



Council Committee on Undergraduate Admissions and Studies

Date: February 29, 2024

To: Council Committee on Undergraduate Admissions and Studies

From: Coby Stephenson on behalf of Dr. Jacob Muthu, Chair

Re: Meeting of Thursday, March 7, 2024

A meeting of the Council Committee on Undergraduate Admissions and Studies is scheduled for Thursday, March 7, 2024, 10:00 a.m. – 12:00 p.m. in AH 527 (Boardroom).

AGENDA

- 1. Approval of the Agenda**
- 2. Approval of the Minutes of Meeting February 1, 2024** - circulated with the Agenda
- 3. Business Arising from the Minutes**
- 4. Reports from Faculties and Academic Units**
 - 4.1. [Faculty of Arts](#)**
 - 4.2. [Faculty of Science](#)**
 - 4.3. [CCUAS Terms of Reference](#)**
- 5. Adjournment**

4. Reports from Faculties and Other Academic Units

4.1. Faculty of Arts

The Faculty of Arts is submitting the following course revisions as items for information.

Items for Information

The Faculty of Arts is submitting the following items for information to CCUAS.

I. Course Revisions

ECON 100 3:3-0

Introduction to Economic Issues

An introduction to the economic way of thinking. Basic economic concepts are used to explore current economic issues such as unemployment, inflation, economic growth, taxation, competition, trade disputes, the crisis in agriculture, pollution reduction, and health care, and more. *Note: Students who have received credit for either ECON 201 or 202, or any ECON course numbered 300 or higher may not take ECON 100 for credit.*

ECON 273 3:3-0

Environmental Economics

This course examines A study of contemporary questions and environmental issues of environmental economics, such as why are fish stocks disappearing? using economics. What are the economic causes costs and benefits of pollution? How do emission standards, environmental taxes, and tradable permits work in reducing pollution? What are the cost-effective ways to address environmental challenges like climate change? Why did Canada abandon the Kyoto agreement? How does trade liberalization affect the environment?

Prerequisite: 15 credit hours or ECON 100.

JS 351 3:0-0

Forms of Racism in Canadian Society

Racism in Can Soc.

This course examines the socio-historic system of racism with a focus on the Canadian Aboriginal experience. Manifestations of the different forms of racism are explored. Participants engage in a variety of activities to analyze racism and evaluate their beliefs and actions in order to promote equity and anti-racism practice. ***Prerequisite: Completion of 30 credit hours including JS 090 and JS 100, or permission of the Department Head.***

End of Report from the Faculty of Arts

4.2. Faculty of Science

The Faculty of Science is submitting the follow item for approval.

Item for Approval

4.2.1 Department of Geology Name Change

MOTION: That the Department of Geology be renamed the Department of Earth Sciences, **effective 202430.**

Rationale:

The new name better reflects the academic programming of the Department and aligns with the majority of Earth Science departments at other Canadian universities.

(End of Motion)

Items for Information

The following historical and new courses are presented as items for information.

All GEOL undergraduate courses will become historical and replaced with new ESC courses to align the course code with the department name change from "Department of Geology" to "Department of Earth Science. All changes are **effective 202520.**

I. Historical Courses

- GEOL 051** Geology Co-op Work Term 1
- GEOL 052** Geology Co-op Work Term 2
- GEOL 053** Geology Co-op Work Term 3
- GEOL 054** Geology Co-op Work Term 4
- GEOL 102** Earth and Environment
- GEOL 201** Internal Processes of the Earth
- GEOL 210** Mineralogy I
- GEOL 211** Mineralogy II
- GEOL 240** Earth System History
- GEOL 241** Paleontology
- GEOL 270** Earth Resources and the Environment
- GEOL 307** Geochemistry
- GEOL 313** Igneous Petrology
- GEOL 314** Sedimentology
- GEOL 315** Metamorphic Petrology
- GEOL 329** Soils and Sediment Analysis
- GEOL 340** Stratigraphy
- GEOL 353** Structural Geology I
- GEOL 396** Geology Field School I
- GEOL 400** Undergraduate Thesis in Geology

GEOL 400AA Undergraduate Thesis in Geology - First Half
GEOL 400AB Thesis - Second Half
GEOL 400AC Undergraduate Thesis in Geology
GEOL 413 Igneous Petrogenesis and Processes
GEOL 414 Geology of Siliciclastic Rocks
GEOL 416 Geology of Carbonate Rocks
GEOL 429 Glacial and Periglacial Geoscience
GEOL 430 Quaternary Environments and the Anthropocene
GEOL 451 Geology of North America
GEOL 453 Structural Geology II
GEOL 454 Global Tectonics and Earth History
GEOL 460 Applied Exploration Geophysics
GEOL 461 Geomodelling
GEOL 470 Metallic Mineral Deposits
GEOL 472 Petroleum Geology
GEOL 473 Petroleum Geochemistry
GEOL 474 Environmental Hydrogeology
GEOL 476 Principles of Groundwater Flow
GEOL 477 Geology of Uranium Deposits
GEOL 490 Directed Readings - an AA-ZZ series.
GEOL 490AB Petrographic and Geochemical Methods in the Study of Carbonate Diagenesis
GEOL 490AC Petroleum Geology of the Ukraine
GEOL 490AD Geology of Columbia
GEOL 490AF Fluid Inclusion Studies
GEOL 490AG Geothermometers and Paleo-geothermal Gradients
GEOL 490AH Remote Sensing and GIS Application in Geological and Geophysical Mapping
GEOL 490AI Paleoenvironmental micropaleontology
GEOL 490AL Watershed Hydrology
GEOL 490AN Geomicrobiology
GEOL 491 Directed Readings - an AA-ZZ series.
GEOL 492 Directed Readings - an AA-ZZ series.
GEOL 492AB Geochemistry
GEOL 492AC Igneous processes and volcanism
GEOL 493 Directed Readings - an AA-ZZ series.
GEOL 493AA Applied Petroleum Geochemistry
GEOL 494 Directed Readings - an AA-ZZ series.
GEOL 494AB Carbonate Reservoir Geology
GEOL 494AB Carbonate Reservoir Geology
GEOL 495 Directed Readings - an AA-ZZ series.
GEOL 495AB Quaternary Geology
GEOL 495AC Late Cretaceous to recent Marine Paleoecology and Sedimentology
GEOL 495AD Advanced structural analysis with application to mineral deposit exploration
GEOL 495AE Directed Study in Glacial Geoscience
GEOL 496 Geology Field Camp II
GEOL 497 International Field Course

II. New Courses

The following ESC course descriptions will also include a note stating that students may only receive credit for either the GEOL or the ESC course.

ESC 051 - Geology Co-op Work Term 1 0:0-0

Four month Co-op work term approved by the department and arranged by the Co-op coordinator.

ESC 052 - Geology Co-op Work Term 2 0:0-0

Four month Co-op work term approved by the department and arranged by the Co-op coordinator. ***Pre-requisite: ESC 051***

ESC 053 - Geology Co-op Work Term 3 0:0-0

Four month Co-op work term approved by the department and arranged by the Co-op coordinator. ***Pre-requisite: ESC 052***

ESC 054 - Geology Co-op Work Term 4 0:0-0

Four month Co-op work term approved by the department and arranged by the Co-op coordinator. ***Pre-requisite: ESC 053***

ESC 102 - Earth and Environment 3:3-1.5

The nature of the earth. Plate tectonics and the geological time scale. Earthquakes, volcanism and surface processes with reference to their effect on the human environment. Earth resources, waste disposal, and pollution in a geological context.

ESC 201 - Internal Processes of the Earth 3: 3-3

Internal earth processes and materials composing the earth. The geological time scale. Deformation and structures of earth materials. Plate tectonics, continental drift and mountain building. Earth resources.

*** Prerequisite: Students must pass ESC 102 with a minimum grade of 60%. ***

ESC 210 - Mineralogy I 3:3-3

Crystal structure and symmetry, Chemistry and occurrence of minerals. Mineral optics.

Prerequisite: ESC 201 with a minimum grade of 65% *Note: ESC 201 may be taken concurrently with a minimum grade of 75% in ESC 102.*

Note: Students are strongly recommended to take CHEM 104 prior to, or concurrently, with this course.

ESC 211 - Mineralogy II 3:3-3

Mineral phase diagrams. Minerals of igneous, metamorphic and sedimentary rocks. Mineral paragenesis. Geothermometers and geobarometers. X-ray techniques. Introduction to thin section identification of minerals in igneous, sedimentary, and metamorphic rocks.

Prerequisite: ESC 201, ESC 210 and CHEM 104.

Note: It is strongly recommended that students register in CHEM 105 prior to, or concurrently with, this course.

ESC 240 - Earth System History 3:3-3

Inter-connected evolution of atmosphere-biosphere-hydrosphere-lithosphere over the course of geologic time; its forcing mechanisms, interactions, and feedbacks. Major physical and biological global events emphasizing North America and Western Canada.

*** Prerequisite: ESC 102 ***

ESC 241 – Paleontology 0-3:3-3

Classification, morphology, evolution, paleoecology, and stratigraphic distribution of the main groups of fossils.

Prerequisite: ESC 240.

Note: ESC 241 is a Winter only course.

ESC 270 - Earth Resources and the Environment 3:3-3

An intermediate course focused on origin, global distribution, use and environmental impact of earth resources, metallic minerals, energy resources, industrial minerals, and the social, economic and political implications of mineral resources.

*** Prerequisite: ESC 102 ***

* Note: ESC 270 may not be taken by students who have passed ESC 472 and/or ESC 470. *

ESC 307 – Geochemistry 3:3-3

Principles of crystal, aqueous, and isotopic geochemistry, and applications to igneous, sedimentary, and metamorphic rocks, and geochemical exploration. Principles of radiometric dating of rocks. Practical problem solving in applied geochemistry.

Prerequisite: CHEM 105 and one of ESC 201 or ESC 211 (ESC 211 is strongly recommended).

ESC 313 - Igneous Petrology 3:3-3

Classification and genesis of igneous rocks. Introduction to the common igneous rock suites and associations. Study of hand specimens and thin sections.

Prerequisite: ESC 211 and ESC 307; ESC 307 and ESC 313 may be taken concurrently if ESC 211 has been completed successfully. CHEM 250 is recommended.

ESC 314 – Sedimentology 3:3-3

Classification, genesis, and petrology of sedimentary rocks. Sediment transport and deposition processes. Sedimentary environments.

*** Prerequisite: ESC 201 and 211 ***

ESC 315 - Metamorphic Petrology 3:3-3

Metamorphic minerals, rocks and processes. Agencies and occurrence of metamorphism. Metamorphic grade, zones and facies. Metamorphic reactions and the petrogenic grid. Metamorphic textures. Anatexis and development of migmatites.

Prerequisite: ESC 211 and ESC 307 (ESC 307 may be taken concurrently.)

ESC 329 - Soils and Sediment Analysis 3:3-3

Introduction to the analysis, properties and classification of soils and sediments. Includes an understanding of the distribution of soil types at local, regional and global scales due to environmental indices like climate, geology, water, and vegetation. This course uses experiential learning where students conduct a field and laboratory study of their own field site, using basic measurements of soils and sediments.

Prerequisite: GES 121.

Note: Students may receive credit for one of ESC 329, ESC 494AD, GEOG 329, or GES 329.

ESC 340 – Stratigraphy 3:3-3

Principles and problems of stratigraphy. Geological history of North America in its world setting. Index fossils. Geological maps.

Prerequisite: ESC 220 or 241, 240 and 314. ESC 314 may be taken concurrently

ESC 353 - Structural Geology I 3:3-3

Primary structural features. Geometry of structural features including simple folds and faults. Relationship between structural features and land forms. Geological maps and air photos.

*** Prerequisite: ESC 201 and ESC 211 ***

ESC 396 - Geology Field School I 3:3-3

Geological study and mapping in an area of sedimentary rocks. Supervised study for several days during the Spring/Summer term. An additional charge will be assessed to cover accommodation and meals. ***Prerequisite: Six courses (18 credit hours) in Geology.***

Note: Students must advise the Earth Sciences Department of their intent to register prior to February 15.

Additional Fee: \$1000.

ESC 400 - Undergraduate Thesis in Geology 6:0-0

Original investigation under the supervision of a faculty member. A thesis describing the research is written and presented, and defended.

*** Prerequisite: ESC 313, 314, 315, 340, 453 and 396, a minimum grade point average of 70% ***

** Permission of the Department Head is required to register. **

Note: This course may be taken in one term (as ESC 400AC or two consecutive terms (as ESC 400AA and ESC 400AB).

ESC 400AA - Undergraduate Thesis in Geology - First Half 3:3-0

Original investigation under the supervision of a faculty member. A thesis describing the research is written and presented, and defended.

*Note: This is the first half of ESC 400 Thesis, and should be taken prior to ESC 400AB *

*** Prerequisite: ESC 313, 314, 315, 340, 453, 396 ***

ESC 400AB - Thesis - Second Half 3:3-0

Original investigation under the supervision of a faculty member. A thesis describing the research is written and presented, and defended.

Prerequisite: ESC 313, 314, 315, 340, 453, 396, and ESC 400AA.

Note: This is the second half of ESC 400 Thesis, and should be taken after ESC 400AA.

ESC 400AC - Undergraduate Thesis in Geology 6:6-0

Original investigation under the supervision of a faculty member. A thesis describing the research is written and presented, and defended.

Prerequisite: ESC 313, 314, 315, 340, 453, 396 & a minimum GPA of 70%.

Permission of the Department Head is required to register.

ESC 413 - Igneous Petrogenesis and Processes 3:3-3

Advanced study of the processes of magma formation and crystallization. Characteristics and genesis of igneous rock suites and associations. Study of igneous rock suites in hand specimen and thin section.

*** Prerequisite: ESC 313 ***

* Note: Not offered every year. *

ESC 414 - Geology of Siliciclastic Rocks 3:3-3

Depositional models using modern sedimentary analogues to interpret ancient environments.

*** Prerequisite: ESC 314 and ESC 340 ***

ESC 416 - Geology of Carbonate Rocks 3:3-3

Modern and ancient depositional environments of limestone and dolomite. Diagenetic processes affecting carbonate rocks.

*** Prerequisite: ESC 307 and ESC 314, ESC 307 may be taken concurrently ***

ESC 429 - Glacial and Periglacial Geoscience 3:3-3

An advanced course relating to cold environments and physical processes. Topics cover the physics of glaciers, glacial and periglacial processes and resulting erosional and depositional landforms and landscapes. Special attention will be paid to the Canadian Arctic environment and the history of glaciation in North America. Lab time is used to conduct short experiments, measure the snow pack and examine glacial sediments to add to our understanding of glacial processes.

Prerequisite: GES 323.

Note: Students may receive credit for one of ESC 429, GEOG 429, GES 429, or GEOG 423 AA.

ESC 430 - Quaternary Environments and the Anthropocene 3:3-0

This course covers general aspects of the Quaternary Period with emphasis on the Holocene and Anthropocene. It includes the main methods employed to reconstruct Quaternary environments, main climatic oscillations, environmental change and impacts by human activities. It emphasizes the importance of paleo-environmental reconstructions in the conservation and management of present ecosystems.

Prerequisite: Two 300 level courses in Geology or Geography and/or permission from the Department Head.

Note: Students with credit for ESC 490AK cannot take ESC 430 for credit.

ESC 451 - Geology of North America 3:3-3

Geology and geological history of North America, with emphasis on Canada. The nature of continental assembly, crustal evolution and geodynamics through time, and comparative studies of lithostratigraphy and magmatism in relation to geotectonic environment. Phanerozoic sedimentary basins.

*** Prerequisite: ESC 313, 315, 340, and ESC 453 or 350 ***

* Note: Not offered every year. *

ESC 453 - Structural Geology II 3:3-3

Morphology, nomenclature and classification of large and small scale structures in the earth's crust. Natural stress-strain relations and structural analysis and interpretation. Major tectonic features of the earth.

*** Prerequisite: ESC 353 and PHYS 109 ***

ESC 454 - Global Tectonics and Earth History 0-3:3-3

Internal structure and processes of the earth, formation and evolution in the context of the solar system, mantle and crustal processes through time, plate tectonics and orogenic activity, supercontinent cycles, case studies of orogenic belts.

Prerequisite: ESC 453 (may be taken concurrently).

Note: Not offered every year. *Note: Credit cannot be held for both ESC 452 and ESC 454.*

ESC 460 - Applied Exploration Geophysics 3:3-3

Introduction to geophysical methods including seismic, magnetics, gravity, electromagnetics, IP, radiometrics, and remote sensing. Application to finding and developing petroleum pools and mineral deposits.

*** Prerequisite: MATH 110, PHYS 112 or PHYS 119 and ESC 201 or permission of the Department Head ***

ESC 461 – Geomodelling 3:3-0

Hands-on computer-based data analysis and processing, applied geostatistics, geospatial studies, and geological modelling methods. Creating 2D and 3D surface-subsurface geological models from diverse data sources including (but not limited to): field maps, boreholes, geochemistry data, structural data, digital elevations, hydrological and geophysical data. Students will gain experience with various software platforms currently used in the Geosciences, including ESRI's ArcGIS Pro.

Prerequisite: ESC 313, ESC 314, ESC 315, and ESC 353.

Note: Students may receive credit for one of ESC 461 or ESC 490AJ.

ESC 470 - Metallic Mineral Deposits 3:3-3

Geologic characteristics and genesis of metallic mineral deposits. Basic concept of mineral exploration. Ore mineralogy and petrology.

Prerequisite: ESC 313, 314, and 353.

ESC 472 - Petroleum Geology 3:3-3

Origin, accumulation, and occurrence of petroleum. Reservoir rocks, fluids and traps. Reservoir conditions and mechanics. Mechanical logs and subsurface methods. Application to finding and developing petroleum pools.

*** Prerequisite: ESC 340 or permission of Department Head ***

ESC 473 - Petroleum Geochemistry 3:3-3

Production of organic matter and its accumulation and transformation in sedimentary rocks. Kerogen and the generation, migration and alteration of petroleum. Formation of coal. Application to oil and gas exploration.

*** Corequisite: ESC 472 or permission of Department Head ***

Note: Not offered every year.

ESC 474 - Environmental Hydrogeology 3:3-3

Water chemistry, water quality and contamination, discussion of remediation (clean-up) of soil and water, and computer modeling of various hydrogeological problems.

Prerequisite: ESC 307

Note: Not offered every year

ESC 476 - Principles of Groundwater Flow 3:3-3

Principles of groundwater flow, properties of aquifers, geology of groundwater occurrence, and regional groundwater flow with examples from the Western Canadian Sedimentary Basin.

Prerequisite: ESC 314 and MATH 110 or permission of the Department Head

ESC 477 - Geology of Uranium Deposits 3:3-0

Geochemistry of uranium; geological characteristics and genesis of various types of uranium deposits, with an emphasis on the unconformity-related uranium deposits in the Athabasca Basin.

Prerequisite: ESC 307, ESC 313, ESC 314, ESC 315, and ESC 335, or must obtain permission of the instructor to register for the course.

Note: Students may receive credit for one of ESC 477 or ESC 490AM.

ESC 490 -Directed Readings - an AA-ZZ series 3:3-0

Courses designed to meet the specific needs of individual students.

ESC 490AB - Petrographic and Geochemical Methods in the Study of Carbonate Diagenesis 3:3-0

Petrographic (staining, transmitted light microscopy, cathodoluminescence, fluorescence), fluid inclusion, and C-O-Sr isotopic studies of carbonate diagenesis.

*** Prerequisite: ESC 314 ***

ESC 490AC - Petroleum Geology of the Ukraine 3:3-0

An examination of exploration methodologies utilized by Ukrainian petroleum exploration geologists. An overview of the geology of the Ukraine and oil/gas fields of the Ukraine.

*** Prerequisite: ESC 472 ***

ESC 490AD - Geology of Columbia 3:3-0

Geology of Colombia is a field based course. The topics covered in this course include: igneous, sedimentary and metamorphic petrology, tectonics, geomorphology, sedimentology, stratigraphy, volcanology and natural hazards. *** Prerequisites: ESC 250, ESC 313, ESC 314, ESC 315, ESC 340 and ESC 396 ***

** Note: Students will find it beneficial to have also taken ESC 496 **

ESC 490AF - Fluid Inclusion Studies 3:3-0

Identification and classification of fluid inclusions. Microthermometric measurements. Interpretation and application to solve geologic problems.

*** Prerequisite: ESC 471 ***

ESC 490AG - Geothermometers and Paleo-geothermal Gradients 3:3-0

Principles of three geothermometers (fluid inclusions, vitrinite reflectance, and raman spectroscopy of carbonaceous matter). Application of these methods to reconstruct paleo-geothermal gradients.

ESC 490AH - Remote Sensing and GIS Application in Geological and Geophysical Mapping 3:3-0

Cover the use of remote sensing and GIS techniques in geological and geophysical mapping. An integrated geological mapping approach is followed in which geological maps are digitized and re-interpreted in a GIS environment on the basis of aerial photographs, satellite imagery and airborne geophysical data. The main subjects in this course are airborne geophysics, geological remote sensing, integrated image interpretation and geological mapping methodology.

ESC 490AI - Paleoenvironmental micropaleontology 3:3-3

*** Prerequisites: ESC 241, ESC 340 *

ESC 490AL - Watershed Hydrology 3:3-0

This course provides an introduction to watershed hydrology including extreme runoff events recorded in the sedimentary record. It is a research-oriented course intended to provide students with an overview of hillslope hydrology and sediment transport accumulation from a process perspective.

Prerequisite: GEOG 323 or permission of the Earth Science Department Head

Note: Students can receive credit for either ESC 490AL or GEOG 497AA but not both.

ESC 490AN – Geomicrobiology 3:3-0

Fundamentals of environmental microbiology in the context of Earth Sciences with an emphasis on the influence of microbes on elemental cycling and metal solubility. Course topics includes microbes in mine wastes, microbe-mineral integrations and the role of microbes in redox zonation in natural and contaminated environments.

*** Prerequisite: ESC 307 or taken concurrently, or special permission of the instructor. ***

ESC 491 -Directed Readings - an AA-ZZ series 3:3-0

Courses designed to meet the specific needs of individual students.

ESC 492 -Directed Readings - an AA-ZZ series 3:3-0

Courses designed to meet the specific needs of individual students.

ESC 492AB – Geochemistry 0-3:3-3

Introduction to geochemistry: The elements, analytical techniques, isotope geology and geochronology, exploration geochemistry, aspects of the geochemistry of igneous, sedimentary and metamorphic rocks.

*** Prerequisite: CHEM 230 and two of either ESC 313, 314, or 315, or permission of Department Head ***

ESC 492AC - Igneous processes and volcanism 3:3-0

Directed readings and discussions in the general areas of igneous petrology, the origins and evolution of magma, and volcanic phenomena. Registration for this course requires special approval from the instructor.

Prerequisite: ESC 210, ESC 211, ESC 307 and ESC 313

ESC 493 -Directed Readings - an AA-ZZ series 3:3-0

Courses designed to meet the specific needs of individual students.

ESC 493AA- Applied Petroleum Geochemistry 3:3-0

ESC 494 -Directed Readings - an AA-ZZ series 3:3-0

Courses designed to meet the specific needs of individual students.

ESC 494AB - Carbonate Reservoir Geology 3:3-0

The course is intended to give the participant practical experience in observing and describing carbonate rocks, and to use pertinent literature to interpret their dispositional environments. The student will also identify processes that have changed the original character of the rocks and have influenced their hydrocarbon-bearing potential.

ESC 494AD - Soil Science 3:3-1

Introduction to the properties, and classification of soil. The geography of soil at local, regional, and global scales. Relationship of soil to geomorphology, climate, water, vegetation, and environmental change.

*** Prerequisite: GEOG 221 ***

ESC 495AB - Quaternary Geology 3:3-0

A survey of the Quaternary Geology of the Earth, with particular emphasis on the history and record of glacial advance and retreat in North America. Critical review of driving mechanisms.

*** Prerequisites: GEOG 323 or ESC 429 or GEOG 429 with minimum grades of 60%. Concurrent enrolment allowed. Or permission of instructor. ***

ESC 495AC - Late Cretaceous to recent Marine Paleocology and Sedimentology 3:3-0

An advanced course that addresses the paleocology and associated sedimentary environment of ancient seas. An examination of the marine ecosystems in selected time periods from the Late Cretaceous (75 mya) to the present. Emphases are placed on the changes in invertebrate assemblages and accompanying marine vertebrates over vast periods of time. The topic includes an understanding of fossil preservation and the conditions and environments conducive to preservation in marine systems.

ESC 495AD - Advanced structural analysis with application to mineral deposit exploration 3:2-0

Theoretical and practical analysis/interpretation of rock structures as a guide to mineral exploration. This course will be largely assignment-based with assignments/projects involving map analysis of structures complemented by stereographic analysis and cross-section construction in an effort to determine the structural controls of mineral deposits in a variety of settings.

Pre-requisite: ESC 453 and permission of instructor and Dept. Head.

ESC 495AE - Directed Study in Glacial Geoscience 3:3-0

An advanced course relating to Glacial Geoscience, in which the student conducts a directed study in Glacial processes and cold environments under the supervision of a faculty member. Topics include glacial and periglacial processes and an exploration of the current theories and controversies on the formation of glacial landforms and landscapes. Special attention will be paid to North America, and the Canadian Arctic environments, and the history of glaciations in Canada during the Quaternary period. ***Prerequisite GEOG 323.***

ESC 496 - Geology Field Camp II 3:3-3

Geological mapping and study in an area of crystalline rock. Supervised study for several days during the Spring/Summer term. An additional charge will be assessed to cover accommodation and meals. ***Prerequisites: ESC 396, 353, 313, 314, and 315.***

Note: students must advise the Earth Sciences Department of their intent to register prior to May 15.

Additional Fee: \$1000.

ESC 497 - International Field Course 3:3-0

A supervised field course for several days at an international location to be determined. This course involves the observation, measurement, analysis and interpretation of geological sites, to expand geological knowledge and familiarize the student with the geology of other places outside of Canada.

Prerequisites: 70% UGPA, min 24 credits in Geology/Environmental Geoscience, full-time student in the previous two terms and/or permission of the Department Head.

Note: An additional charge will be assessed to cover costs of the course.

End of Report from the Faculty of Science

4.3. CCUAS Terms of Reference

4.3.1 Council Committee on Undergraduate Admissions and Studies (CCUAS) Terms of Reference

<p>MOTION: To approve the Council Committee on Undergraduate Admissions and Studies (CCUAS) Terms of Reference, as provided in Attachment I, effective 202430.</p>

Rationale:

Section 3.2 of the Council Rules and Regulations states:

Committees of Council will be required to review their terms of reference no less than once every five years, reporting to Executive of Council that this has been done.

The Council Committee on Undergraduate Admissions and Studies (CCUAS) terms of reference were last approved by Executive of Council on March 22, 2017. As such, review is required in order to bring the terms of reference in alignment with the Council Rules and Regulations.

Significant proposed changes:

- Terms for Council members to be extended from three years to four years to provide better continuity of knowledge. Extension of the term of the Chair to two years (instead on one) allows for greater consistency in meeting processes
- Simplification of roles and responsibilities of the Committee to reflect the current activity of CCUAS and its reporting to Executive of Council. In addition, the revisions align closely with the recent

changes approved to the Terms of Reference of the Council Committee on the Faculty of Graduate Studies and Research (CCFGSR)

- Addition of a quorum requirement
- Revisions to the membership list:
 - Removal of the President as a member - their schedule does not allow attendance at CCUAS, and their inclusion in the membership complement can contribute to difficulty in meeting quorum requirements
 - Removal of AVP (Student Affairs) as domestic admissions now falls under the purview of the Registrar
 - Addition of AVP (International), member of Council, responsible for international admissions
 - Removal of ex-officio non-Council members as voting participants
 - Clarification of Faculty/Academic Unit representation, Federated College representation, student representation, and the use of designates

Revisions to the CCUAS Terms of Reference were previously brought for approval to the May 4, 2023 and December 7, 2023 meetings of CCUAS. In both cases, the Committee asked for further consultation. These consultations were undertaken, and also included advice and guidance from the Provost and Vice-President (Academic). The Terms of Reference proposed as [Attachment I](#) have incorporated the suggestions from those consultations.

Attachments:

[Attachment I – Proposed CCUAS Terms of Reference](#)

[Attachment II – Current CCUAS Terms of Reference](#)

(End of Motion)

5. Adjournment

COUNCIL COMMITTEE ON UNDERGRADUATE ADMISSIONS AND STUDIES

Purpose: Responsible for advising Council on undergraduate academic programs and related academic calendar regulations.

Membership:

<i>Elected:</i>	3 members of Council
	2 undergraduate students, who are student members of Council
<i>Ex Officio:</i>	University Secretary
	Registrar
	Associate Vice-President (International)
	Dean, Champion College
	Dean, Luther College
	Associate Dean, Academic, First Nations University of Canada
	Each Faculty or Academic Unit's* Associate Dean (Undergraduate) or equivalent

*Arts, Business Administration, Education, Engineering & Applied Science, Kinesiology & Health Studies, Media, Art and Performance, Nursing, Science, Social Work, Centre for Continuing Education, La Cité universitaire francophone

Ex Officio members who are unable to attend a CCUAS meeting may send a designate in their place. Designates must be members of Council in order to have voting privileges, or will otherwise attend as resources or non-voting observers.

Resources (non-voting): Registrar's Office

Chair: Normally an elected member of Council serving their third year and who will serve a two-year term as Chair of the Committee. The Chair of the Committee will be expected to attend Executive of Council each month to present CCUAS motions for approval.

Terms: Elected members of Council normally serve for four years.
Undergraduate students normally serve for one year.

Quorum: 50% + 1 (12 voting members)

Roles and Responsibilities:

Review and recommend approval of undergraduate programs and related regulations to Executive of Council including:

1. Admission requirements;
2. Expectations of academic performance;
3. Proposals for new, revised, and deleted undergraduate programs, including majors and minors;
4. Graduation requirements; and,
5. Academic schedule, which outlines the start and end dates associated with the delivery of instruction.

Proposals for new, revised, and deleted (historical or archived) courses are received for information. The Committee reserves the right to raise any such course to the table for approval.

Note: The Council Committee has the ability to refer new or substantially revised undergraduate academic programs to the Council Committee on Academic Mission (CCAM) or Council Committee on Budget (CCB).

Council Committee on Undergraduate Admissions and Studies

Purpose: Responsible for advising Council on undergraduate academic programs, policy, regulations and standards.

Membership: 3 elected members of Council recommended by the Nominating Committee of Council and approved by Executive of Council (1 member will be replaced each year, there will be no more than one from each faculty, and one of these members will be elected at the first meeting in the new academic year to act as Chair). This member will also be a member of the Council Committee on Student Appeals.
 2 undergraduate students appointed by the Students' Union from the student members of Council
 1 designate from each Federated College named by the Federated College
 The Director of the Centre for Continuing Education (or designate)
 The Associate Dean responsible for undergraduate academic affairs (or designate) from each undergraduate faculty
Ex officio: President
 University Secretary
 AVP (Student Affairs)
 Registrar
 Director (Enrolment Services)
 Associate Director (UR International)

Resources: Registrar's office

Roles and Responsibilities:

Note: All new, or substantially revised, undergraduate academic programs, policy, regulations and standards will normally first be considered by the Council Committee on Budget.

1. To recommend proposals for new, revised, and deleted undergraduate degree and non-degree programmes to Executive of Council.
2. To recommend proposals for new, revised, and deleted undergraduate academic policies and standards to Executive of Council.
3. To recommend proposals for new, revised, and deleted standards for undergraduate admission and graduation to Executive of Council.
4. To receive for information new, revised, and deleted undergraduate courses. The Committee reserves the right to raise any such course to the table for approval.

Executive of Council Approved 22 March 2017