Note This course is not available to students registered in the MUSC Specialization.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Develop a vocabulary for describing music that can be applied in situations of musical performance, musical pedagogy, writing about music, concert attendance, and working with other musicians.
2. Gain fluency and confidence in working with diatonic harmony and voice-leading as found in classical and popular music.
3. Identify and analyze music appropriate to the course content, showing where applicable, how diatonic harmony and smooth voice-leading underlies this music.
4. Master foundational concepts in rudiments and harmony, through written work, performance and/or listening, that can be applied in situations of composition, arranging, performing and/or improvising.
5. Synthesize and apply foundational concepts of diatonic harmony by replicating their knowledge in a variety of musical situations.

**MUSC 115 Large Ensemble Units: 1.50**

Large ensemble for qualified instrumentalists and singers. Topics vary. Course includes weekly rehearsals of a wide variety of repertoire, and a minimum of one concert per term, for all students. Credit attained only with regular attendance, active participation, and ample preparation.

NOTE Students will be registered into the course number that matches their current level of study (i.e., if a student is in third year they will be registered in MUSC 315).

Learning Hours: 168 (72 Practicum, 96 Private Study)

Requirements: Prerequisite Permission of the School upon audition.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe current and previous experiences of musical performances, in both historical and contemporary contexts, in order to inform performance practice.
2. Describe their own performances with general descriptors of success and failure.
3. Identify and reproduce performance gestures in order to collaborate and coordinate musical performance with other musicians.
4. Show an awareness of present genres, styles, and performance traditions in order to identify appropriate professional conduct (such as rehearsal and concert etiquette) and methodologies.
5. Successfully reproduce a given musical style, reformulate a collection of available ideas, and recognize connections between previous experience and current performance in order to create a new musical interpretation.
6. Support a constructive team climate by treating other members with respect, maintaining positive attitude and interactions, and providing assistance and support for other team members in order to accomplish both regular rehearsal tasks and to create a successful final performance.

MUSC 118 Music Performance Lessons for Non-Concentrators 1A Units: 3.00

Regular instrumental or vocal instruction for non-concentrators with an emphasis on individualized or small group study. Students may enter into this course from a variety of backgrounds, paths, and programs.

NOTE This course is intended for students outside of the BMUS or BMT programs. Students in the BMUS or BMT programs should instead enrol in MUSC 122.

NOTE Please contact the DAN School for information about the audition requirements.

NOTE In addition to the regular tuition fee, students are charged an additional fee for private music lessons: estimated cost \$800.

NOTE Students may be required to attend up to six concerts per term: estimated cost \$60-\$100. This can include free concerts.

Learning Hours: 119 (29 Laboratory, 90 Private Study)

Requirements: Prerequisite Registration is based on a successful audition and permission of the School. Exclusion MUSC 120/6.0; MUSC 121/6.0; MUSC 122/3.0; MUSC 123/3.0; MUSC 124/6.0; MUSC 125/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Recognize and identify current repertoire of the instrument and/or performance tradition in order to have a well-rounded understanding of the field and genre at large.
2. Identify, develop, and (re)produce the appropriate technique and style to create a comprehensive performance in the student's chosen genre and instrument/voice.
3. Expand, refine, and apply technique and interpretive capability in order to execute repertoire of increasing difficulty.
4. Distinguish what performance elements require improvement in a students' own performance, and to co-ordinate a plan for practicing and improving these skills, thereby acquiring advanced performance skills.
5. Perform in public with a growing sense of competence and confidence.

MUSC 119 Music Performance Lessons for Non-Concentrators 1B Units: 3.00

Regular instrumental or vocal instruction for non-concentrators with an emphasis on individualized or small group study. Students may enter into this course from a variety of backgrounds, paths, and programs.

NOTE This course is intended for students outside of the BMUS or BMT programs. Students in the BMUS or BMT programs should instead enrol in MUSC 123.

NOTE Please contact the DAN School for information about the audition requirements.

NOTE In addition to the regular tuition fee, students are charged an additional fee for private music lessons: estimated cost \$800.

NOTE Students may be required to attend up to six concerts per term: estimated cost \$60-\$100. This can include free concerts.

Learning Hours: 119 (29 Laboratory, 90 Private Study)

Requirements: Prerequisite Registration is based on a successful audition and permission of the School. Exclusion MUSC 120/6.0; MUSC 121/6.0; MUSC 122/3.0; MUSC 123/3.0; MUSC 124/6.0; MUSC 125/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Recognize and identify current repertoire of the instrument and/or performance tradition in order to have a well-rounded understanding of the field and genre at large.
2. Identify, develop, and (re)produce the appropriate technique and style to create a comprehensive performance in the student's chosen genre and instrument/voice.
3. Identify, develop, and (re)produce the appropriate technique and style to create a comprehensive performance in the student's chosen genre and instrument/voice.
4. Distinguish what performance elements require improvement in a students' own performance, and to co-ordinate a plan for practicing and improving these skills, thereby acquiring advanced performance skills.
5. Perform in public with a growing sense of competence and confidence.

MUSC 120 Applied Study I (Advanced Performance) Units: 6.00

A first year study of the student's applied subject (instrument or voice) in the performance concentration.

NOTE Students are invited to audition for this course based on exceptional performance ability in their BMUS entrance audition. Course auditions take place in early September and successful students are registered in MUSC 120 and MUSC 125 by the DAN School. An invitation to audition does not guarantee acceptance into this course. All decisions are final.

NOTE Students are required to attend twelve concerts per year (six per semester): estimated cost \$60-\$100. This can include free concerts.

Learning Hours: 263 (24 Practicum, 23 Individual Instruction, 216 Private Study)

Requirements: Prerequisite Registration in the MUSC Specialization and permission of the School. Corequisite MUSC 125/6.0. Exclusion MUSC 121/6.0; MUSC 124/6.0.

Offering Faculty: Faculty of Arts and Science



MUSC 121 Applied Study I Units: 6.00

The first year of study of the student's chief practical subject (instrument or voice).

NOTE Students are required to attend twelve concerts per year (six per semester); estimated cost \$60-\$100. This can include free concerts.

Learning Hours: 263 (24 Practicum, 23 Individual Instruction, 216 Private Study)

Requirements: Prerequisite Registration in the MUSC Specialization or MUTH Plan and permission of the School. Contact the DAN School for more details. Exclusion MUSC 118/3.0; MUSC 119/3.0; MUSC 120/6.0; MUSC 124/6.0; MUSC 125/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Recognize and identify current repertoire of the instrument and/or performance tradition in order to have a well-rounded understanding of the field and genre at large.
2. Recognize and identify current repertoire of the instrument and/or performance tradition in order to have a well-rounded understanding of the field and genre at large.
3. Expand, refine, and apply technique and interpretive capability in order to execute repertoire of increasing difficulty.
4. Distinguish what performance elements require improvement in a students' own performance, and to co-ordinate a plan for practicing and improving these skills, thereby acquiring advanced performance skills.
5. Perform in public with a growing sense of competence and confidence.

MUSC 122 Music Performance for Concentrators

1A Units: 3.00

Regular lessons in musical performance with a focus on a customized plan of study, in either small-group or individual instruction.

NOTE This course is intended for students in the BMUS or BMT programs. Students in other programs should instead apply for MUSC 118.

NOTE Students are required to attend six concerts per term; estimated cost \$60-\$100. This can include free concerts.

Learning Hours: 119 (29 Laboratory, 90 Private Study)

Requirements: Prerequisite Enrolment in a BMUS Program and permission of the School. Exclusion MUSC 118/3.0; MUSC 119/3.0; MUSC 120/6.0; MUSC 121/6.0; MUSC 124/6.0; MUSC 125/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Recognize and identify current repertoire of the instrument and/or performance tradition in order to have a well-rounded understanding of the field and genre at large.
2. Identify, develop, and (re)produce the appropriate technique and style to create a comprehensive performance in the student's chosen genre and instrument/voice.
3. Expand, refine, and apply technique and interpretive capability in order to execute repertoire of increasing difficulty.
4. Distinguish what performance elements require improvement in a students' own performance, and to co-ordinate a plan for practicing and improving these skills, thereby acquiring advanced performance skills.
5. Perform in public with a growing sense of competence and confidence.

MUSC 123 Music Performance for Concentrators**1B Units: 3.00**

Regular lessons in musical performance with a focus on a customized plan of study, in either small-group or individual instruction.

NOTE This course is intended for students in the BMUS or BMT programs. Students in other programs should instead apply for MUSC 119.

NOTE Please contact the Dan School if you plan to change your MUSC 122 instrument/voice, or performance genre. Changes cannot be guaranteed.

NOTE Students are required to attend six concerts per term: estimated cost \$60-\$100. This can include free concerts.

Learning Hours: 119 (29 Laboratory, 90 Private Study)

Requirements: Prerequisite Enrolment in a BMUS Program. Exclusion MUSC 118/3.0; MUSC 119/3.0; MUSC 120/6.0; MUSC 121/6.0; MUSC 124/6.0; MUSC 125/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Recognize and identify current repertoire of the instrument and/or performance tradition in order to have a well-rounded understanding of the field and genre at large.
2. Identify, develop, and (re)produce the appropriate technique and style to create a comprehensive performance in the student's chosen genre and instrument/voice.
3. Expand, refine, and apply technique and interpretive capability in order to execute repertoire of increasing difficulty.
4. Distinguish what performance elements require improvement in a students' own performance, and to co-ordinate a plan for practicing and improving these skills, thereby acquiring advanced performance skills.
5. Perform in public with a growing sense of competence and confidence.

MUSC 124 Applied Music I Units: 6.00

Private instrumental or vocal instruction for non-MUSC Specialization/Non-MUTH students. Auditions required.

NOTE Please contact the DAN School for information about the audition requirements.

NOTE In addition to the regular tuition fee, students are charged an additional fee for private music lessons: estimated cost \$1,600.

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 263 (24 Practicum, 23 Individual Instruction, 216 Private Study)

Requirements: Prerequisite Registration is based on a successful audition and permission of the School. Exclusion MUSC 120/6.0; MUSC 121/6.0; MUSC 125/6.0. Note This course is not available to students registered in the MUSC Specialization or MUTH Plan.

Offering Faculty: Faculty of Arts and Science

MUSC 125 Applied Study I (Advanced Performance Recital) Units: 6.00

Students will perform in a public recital in accordance with the guidelines established by the DAN School.

Requirements: Prerequisite Registration in the MUSC Specialization and permission of the School. Corequisite MUSC 120. Exclusion MUSC 121; MUSC 124.

Offering Faculty: Faculty of Arts and Science

**MUSC 126 Ear Training for Production Units: 3.00**

Study of the full spectrum of sound, focusing on listening and identifying frequencies, balance, timbres, and textures with increasing precision. Students will also learn active listening approaches situating themselves as intentional listeners with obligations to place and people.

Learning Hours: 120 (48 Laboratory, 24 Online Activity, 48 Private Study)

Requirements: Prerequisite None.

Course Equivalencies: MUSC 126; MUSC 126B

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Situate current audio practices in the historical context of the 20th century, including the adoption of sound analysis tools from military research, and attitudes toward environmental sound recording often governed by a 19th century "collector aesthetic" that in Canada can also be connected to other common extractive settler practices.
2. Assess and explain the sonic qualities of everyday sound environments, in terms that can be applied to an understanding of sound mixes in postproduction.
3. Identify the frequency of a tone or other sound with as much accuracy as possible.
4. Analyze audio recordings in terms of amplitude, frequency and timbre.
5. Listen for and address audio problems which require correction.

MUSC 127 Ear Training and Sight Singing I Units: 3.00

Training in sight reading and dictation.

NOTE Students with RCM Grade 8 Theory or equivalent may request permission from the School to take the course.

Learning Hours: 132 (72 Laboratory, 60 Private Study)

Requirements: Prerequisite (Registration in a MUTH or MUSC Specialization Plan) or MUSC 104/3.0 or permission of the School. Corequisite MUSC 192/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Sing a given diatonic melody at sight using tonic sol-fa syllables.
2. Identify intervals, diatonic scales, modes, chords, and progressions aurally.
3. Reproduce intervals, diatonic scales, modes, chords, and progressions in written notation.
4. Demonstrate the connection between sight-singing and ear training and how both skills are mutually reinforcing.
5. Perform notated rhythms at sight.

MUSC 129 Keyboard Skills Units: 3.00

A fundamental keyboard skills course designed for non-keyboard majors.

NOTE Course content will support and coordinate with the traditional diatonic harmonic material covered in MUSC 192/193 but will also include other styles. Successful completion of the course will require a working fluency at the keyboard in sight-reading, melodic and harmonic analysis as well as transcription. Activities will include harmonization, transposition and improvisation.

NOTE Students require previous rudiments and piano experience to take this course.

Learning Hours: 120 (24 Laboratory, 96 Private Study)

Requirements: Prerequisite (Registration in a MUTH or MUSC Specialization Plan) or permission of the School. Recommended MUSC 192/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Memorize basic diatonic harmonic progressions.
2. Realization/harmonization in block chords of elementary figured (also unfigured) bass and/or melodic fragments based on the vocabulary and syntax of the above.
3. Melody harmonization, transcription, and improvisation using simple accompanimental idioms.
4. Prepared score reading of keyboard and orchestral excerpts.
5. Sight-reading of single instrumental lines from orchestral scores employing treble, bass, alto clef, and/or tenor clefs as written or for use in transposition.
6. Melodic analysis.

MUSC 151 Introduction to Instrumental**Composition Units: 3.00**

This course teaches students the basics of instrumental music composition in the Western Art Music tradition with a strong emphasis on creativity and class participation.

NOTE No prior experience with composition is required, but students must demonstrate a thorough understanding of the rudiments of music prior to enrolment.

Learning Hours: 136 (12 Lecture, 24 Seminar, 4 Group Learning, 96 Private Study)

Requirements: Prerequisite Registration in a MUSC Specialization Plan or MUTH Plan or MUSC 104/3.0 or MUSC P52/3.0* or permission of the School. Exclusion MUSC 153/6.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate an understanding of musical notation (both handwritten and computer-generated).
2. Demonstrate the fundamentals of instrumental composition through the creation of new, original compositions -including the concepts of development and pacing, harmony, rhythm, texture and idiosyncratic instrumental capabilities.
3. Develop a broad sense of the trends and developments of instrumental music in the Western tradition from the Medieval era to the present.
4. Develop an understanding of concepts and terms associated with instrumental composition and performance - form, texture, harmony, colour, notation, ensemble, etc.
5. Develop the time management and networking skills involved in conceiving, composing, securing performers, rehearsing and presenting a new musical composition.
6. Gain experience with the process or workshopping new composition (both the students' own and work of others) collectively within a group.

MUSC 152 Introduction to Vocal Composition Units: 3.00

This course teaches students the basics of vocal composition in the Western Art Music tradition with a strong emphasis on creativity and class participation.

NOTE No prior experience with composition is required, but students must demonstrate a thorough understanding of the rudiments of music prior to enrollment.

Learning Hours: 136 (12 Lecture, 24 Seminar, 4 Group Learning, 96 Private Study)

Requirements: Prerequisite MUSC 104/3.0 or MUSC P52/3.0* or permission of the School. Exclusion MUSC 153/6.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Create a portfolio of works for voice which demonstrates the fundamentals of vocal composition through the creation of new, original compositions - including compositional concepts such as development and pacing, harmony, rhythm, texture, and concepts specific to writing for voice such as setting text, working with vowels and consonants, supporting the voice harmonically and texturally, and writing for multiple voices.
2. Demonstrate an understanding of musical notation and competency with computer notation and professional score presentation.
3. Develop a broad sense of the trends and developments of vocal music in the Western tradition from the Medieval era to the present.
4. Develop an understanding of concepts and terms associated with vocal composition and performance, e.g. tessitura, fach, passaggio, melisma, chest voice, head voice, etc.
5. Develop the time management and networking skills involved in conceiving, composing, securing performers, rehearsing and presenting a new musical composition.
6. Gain experience with the process of workshopping new compositions (both your own and others) collectively within a group.



MUSC 156 Introduction to Digital Audio Recording, Editing, and Mixing Units: 3.00

Basics of digital audio recording, with a focus on free/open-source software tools. Through assignments oriented towards mastering basics necessary for podcast or music recording/mixing, you will gain experience with digital audio workstation software for multitrack production, and tools such as EQ, compression, and limiting.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

Learning Hours: 120 (24 Lecture, 24 Online Activity, 72 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

MUSC 157 Amplified Sound in Live Contexts Units: 3.00

A hands-on exploration of how sound is mediated and amplified for live events, with emphasis on sound design for theatre and sound reinforcement for live music. Students will be introduced to the equipment used in live audio production including microphones, mixers, amplifiers and loudspeakers.

Learning Hours: 120 (18 Lecture, 18 Laboratory, 24 Online Activity, 60 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Assess the sound reinforcement needs of a person or group, whether it is a primarily musical or theatrical occasion, and design a solution.
2. Assess the acoustic properties of a performance space using ears or analysis tools (such as decibel or spectrum meters on phones) to identify problems that can be solved with creative use of EQ and microphone/speaker placement.
3. Identify, describe and properly employ the features and functions of sound equipment including microphones, audio interfaces, mixers, amplifiers, loudspeakers, and analysis tools such as spectrum and decibel meters.
4. Produce an event for a live band or ensemble which requires amplified presentation.
5. Design, produce and deliver amplified sound elements for a live theatrical scene using a computer cueing system.

MUSC 158 Sampling and Beatmaking Units: 3.00

An introduction to contemporary tools and issues in digital music production, songwriting, composition, and beat-making. Students will acquire foundational skills in Digital Audio Workstation (DAW) Software Concepts examined include sampling, sequencing, sound design, drum programming, song structure, software instruments, basic synthesis, remixing, licensing, and the history of sampling.

NOTE Students with substantial experience in creating music in a DAW can submit a portfolio of works to the School for entry directly into MUSC 159. Students with no previous experience in DAW production should enrol in MUSC 158.

Learning Hours: 120 (18 Lecture, 18 Laboratory, 24 Online Activity, 60 Private Study)

Requirements: Prerequisite None. One-Way Exclusion MUSC 159/3.0; MUSC 254/3.0; MUSC 255/6.0*; MUSC 256/3.0; MUSC 397/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate fluency in use of digital audio workstation software such as Ableton Live.
2. Record and manipulate samples from existing audio sources in old and new formats from vinyl to MP3, including locating online sources of free and open-source samples.
3. Create engaging beats that integrate a variety of timbres, textures and forms using sampled or synthesized sounds, in combination with complementary FX such as reverb and delay.
4. Operate control surfaces and other MIDI devices for live performance handling of sampled and other electronic sounds.
5. Understand the history of sampling cultures and describe ethical considerations for recording, selecting, or manipulating sounds.

MUSC 159 Creative Production: Beats, Songs, and Soundtracks Units: 3.00

Students in this course will apply and extend their skills in digital music production, songwriting, composition and beat-making. This is a hands-on, project-based course where students will apply their abilities to produce more extensive works such as an EP, music and sound design for a game, or soundtracks for film or other visual media.

Learning Hours: 120 (18 Lecture, 18 Laboratory, 24 Online Activity, 60 Private Study)

Requirements: Prerequisite MUSC 158/3.0 or permission of the School after submission of a portfolio.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate fluency in use of digital audio workstation software such as Ableton Live.
2. Record and manipulate samples from existing audio sources in old and new formats from vinyl to MP3, including locating online sources of free and open-source samples.
3. Create engaging beats that integrate a variety of timbres, textures and forms using sampled or synthesized sounds, in combination with complementary FX such as reverb and delay.
4. Operate control surfaces and other MIDI devices for live performance handling of sampled and other electronic sounds.
5. Understand the history of sampling cultures and describe ethical considerations for recording, selecting, or manipulating sounds.

MUSC 171 Social History of Popular Music Units: 3.00

A survey of important trends in 20th century Western popular music. Topics include genres, individual artists and groups, record labels and stylistic trends, and sociological issues.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Compare and contrast musical elements and intentions.
2. Recall persons, events, and themes critical to the development of popular music.
3. Recognise and define musical concepts and elements in popular songs.
4. Understand the social, cultural and historical influences that shaped the musical genres covered in class.
5. Understand Western popular music at the intersection of issues pertaining to race, gender, and class.

**MUSC 192 Theory and Analysis IA Units: 3.00**

Diatonic voice-leading and harmony, principles of form, and small structures through part-writing, analysis, and composition.

NOTE Students having received 80% or higher on a conservatory advanced rudiments exam may enrol in the course with permission of the School.

Learning Hours: 120 (36 Lecture, 12 Tutorial, 72 Private Study)

Requirements: Prerequisite ([Registration in the MUSC Specialization Plan or MUTH Plan] or [a minimum grade of A- in MUSC 104/3.0] or MUSC 105/3.0) or permission of the School. Exclusion MUSC 191/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Master, through written work, foundational concepts in Western music theory's practice of diatonic harmony in SATB chorale and keyboard textures.
2. Identify and analyze common-practice era music, showing how diatonic harmony and smooth voice-leading underlies virtually all tonal music.
3. Develop initial knowledge and applications of computer notation of music.
4. Synthesize and apply foundational concepts in diatonic harmony by replicating their knowledge in a variety of musical situations.
5. Synthesize and apply foundational concepts in diatonic harmony through composition and apply these concepts of creativity to other areas.

MUSC 193 Theory and Analysis IB Units: 3.00

A continuation of diatonic voice-leading, harmony, and principles of form through part-writing, analysis, and composition.

Learning Hours: 120 (36 Lecture, 12 Tutorial, 72 Private Study)

Requirements: Prerequisite A minimum grade of C- in MUSC 192/3.0. Exclusion MUSC 191/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Master, through written work, more complex concepts of Western diatonic harmony in various musical textures and small forms, and expand and deepen this knowledge through modal counterpoint.
2. Identify and analyze common-practice era music, showing how diatonic harmony and smooth voice-leading underlies virtually all tonal music and develop from principles of modal counterpoint.
3. Practice and refine applications of computer notation of music.
4. Synthesize and apply foundational concepts in diatonic harmony and modal counterpoint by replicating knowledge in a variety of musical situations.
5. Synthesize and apply foundational concepts in diatonic harmony and modal counterpoint through composition and apply these concepts of creativity to other areas.

Music Theatre (MUTH)

MUTH 110 The Republic to Rationalism: History, Arts, and Performance I Units: 3.00

An introduction to Western music, theatre, art, and literature in historical and global perspective, focusing on drama and music to place artistic creation between 400 BCE-1750 CE in a social and political chronological framework. We will explore Mediterranean Antiquity, European Medievalism, Global Early Modernity, and the European Baroque, weaving in questions of historiography and cultural exchange.

Learning Hours: 114 (36 Lecture, 36 Online Activity, 42 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Recall chronological framework of aesthetic eras/ideas.
2. Compare and differentiate these ideas in global perspective.
3. Develop skills in critical thought, research, and writing to respond to different forms of art in historical perspective.
4. Recognize how different forms of art reflect and reinforce social functions.

MUTH 111 Listening to Revolutions: History, Arts, and Performance II Units: 3.00

An introduction to the study of Western music, theatre, fine art, and literature in historical and global perspective. Using drama and music as a focal point, this interdisciplinary course will place artistic creation in a social, philosophical, and political chronological framework. Key periods include European Romanticism, Modernism, and Popular Culture. NOTE Also offered at the Bader International Studies Centre, Herstmonceux. Learning Hours may vary.

Learning Hours: 114 (36 Lecture, 36 Online Activity, 42 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Compare and differentiate these ideas in global perspective.
2. Demonstrate skills in critical thought, research, and writing to respond to different forms of art in historical perspective.
3. Demonstrate the ability to communicate these ideas.
4. Recall chronological framework of aesthetic eras/ideas.
5. Recognize how different forms of art reflect and reinforce social functions.

MUTH 160 Music Theatre Ensemble Units: 1.50

Performance experience for qualified musicians in a staged vocal ensemble. Topics include musical theatre, opera, or other ensemble formats combining voice and drama.

NOTE Placement is made at the discretion of the School based on an audition or other criteria.

NOTE Students will be registered into the course number that matches their current level of study. (i.e., if a student is in third year they will be registered in MUTH 360).

Learning Hours: 168 (72 Practicum, 24 Group Learning, 72 Private Study)

Requirements: Prerequisite Permission of the School upon audition.

Offering Faculty: Faculty of Arts and Science

Pathology and Molecular Medicine (PATH)

PATH 111 Data Science Through Visualization Units: 3.00

This blended course is designed to bring awareness and raise excitement in data science. Through different types of visualization students will learn key concepts of data science and big data investigation. The course will also explore examples of how data science is applied to solve problems in various disciplines.

Learning Hours: 120 (12 Lecture, 24 Group Learning, 36 Online Activity, 48 Private Study)

Requirements: Prerequisite None. Exclusion STAT 161/3.0.

Offering Faculty: Faculty of Health Sciences

Course Learning Outcomes:

1. Perform, observe, and interpret visualization of data from variety of sources.
2. Apply skills acquired to critically evaluate and summarize data.
3. Describe appropriate data visualization for diverse types of challenges.
4. Collaborate and communicate an understanding of concepts and diverse perspectives in data science.



PATH 120 Understanding Human Disease in the 21st Century Units: 3.00

The course provides an introduction to human disease and our understanding of key conditions with major global health and societal impact, including cardiovascular, neurological and infectious diseases and cancer. The basic concepts of disease mechanisms and current management will be explored using specific diseases and clinical example cases. Also offered online.

LEARNING HOURS may vary 120(12L;36G;36O;36P)

Requirements: One-Way Exclusion PATH 310/3.0; CANC 440/3.0

Offering Faculty: Faculty of Health Sciences

Course Learning Outcomes:

1. Access the individual and population impacts of human disease by effectively researching major issues affecting changes in global health
2. Apply the skills acquired to critically evaluate scientific literature on human disease
3. Collaborate and communicate an understanding of the causes and implications of human disease including current and future management and treatments.
4. Explain how different populations are differentially impacted by the same disease
5. Identify and describe mechanisms underlying human disease and be able to recognize potential origins of human disease states

Pharmacology and Toxicology (PHAR)

PHAR 100 Introductory Pharmacology Units: 3.00

Topics covered include central nervous system stimulants and depressants, narcotics, alcohol, cardiovascular agents, contraceptives, environmental toxicants, mechanism of drug action and disposition, antibiotics, drugs used in sports, over-the-counter drugs, food additives, and vitamins.

NOTE Also offered online. Consult the Bachelor of Health Sciences program office. Learning Hours may vary.

Requirements: One-Way Exclusion PHAR 230/3.0; PHAR 270/3.0; PHAR 340/3.0; PHAR 370/3.0; PHAR 450/3.0

Offering Faculty: Faculty of Health Sciences

Course Learning Outcomes:

1. Apply learned knowledge of the essential elements of a phase 3 clinical trial to design a hypothetical clinical trial for a new drug to treat a specific disease or condition. (PLO 4, 8; Assessment 1)
2. Describe the mechanism of action and physiological effects of classes of drugs to be able to summarize the reason(s) for their use and abuse in society. (PLO 4, 6; Assessments 2-5)
3. Discuss the pharmacological principles of drug abuse to advocate for healthy and appropriate drug use. (PLO 4, 6; Assessment 2)
4. Effectively discuss and apply relevant pharmacological principles within a group to successfully complete collaborative assignments. (PLO 4; Assessments 1, 2)

Philosophy (PHIL)

PHIL 111 What is Philosophy? Units: 6.00

An introduction to philosophy through the examination of a number of classic philosophical works, with an evaluation of the positions and arguments offered in each.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 240 (72 Lecture, 168 Private Study)

Requirements: Prerequisite None. Exclusion PHIL 151/3.0.

Note Students considering a Major or Joint Honours Plan in PHIL are strongly encouraged to take PHIL 111/6.0 or PHIL 115/6.0 in their first year of study.

Course Equivalencies: PHIL111; PHIL111A

Offering Faculty: Faculty of Arts and Science

PHIL 115 Fundamental Questions Units: 6.00

Representative basic philosophical issues will be explored, such as: good and bad arguments, the source of moral obligation, the justification of knowledge claims, free will and determinism, the social enforcement of gender roles, taking responsibility for the environment, and the meaning of life.

Learning Hours: 240 (48 Lecture, 24 Tutorial, 168 Private Study)

Requirements: Prerequisite None. Note Students considering a Major or Joint Honours Plan in PHIL are strongly encouraged to take PHIL 111/6.0 or PHIL 115/6.0 in their first year of study.

Offering Faculty: Faculty of Arts and Science

PHIL 151 Great Works of Philosophy Units: 3.00

An examination of some major milestones in the development of philosophical thought. The course will involve both the exposition of texts and discussion of the philosophical issues which they raise.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None. Exclusion PHIL 111/6.0.

Offering Faculty: Faculty of Arts and Science

PHIL 153 The State and the Citizen Units: 3.00

An introduction to political philosophy which explores the relationship between state and citizen. Issues include: civil disobedience, nationalism, the welfare state, anarchism and the capitalist state.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

PHIL 157 Moral Issues Units: 3.00

An introduction to ethics via an examination of controversial moral issues. Special topics: abortion; animal rights; euthanasia.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 120 (24 Lecture, 12 Group Learning, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Physics (PHYS)
PHYS 104 Fundamental Physics Units: 6.00

Mechanics, including systems of particles and rigid body motion; gravitation; fluids; electricity and magnetism; oscillatory motion and waves; topics in modern physics. The material is presented at a more fundamental level appropriate for students who are seeking a deeper appreciation of physics, and who may be considering a concentration in Physics.

Learning Hours: 240 (72 Lecture, 36 Laboratory, 36 Tutorial, 96 Private Study)

Requirements: Prerequisite None. Corequisite (MATH 120 or MATH 121 or [MATH 123 and MATH 124]). Exclusion PHYS 106; PHYS 115; PHYS 116; PHYS 117/6.0; PHYS 118; PHYS 119. Recommended 4U Physics.

Offering Faculty: Faculty of Arts and Science

PHYS 106 General Physics Units: 6.00

Mechanics, including systems of particles and rigid body motion; fluids; electricity and magnetism; oscillatory motion and waves; heat, light and sound; topics in modern physics. Aspects of physics useful for further work in other sciences will be emphasized.

NOTE Also offered at the Bader College, UK. Learning Hours may vary.

Learning Hours: 240 (72 Lecture, 36 Laboratory, 36 Tutorial, 96 Private Study)

Requirements: Prerequisite None. Corequisite (MATH 120 or MATH 121 or [MATH 123 and MATH 124]). Exclusion PHYS 104; PHYS 115; PHYS 116; PHYS 117/6.0; PHYS 118; PHYS 119. Recommended 4U Physics.

Offering Faculty: Faculty of Arts and Science

**PHYS 115 Introduction to Physics I Units: 3.00**

An algebra-based course dealing with basic physics concepts, including dynamics, fluids, and basic thermodynamics.

PHYS 115 includes a required lab component.

NOTE PHYS 115 and PHYS 116 together, are equivalent to PHYS 117/6.0.

NOTE Manual: estimated cost \$10.

Learning Hours: 132 (36 Lecture, 12 Laboratory, 12 Tutorial, 72 Private Study)

Requirements: Prerequisite None. Exclusion PHYS 104; PHYS 106; PHYS 117/6.0; PHYS 118; PHYS 119.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Analyze the information contained in various hypothetical problem scenarios within the context of recognizable physics laws and apply systematic problem-solving strategies to solve for unknown quantities.
2. Identify and interpret the laws of nature as summarized by the fundamental concepts that constitute the foundation of classical physics.
3. Interpret and apply basic experiment methodologies designed to test fundamental concepts through direct observation.
4. Quantitatively analyze measurement results with effective evaluation of experimental uncertainties.
5. Relate nature's basic laws describing forces, motion, energy, momentum, thermodynamics, and the conservation rules that constrain these laws to real world applications.

PHYS 116 Introduction to Physics II Units: 3.00

An algebra-based course dealing with basic physics concepts, including waves, electromagnetism, and basic optics.

PHYS 116 includes a required lab component.

NOTE PHYS 115 and PHYS 116 together, are equivalent to PHYS 117/6.0.

NOTE Manual: estimated cost \$10.

Learning Hours: 132 (36 Lecture, 12 Laboratory, 12 Tutorial, 72 Private Study)

Requirements: Prerequisite PHYS 115. Exclusion PHYS 104; PHYS 106; PHYS 117/6.0; PHYS 118; PHYS 119.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Analyze the information contained in various hypothetical problem scenarios within the context of recognizable physics laws and apply systematic problem-solving strategies to solve for unknown quantities.
2. Identify and interpret the laws of nature as summarized by the fundamental concepts that constitute the foundation of classical physics.
3. Interpret and apply basic experiment methodologies designed to test fundamental concepts through direct observation.
4. Quantitatively analyze measurement results with effective evaluation of experimental uncertainties.
5. Relate nature's basic laws describing forces, motion, energy, waves, electromagnetism, optics, and the conservation rules that constrain these laws to real world applications.

PHYS 118 Basic Physics Units: 6.00

An algebra-based course dealing with basic Physics concepts, including dynamics, fluids, waves, electromagnetism, and basic optics. Emphasis is placed on the development of problem-solving skills through the use of Mastery based course delivery.

NOTE Only offered online. Consult Arts and Science Online.

Learning Hours: 228 (132 Online Activity, 96 Private Study)

Requirements: Prerequisite None. Recommended 4U Physics. Exclusion PHYS 104/6.0; PHYS 106/6.0; PHYS 115/3.0; PHYS 116/3.0; PHYS 117/6.0.

Course Equivalencies: PHYS 118/118B

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Students will apply nature's basic laws describing forces and motion, energy and momentum, and the conservation rules that constrain these laws to real world applications.
2. Students will be able to analyze the information contained in various problem scenarios within the context of recognizable physics laws and utilize systematic problem-solving strategies to solve for unknown quantities.
3. Students will be able to identify and interpret the laws of nature as summarized by the fundamental concepts that constitute the foundations of classical physics.

PHYS 119 Introductory Physics Laboratory Units: 1.50

This is the laboratory portion of PHYS 117, offered for students who completed the online PHYS 118 Basic Physics course, but would like a laboratory experience. A laboratory class in mechanics, electricity, waves and optics. This course runs 8 experiments through the fall and winter terms.

Requirements: Prerequisite PHYS 118/6.0. Exclusion PHYS 104/6.0; PHYS 106/6.0; PHYS 115/3.0; PHYS 116/3.0; PHYS 117/6.0.

Offering Faculty: Faculty of Arts and Science

Physiology (PHGY)**PHGY 170 Human Cell Physiology Units: 3.00**

This is an introductory level course on the structure and function of human cells for students interested in pursuing human health-related disciplines. Students will also learn the principles of energy metabolism, cell growth and proliferation, and how cells interact with their environment. There is also an overall focus to relate cellular processes to human function and disease, culminating in a group presentation focused on one specific cell process and how it affects health. Students taking this course will be well-prepared for upper year molecular biology courses.

NOTE Also offered online. Consult the Bachelor of Health Sciences program office. Learning Hours may vary.

Learning Hours: 114 (36 Online Activity, 78 Private Study)

Requirements: One-Way Exclusion KNPE 225/3.0

Offering Faculty: Faculty of Health Sciences

Course Learning Outcomes:

1. Identify and describe basic cellular components to be able to characterize their roles in the structure and function of human cells (PLO 1,3; Assessment 1-5)
2. Integrate a basic understanding of cellular processes to articulate how human cells interact with their environment (PLO 1,3; Assessment 1-5)
3. Recognize key principles of human cell function in order to understand the cellular basis of health and disease (PLO 1,3; Assessment 1-5)
4. Understand how cells, tissues, organs and systems work together in order identify and explain the mechanisms through which the body maintains homeostasis.



Political Studies (POLS)

POLS 101 Contemporary Issues in Politics Units: 3.00

An examination of current political issues. By examining an issue or problem students will be exposed to political institutions, processes and concepts in political science. The subject matter will change depending on the instructor and current political events.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 12 Off-Campus Activity, 72 Private Study)

Requirements: Prerequisite None. Note This course does not lead to further courses in Political Studies. This course cannot be used as credit towards any POLS Plan.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Apply political science concepts such as power, and authority to contemporary political issues.
2. Develop and practice critical skills in writing, reading, and political analysis.
3. Differentiate between different actors, institutions, and parties and their role in political decision making.
4. Understand how political decisions are made in different contexts.

POLS 111 Power and Politics Units: 3.00

This course introduces students to core concepts and tools of political science and their relationship to politics.

NOTE POLS 111 and POLS 112 together, are equivalent to POLS 110/6.0*.

NOTE Also offered online; consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None. Exclusion POLS 110/6.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Master important concepts in political science and apply them to institutions and the practice of politics.
2. Understand how concepts in political science can be applied to contemporary political issues.
3. Develop critical analysis in reading and writing by analyzing journal articles, chapters, and articles.
4. Begin mastering skills such as time management, argumentative writing, and active engagement in tutorials.

POLS 112 Enduring Political Debates Units: 3.00

This course examines important and enduring debates in politics and political science. Themes will vary year to year. NOTE POLS 111 and POLS 112 together, are equivalent to POLS 110/6.0*.

NOTE Also offered online; consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None. Exclusion POLS 110/6.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Learn key concepts and debates in politics and political science.
2. Develop critical analysis in reading and writing by analyzing journal articles, chapters, and articles.
3. Develop skills in time management, argumentative writing, and active engagement in tutorials.

Portuguese (PORT)

PORT 103 Beginning Portuguese and Culture I Units: 3.00

Introduction to the language and culture of Portugal and Brazil, acquiring basic communicative skills, vocabulary, and structures of the Portuguese language. This course promotes knowledge and understanding of the social, cultural, and historical contexts of both countries.

NOTE Students can self-enrol during the course registration period. However, for students with previous knowledge of the language, final approval of enrolment is at the discretion of the instructor, pending an assessment of a student's language competency. Students can contact the instructor for an assessment anytime during the academic year (September-May). Please note that instructors may not be available for language competency assessments in May, June, July, and early August. Non-disclosure of previous knowledge of the language is considered a departure from academic integrity.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Engage in everyday conversations using common vocabulary and basic grammatical structures, allowing them, for example, to introduce themselves, ask and answer simple questions, and express their basic needs and preferences in the language.
2. Understand spoken language on familiar topics, such as personal information, basic descriptions, and daily routines, delivered at a slow to moderate pace and using beginner-level vocabulary.
3. Read and comprehend short texts related to everyday life, employing basic reading strategies to understand sentence structure, main ideas, and key details with limited use of a dictionary.
4. Write simple messages, notes, and paragraphs employing correct syntax and basic vocabulary to express personal experiences, daily activities, and simple opinions.
5. Cultural Context: Throughout the course, students will gain an introductory understanding of the cultural context of the target language, including significant customs, traditions, and social norms associated with the regions where the language is spoken.

PORT 104 Beginning Portuguese and Culture II Units: 3.00

Continuation of PORT 103/3.0. Basic communicative skills, vocabulary, and structures of the Portuguese language and the knowledge and understanding of the social, cultural, and historical contexts of Portugal and Brazil, and other Portuguese speaking countries.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite PORT 103/3.0.

Offering Faculty: Faculty of Arts and Science

Psychology (PSYC)

PSYC 100 Principles of Psychology Units: 6.00

An introductory survey of basic areas of psychology including perception, cognition, learning and motivation and their biological substrata. Also reviewed are child development, individual differences, social psychology and clinical psychology. Research participation experience is provided for students on an individual voluntary basis. Students are encouraged to participate in up to five hours of research experimentation. The course is based on a blended model where on-line learning is supplemented with a weekly lecture and small-group learning lab.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).

NOTE Also offered at Bader College, UK (Learning Hours may vary).

Learning Hours: 221 (24 Lecture, 22 Laboratory, 100 Online Activity, 75 Private Study)

Requirements: Prerequisite None. Exclusion PSYC 101/3.0; PSYC 102/3.0; PSYC 103/3.0.

Course Equivalencies: PSYC 100A/B; PSYC100 (online)

Offering Faculty: Faculty of Arts and Science



Religious Studies (RELS)

RELS 132 Western Religions Units: 3.00

This course will examine Judaism, Christianity, Islam as well as some indigenous traditions and new religious movements. It will primarily consider these religious traditions in their historical context, looking carefully at their origins, sacred literature, and ritual life, though at times we will consider selected contemporary issues that highlight different religions' response to modernity.

NOTE RELS 132 and RELS 133 together, are equivalent to RELS 131.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units from RELS 131/6.0; RELS 132/3.0; RELS 133/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Develop a definition of religion that recognizes the diversity of religious traditions.
2. Identify the world's religious traditions within their global and cultural context.
3. Critically analyze contemporary religious issues in their historical roots.
4. Communicate their critical thinking through research and writing.

RELS 133 Eastern Religions Units: 3.00

This course will examine a host of religions from the "east". It will primarily consider these religious traditions in their historical context, looking carefully at their origins, sacred literature, and ritual life, though at times we will consider selected contemporary issues that highlight different religions' response to modernity.

NOTE RELS 132 and RELS 133 together, are equivalent to RELS 131.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units from RELS 131/6.0; RELS 132/3.0; RELS 133/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Develop a definition of religion that recognizes the diversity of religious traditions.
2. Identify the world's religious traditions within their global and cultural context.
3. Critically analyze contemporary religious issues in their historical roots.
4. Communicate their critical thinking through research and writing.

RELS 137 Religion and Film Units: 3.00

This course will explore how religion is portrayed in film, noting particularly the depiction of religious belief, practices, practitioners, and institutions, and the use of religious symbols and metaphors.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None. Equivalency RELS 237/3.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Analyze how religion can be presented in films.
2. Collaborate with others in critical thinking, research, and writing.
3. Demonstrate knowledge of the basic terminology and concepts for the academic study of religion; demonstrate comprehension of different analytical methods that can be used in the interpretation of religion in film.
4. Evaluate how a film's use of religion reflects and/or creates worldviews.

RELS 140 Religion and Science Units: 3.00

This course examines the categories of both science and religion and attempts to explore the possible relationships between them. Case studies involve: medicine and health, relationships with other animals, concepts of human nature, super/natural ontologies, and science-and-technology-based religions.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Engage with the complexity of relationships between religion and science using the methods and theories of religious studies.
2. Examine the form and functions of a variety of stories about religion and science that people have told themselves across different places and times.
3. Formulate research questions about religion and science and analyze the significance of these research questions for public life and academic conversations.
4. Identify some key concepts, issues, and debates going on in the study of religion and science.
5. Practice your scholarly writing and conversation skills.

RELS 162 Religion, News, and Media Units: 3.00

This course will identify and describe characteristics of religion as they appear in news reports of social, political, and economic aspects of public life and analyze how the news presents, shapes, and creates perceptions of religion in public discourse.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Closely read and critically evaluate media depictions of religion.
2. Describe how the advent of new media have changed religious practice.
3. Recognize how news media create and shape discourses about religion.
4. Write a cogent, critical analysis of news media engaging with religion.

RELS 163 Popular Culture and Religion Units: 3.00

This course will identify and describe characteristics of religion as they appear in popular culture (e.g. fashion; comics; movies; art; music; novels; sitcoms; dramas; video games) and analyze how such depictions present, shape, and create perceptions of religion in public discourse.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science



Sociology (SOCY)

SOCY 100 Perspectives in Sociology Units: 3.00

This course introduces students to foundational and contemporary perspectives in Sociology. Students will learn to develop and use their sociological imagination. Major classical sociological perspectives are explored and then questioned and challenged. We focus on critical analysis, anti-oppressive frameworks, and inclusive pedagogy, to develop a more comprehensive sociological understanding. Different perspectives are applied to culture, social structure, social institutions, social control, inequality, and resistance. Sociological methods, methodologies, and research tools are introduced.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite None. Exclusion SOCY 122/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Transcend “everyday thinking” about the social world and develop a “sociological imagination”.
2. Define and critically discuss the fundamental ideas that have shaped sociology as a discipline.
3. Critically examine the ways that sociology has been challenged by interdisciplinary thinkers.
4. Identify and explain new perspectives that reframe traditional sociological thinking.
5. Develop a sociological understanding of social structures, social institutions, and culture.
6. Identify central issues related to social and structural inequalities, including the impact of racism, sexism, homophobia, transphobia, classism, and ableism on peoples' lives.
7. Use intersectionality as an analytical tool.
8. Be introduced to the methods, methodologies, and research tools that are used in the discipline of sociology.
9. Develop tools to read peer-reviewed articles understand the main arguments developed within them.
10. Learn how to discuss and grapple with readings with peers.

SOCY 101 Major Themes in Sociology Units: 3.00

This course uses sociological perspectives to examine major processes, practices, and institutions shaping the social world. Social stratification, inequalities, identities, and justice, and the social world as structured by class, gender, sexuality, race, disability and poverty, are explored. Institutions, dimensions, and practices shaping social life are explored, such as nationalism, social movements, the state; the family, education, the media; work and labour, health and illness, crime, sport, urbanization and environment. Students also consider forms of public sociology and engagement.

Learning Hours: 120 (24 Lecture, 12 Tutorial, 84 Private Study)

Requirements: Prerequisite SOCY 100/3.0. Exclusion SOCY 122/6.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Contribute to thoughtful discussions about sociological theories and phenomena and clearly articulate questions, critiques, and general thoughts about course materials.
2. Clearly articulate a variety of sociological approaches to several major social processes, institutions, and domains of social life.
3. Identify and explain significant dimensions of social inequality, identity, and stratification and how they shape social reproduction and social change.
4. Identify central issues related to social inequalities in Canada and beyond, including the impact of class, race, gender, sexuality, and disability on peoples' lives.
5. Demonstrate reading comprehension through the ability to read peer-reviewed articles and extract the key perspectives, arguments, and evidence.
6. Articulate an introductory understanding of public sociology and its potential to advocate for social change.
7. Acquire an introductory understanding of sociological research using the Queen's University Library and develop skills to support critical writing and reflection.

SOCY 122 Introduction to Sociology Units: 6.00

An introduction to the concepts, theories and methods of sociological enquiry, and their application to the analysis of Canadian society.

Learning Hours: 240 (48 Lecture, 24 Group Learning, 24 Online Activity, 144 Private Study)

Requirements: Prerequisite None. Exclusion Maximum of 6.0 units from: SOCY 100/3.0; SOCY 101/3.0; SOCY 122/6.0.

Course Equivalencies: SOCY122; SOCY122A

Offering Faculty: Faculty of Arts and Science

Spanish (SPAN)

SPAN 111 Beginning Spanish I Units: 3.00

Offers a basic level of Spanish understanding, speaking, reading and writing for students who have no knowledge of Spanish whatsoever.

NOTE Students can self-enrol during the course registration period. However, for students with previous knowledge of the language, final approval of enrolment is at the discretion of the instructor, pending an assessment of a student's language competency. Students can contact the instructor for an assessment anytime during the academic year (September-May). Please note that instructors may not be available for language competency assessments in May, June, July, and early August. Non-disclosure of previous knowledge of the language is considered a departure from academic integrity.

Learning Hours: 120 (36 Lecture, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None. One-Way Exclusion May not be taken with or after SPAN 112/3.0; SPAN 201/6.0*; SPAN 204/3.0; SPAN 205/3.0; SPAN 301/3.0; SPAN 302/3.0; SPAN 303/3.0*; SPAN 304/3.0*; SPAN 401/3.0*; SPAN 402/3.0*.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Engage in everyday conversations using common vocabulary and basic grammatical structures, allowing them, for example, to introduce themselves, ask and answer simple questions, and express their basic needs and preferences in the language.
2. Understand spoken language on familiar topics, such as personal information, basic descriptions, and daily routines, delivered at a slow to moderate pace and using beginner-level vocabulary.
3. Read and comprehend short texts related to everyday life, employing basic reading strategies to understand sentence structure, main ideas, and key details with limited use of a dictionary.
4. Write simple messages, notes, and paragraphs employing correct syntax and basic vocabulary to express personal experiences, daily activities, and simple opinions.
5. Cultural Context: Throughout the course, students will gain an introductory understanding of the cultural context of the target language, including significant customs, traditions, and social norms associated with the regions where the language is spoken.

SPAN 112 Beginning Spanish II Units: 3.00

The continuation of SPAN 111. Also for students entering the University who have some knowledge of Spanish but have not completed 4U Spanish or equivalent. For these students an assessment exam or interview with an academic adviser is required before registration. Contact the Department of Languages, Literatures and Cultures for details.

NOTE Also offered at the Bader International Studies Centre, Herstmonceux (Learning Hours may vary).

Learning Hours: 120 (36 Lecture, 6 Online Activity, 78 Private Study)

Requirements: Prerequisite A minimum grade of a C in (SPAN 111 or SPAN P10). Exclusion A maximum of 6.0 units from SPAN P10; SPAN 101; SPAN 111; SPAN 112. One-Way Exclusion May not be taken with or after SPAN 201; SPAN 204; SPAN 205; SPAN 301; SPAN 302; SPAN 303; SPAN 304; SPAN 401; SPAN 402.

Offering Faculty: Faculty of Arts and Science



Statistics (STAT)

STAT 161 Introduction to Data Science Units: 3.00

This course introduces critical concepts, tools, techniques and skills in statistical inference/learning, machine learning, and computer programming, through hands-on analysis of real-world datasets from diverse fields in science and social science. It offers three perspectives (inferential thinking, computational thinking and real-world relevance) on the foundations of Data Science and develops a data-oriented mindset.

Learning Hours: 132 (36 Lecture, 12 Laboratory, 84 Private Study)

Requirements: Prerequisite None. Recommended An Ontario 4U mathematics course or equivalent. Exclusion Maximum of one course from: BIOL 243/3.0; CHEE 209/3.5; CISC 171/3.0; COMM 162/3.0; ECON 250/3.0; GPHY 247/3.0; HSCI 190/3.0; KNPE 251/3.0; NURS 323/3.0; POLS 285/3.0; POLS 385/3.0*; PSYC 202/3.0; SOCY 211/3.0; STAM 200/3.0; STAT 161/3.0; STAT 263/3.0. Exclusion Maximum of one course from: PATH 111/3.0; STAT 161/3.0. One-Way Exclusion May not be taken after STAT 269/3.0.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Work with critical concepts, tools, techniques, and skills in computer programming, statistical inference/learning and machine learning.
2. Use visualization to understand data.
3. Work with the computational tools and practices for summary, analysis, and visualization of data.
4. Analyze real data sets and communicate their results.
5. Have a basic understanding of the implications and tools of data collection.

Visual Art (ARTV)

ARTV 101 Foundations in Visual Art Units: 3.00

A broad introduction to drawing, painting, printmaking and sculpture, with an overview of contemporary and historical practices. The course is organized around hands-on workshops, requiring students to replicate technical and theoretical methods that incorporate the elements and principles of art such as line, value, space, texture, shape, form and colour theory. Students will harness fundamental studio skills to enhance their creative expression and artistic intuition while developing the ability to identify and articulate the distinctive aesthetic qualities inherent to each artistic medium.

NOTE Materials: estimated cost \$157.50.

NOTE Administered by the Departments of Art History and Art Conservation, Film and Media, and the DAN School of Drama and Music.

Learning Hours: 120 (12 Lecture, 24 Laboratory, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate through practice foundational and/or exploratory techniques in range of media.
2. Apply the elements and principles of art to create a portfolio of studio work.
3. Identify and analyze how elements and principles of art are used in contemporary and historical works using discipline and medium specific vocabulary.
4. Synthesize the fundamental technical and theoretical skills to explore intuition and expressive possibilities.

ARTV 102 Meaning-Making Through Visual Art Units: 3.00

An introduction to the production of meaning through art making across a range of visual media. Although different in their final forms, all works of art are the product of a series of decisions (material, formal, conceptual, cultural, political, relational) that create effects and meanings. These meanings are shaped by different perspectives and worldviews, and they shift over time or across different contexts. In this course, students will be introduced to a variety of artistic processes and use these to convey concepts gaining critical awareness of how their works engage various audiences.

NOTE Materials: estimated cost \$157.50.

NOTE Administered by the Departments of Art History and Art Conservation, Film and Media, and the DAN School of Drama and Music.

Learning Hours: 120 (12 Lecture, 24 Laboratory, 12 Online Activity, 72 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Demonstrate the relationship between the materials, form, and concept(s) of historical and contemporary artworks in a range of media, including non-western and western forms.
2. Make connections between the meaning of works of art and the broader social world by discussing how production and reception are shaped by diverse cultural perspectives, historical contexts, social and political issues, and/or geographic locations.
3. Develop, implement, and explain informed and reflective concepts for their own works of art.
4. Apply knowledge of artistic materials, processes, and formal visual elements to create meaning through their own works of art/artistic practice.

Wellness (WELL)**WELL 100 Wellness: Science and Practice Units: 3.00**

This course is an introduction to the science and practice of well-being. It examines the utility of the stress response and lifestyle factors like sleep, fitness and diet that influence it. The course will review basic techniques for adaptively regulating the stress response, including cognitive and emotional regulation techniques, time management, and interpersonal effectiveness. Students will actively engage in activities known to improve wellness. The course will have an extensive practical component to allow students to engage in such activities.

Learning Hours: 126 (18 Lecture, 48 Online Activity, 12 Off-Campus Activity, 48 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe and evaluate the science of stress and stress management
2. Apply scholarly evidence to articulate the relationship between lifestyle factors and well being
3. Evaluate and measure personal lifestyle factors that affect wellbeing
4. Identify and appropriately utilize basic stress management techniques
5. Identify and apply methods for overcoming common barriers to implementation of stress management techniques



Writing (WRIT)

WRIT 120 Fundamentals of Effective Writing Units: 3.00

A focus on the principles and practical applications of effective writing. Students apply effective writing strategies to address a variety of professional and academic audiences. Students plan, outline, write, and revise reader-centred documents that relate to forms and contexts they will encounter in the workplace and in educational environments.

Learning Hours: 114 (36 Online Activity, 78 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe the importance of purpose, audience, and tone and their use in various contexts.
2. Identify and correct errors in sentence structure and grammar to effectively edit own and others' writing.
3. Participate in a writing community through forums that foster independent, peer, and collaborative writing skills to become a more intentional communicator.
4. Practice writing in different styles and formats to meet the needs and expectations of academic and professional audiences.
5. Recognize the iterative nature of the writing process and use effective strategies to revise own writing.
6. Use active reading and thinking strategies to engage analytically with a text.

WRIT 125 Fundamentals of Academic Essay

Writing Units: 3.00

A study of the basic principles of academic writing, including a series of assignments that emphasize logical organization, stylistic clarity, and grammatical precision.

Learning Hours: 120 (36 Lecture, 24 Online Activity, 60 Private Study)

Requirements: Prerequisite None.

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Analyze writing to identify argumentative strategies and assess how effective they are.
2. Apply strategies to revise, edit, and proofread writing to make it more polished and clearer.
3. Assess research material and use documentation techniques to integrate source material effectively into own writing.
4. Identify the basic parts of the academic essay and use them effectively in essay-writing.
5. Interpret and apply feedback from peers, TAs, and instructor to own writing to make it more persuasive, coherent, and clear.
6. Recognize common grammar and style errors and how to correct them.