

GEOGRAPHY FINAL COURSE OUTLINE: FALL 2023

GEOGRAPHY 502 Arctic Systems Science Class Number 76081

Section	Days	Time	Location
LEC 01	Tu, Th	14:00 – 15:15	ES 342

Instructor: Brian Moorman	Office: ES 324
Telephone: 403 220 4835	Email: moorman@ucalgary.ca

Official Course Description

Investigates the Arctic as a coupled system, and how the Arctic interacts with other Earth systems. Draws on physical, chemical, and biological sciences to understand linked topics such as Arctic glaciers, marine environments, hydrology, permafrost, wildlife, vegetation, and sea ice. Particular focus is paid to cycles of carbon, water, and energy as key drivers of the Arctic system. Selected human interactions with the Arctic system are also examined.

Course Objectives

In this course we will explore the elements that make up the Arctic's physical environment. Beyond that, a core objective of the course will be to gain a clearer understanding of how these elements are interrelated and interdependent.

Course Learning Outcomes

The Department of Geography is committed to student knowledge and skill development. The table below lists the key learning outcomes for this course, the program-learning outcomes to which they contribute, and the expected level of achievement.

Course Learning Outcomes	PLO(s)*	Level(s)**
Explain the essential physical, chemical, biological, and geological processes that govern the arctic environment.	2	3
Explain natural vs. anthropogenic influences on arctic systems, and the nuanced interrelationships of these systems.	2, 5	3
Students should be able to explain how arctic systems have a broader influence on the globe.	2, 4	2
Students are expected to demonstrate independent research skills and resourcefulness in examining arctic system analysis.	7, 3	2
Students should be able to critically discuss and debate societal and policy issues of the Arctic.	1	2
Students should be equipped to critically evaluate public and media discussions on arctic science.	1, 8	3
Students should be able to apply a solid understanding of the arctic systems into their broader geography program and their workplace projects.	2, 5	3

**PLOs = Program Learning Outcomes: 1 = reflect and communicate diverse human-environment perspectives, 2 = identify and explain human-environment processes, 3 = implement sampling, data collection, analyses and communication methods, 4 = analyze spatial and temporal aspects of human-environment systems, 5 = employ knowledge, arguments, and methodologies for solving human-environment problems, 6 = evaluate geospatial data and manipulate it to create cartographic products, 7 = communicate geographic concepts using oral, written, graphic, and cartographic modes, and 8 = demonstrate literacy skills.*

***Levels: 1 = Introductory, 2 = Intermediate, and 3 = Advanced.*

Prerequisites

Prerequisite: 3 units from Geography 305, 408.

Learning Resources

Readings and other resource materials will be posted on D2L.

Learning Technologies and Requirements

Not applicable

Grading (Weighting)

Midterm Exam (to test assimilation and synthesis of information): Oct 26 in class	30%
Term project group problem solving a specific issue in the Arctic: due Dec. 8, drop box	20%
Term project presentation: Dec. 5 in class	10%
Analysis of lectures , synthesis and critique (2): due 1 week after presentation	10%
Mapping our knowledge assignment	20%
Participation; questions, discussion, other contributions to the discussion:	10%

For the mapping our knowledge assignment, at the end of every lecture, students will be asked to summarize the important points covered in class and volunteers will be asked for to provide a contribution to the class knowledge map due in the following class. Students are to submit five (5) of these throughout the term, each worth four (4) percent of their grade, for a total of 20 percent.

There is no final exam. The midterm exam will be held in class, over 75 minutes, and will consist of short-answer questions to test for understanding and integration of the course content. If you are unable to complete an assignment or take a test on time, please contact Prof. Moorman as soon as possible. Unexcused late assignments will be assessed a 20% penalty per day. Deferred in-term exams may be permitted for acceptable reasons scheduled and administered at the instructor's discretion. It is not essential to pass all components to pass the course as whole.

The University's official letter grading system will be used and a weighted average of letter grades, using the aforementioned weighting, will be used.

Grading System

Letter Grade	Grade Point Value	Description
A+	4.00	Outstanding performance
A	4.00	Excellent performance
A-	3.70	Approaching excellent performance
B+	3.30	Exceeding good performance
B	3.00	Good performance
B-	2.70	Approaching good performance
C+	2.30	Exceeding satisfactory performance
C	2.00	Satisfactory performance
C-	1.70	Approaching satisfactory performance.
D+	1.30	Marginal pass. Insufficient preparation for subsequent courses in the same subject
D	1.00	Minimal Pass. Insufficient preparation for subsequent courses in the same subject.
F	0.00	Failure. Did not meet course requirements.

For additional detailed course information posted by the instructor, visit the course Desire2Learn page online at <https://d2l.ucalgary.ca/d2l/home>.

Supplementary Fees

Not applicable

SUPPLEMENTAL INFORMATION

Principles of Conduct

The University Calendar includes a statement on the principles of conduct expected of all members of the university community (including students, faculty, administrators, any category of staff, practicum supervisors, and volunteers), whether on or off university property. This statement applies in all situations where members of the university community are acting in their university capacities. All members of the university community have a responsibility to familiarize themselves with the principles of conduct statement, which is available at: www.ucalgary.ca/pubs/calendar/current/k.html.

Plagiarism, Cheating, and Student Misconduct

The University of Calgary is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect.

Academic dishonesty is not an acceptable activity at the University of Calgary, and students are **strongly advised** to read the Student Misconduct section in the University Calendar at:

www.ucalgary.ca/pubs/calendar/current/k-3.html. Often, students are unaware of what constitutes academic dishonesty or plagiarism. The most common are (1) presenting another student's work as your own, (2) presenting an author's work or ideas as your own without adequate citation, and (3) using work completed for another course. Such activities will not be tolerated in this course, and students suspected of academic misconduct will be dealt with according to the procedures outlined in the calendar at: www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-procedure

Instructor Intellectual Property

Information on Instructor Intellectual Property can be found at: www.ucalgary.ca/legal-services/university-policies-procedures/intellectual-property-policy

Freedom of Information and Protection of Privacy

Freedom of Information and Protection of Privacy (FOIP) legislation in Alberta disallows the practice of having students retrieve assignments from a public place, such as outside an instructor's office, the department office, etc. Term assignments will be returned to students individually, during class or during the instructor's office hours; if students are unable to pick up their assignments from the instructor, they must provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

Human subjects

Students in the course will not be expected to participate as subjects or researchers when research on human subjects may take place.

Internet and electronic communication device information

There are no restrictions on the use of laptops and tablets in class if they are used to take notes or find information relevant to the class, and if there is no disturbance or distraction of other students or the instructor. Phones must be turned off during class, unless you have previously identified yourself to the instructor as a health care or law enforcement professional.

Posting of Grades and Picking-up of Assignments

Graded assignments will be returned by the instructor or teaching assistant personally during scheduled lecture or laboratory periods, unless they are made available electronically through the course D2L webpage. Grades and assignments will not be available at the Department of Geography's main office.

Academic Accommodations

It is the student's responsibility to request academic accommodations, according to the university policies and procedures listed in the University Calendar.

The student accommodation policy can be found at: www.ucalgary.ca/legal-services/university-policies-procedures/student-accommodation-policy

Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities:

www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure

Students needing an accommodation based on a protected ground other than disability should communicate this need, preferably in writing to their instructor or the Department Head (email: freeman@ucalgary.ca).

Documentation for Absences or Missed Course Assessments

Students who are absent from class assessments (tests, participation activities, or other assignments) should inform the instructor as soon as possible. Instructors may request that evidence in the form of documentation be provided. If the reason provided for the absence is acceptable, instructors may decide that any arrangements made can take forms other than make-up tests or assignments. For example, the weight of a missed grade may be added to another assignment or test. For information on possible forms of documentation, including statutory declarations, please see:

www.ucalgary.ca/pubs/calendar/current/m-1.html

Copyright Legislation

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright: (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (www.laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Act.

Wellness and Mental Health Resources

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness, and academic success and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support, or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, <https://www.ucalgary.ca/wellnesscentre/services/mental-health-services>) and the Campus Mental Health Strategy website: (<http://www.ucalgary.ca/mentalhealth/>).

Contact Information for Student and Faculty Representation

- Student Union VP Academic 403-220-3911, suvpaca@ucalgary.ca
- Students Union Representatives for the Faculty of Arts – 403-220-3913, arts1@su.ucalgary.ca, arts2@su.ucalgary.ca, arts3@su.ucalgary.ca, arts4@su.ucalgary.ca
- Student Ombuds Office information can be found at: www.ucalgary.ca/ombuds/

Campus Safewalk

Campus Security, in partnership with the Students' Union, provides the Safewalk service, 24 hours a day, to any location on Campus, including the LRT station, parking lots, bus zones, and university residences. Contact Campus Security at 220-5333 or use a help phone, and Safewalkers or a Campus Security officer will accompany you to your campus destination.