

GEOGRAPHY FINAL COURSE OUTLINE: FALL 2021

**GEOGRAPHY 412
GFC HOURS (3-2)
Soil Science**

Section	Days	Time	Location
LEC 01	TuTh	12:30 – 13:45	ES 443
LAB 01	Mo 11:00AM – 12:50PM, biweekly		ES 355
LAB 02	Tu 2:00PM – 3:50PM, biweekly		ES 355

A shift to online modality may be necessary in the event of an infectious outbreak.

Instructor: Andrea Freeman	Office: ES 356B
Telephone: 403 220 3930	Email: freeman@ucalgary.ca
Email communication must be through your UCalgary email address.	Office hours: Via Zoom, by appointment

TA: Natalie Bakko
Email: natalie.bakko@ucalgary.ca
Office hours: TBA

*The **Department of Geography** condemns the longstanding and continued injustices against those marginalized by racism, sexism, homophobia, transphobia, classism, xenophobia, able-bodied normativity, mental health profiling, and other forms of prejudice. We are pained by the fact that injustices are unevenly borne. <https://arts.ucalgary.ca/news/anti-racism-statement>*

Territorial Acknowledgement

The Department of Geography would also like to acknowledge the traditional territories of the people of the Treaty 7 region in southern Alberta. The City of Calgary is also home to Métis Nation of Alberta, Region

III. <https://www.ucalgary.ca/indigenous/cultural-protocol>

Official Course Description

Exploration of soil science including the chemical, physical, and biological properties of soils; soil formation and development, including the classification of soils, and the application of soil science to land use, environmental quality, global change, and sustainable development.

Course Objectives

Students completing this course will be able to describe the formation of soils at the Earth's surface, including the chemical, physical, and biological processes that have acted upon them. They will be able to understand the application of these concepts in the literature and provide initial recommendations on the use of soils in geomorphology, in land use and environmental assessments (including archaeology), and in amendments to soils that promote healthy solutions to global issues and sustainable development practices. Basic analytical skills for soils science will be developed in the laboratory.

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)**
Understand and articulate advanced concepts in soil science	1, 5, 7	2,3
Describe elemental and biological processes that act on soil formation	2	1.2
Critically evaluate the literature on soil science as applied in Geography	4, 7, 8	2,3
Compose and participate in written and oral discussion of soil processes	5, 7, 8	2
Conduct basic analyses on soil components	3, 4	1, 2

**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

3 units from Geography 211, 308, 310.

Course Format

- Students unable to attend class for **any reason** may view last year's lectures online via D2L. Reasonable accommodations will be made if a student must miss a laboratory session due to illness or quarantine.
- All examinations will be held online
- Meetings with the instructor or TA will normally be held online via Zoom, unless exceptional circumstances arise

Learning Resources

Weil and Brady. *The nature and properties of soils* (15th edition).

A list of additional readings for discussions will be posted to D2L

Assessment Methods

Two, weekly group discussions (5% each)	10%
Discussion Questions (3% each X 6 discussions)	18%
Group Contract	2%
Participation (synchronous sessions)	5%
Midterm Tests (x3, 20%, 10%, 10%)	40%
Labs (5X5%)	25%

All components must be attempted to pass the course, but a failing grade on any individual component will not necessarily result in failure of the course. Final course grade will be determined by percentage earned.

There is no Registrar-schedule final exam.

Guide to Assessments (Tests):

- Examinations are open-book and open note; however, any written answers must be presented in your own words (no plagiarism, **no cutting and pasting from shared notes or other online resources**). Students unfamiliar with Academic Integrity should consider taking a workshop: <https://www.ucalgary.ca/student-services/student-success/learning/academic-integrity>
- You are on your honor to use only the textbook and your own personal notes for examination purposes; any other resources identified will be reported to the Associate Dean; for tests 2 and 3 your "notes" may include ***your personal answers*** to discussion questions.
- Tests will be posted to D2L and will open at 12:30 pm and close at 2:00 pm (Calgary) on the date of the test.
- You **must not consult or interact with anyone** regarding the exam **during the exam period**.
- The instructor will be available via Zoom for questions between the hours of 12:30 and 1:45 pm on the date of the test.
- The test will be open to you for 1 hour and 15 minutes unless you have an academic accommodation. You will be given a 5-minute buffer. Please do not enter and exit the test; you will only be allowed one entry.

Guide to Assessments (Other):

- A reading list will be provided and divided into topics. All students are required to read these materials.
- Students will be assigned to groups based on topical interest and will be required to participate in two weekly presentations as the leaders of those discussions. I strongly advise preparing a powerpoint presentation.
- Powerpoint presentations must be sent to the instructor by 10 am (Calgary) on the date of the presentation so that in the event of an inability to share, the instructor may load any prepared materials.
- Discussion Questions will be provided prior to each discussion session. These are due by 10 am (Calgary) on the day of the discussion. These must be answered in your own words. Lectures and discussions will form the content of tests 2 and 3.
- Lab assignments will be posted to D2L along with a **video** explaining the methods used; these **must be viewed in advance** of your lab to reduce time spent in close contact with others. Students in each lab section will be divided into two groups to promote a healthier workspace. You must attend your scheduled lab session. The TA will provide due dates for the lab assignments.

Late assignment policy: Late assignments will receive a 10% penalty in the first week. Unless a valid excuse is provided, any assignments more than one week late will receive an automatic grade of zero. Valid excuses are only those outlined by the

University of Calgary policy for examinations and tests and a request for deferral should be sent to the instructor within 24 hrs of the missed test or assignment deadline.

Grading System

96 – 100	A+	77 – 80	B	59 – 61	C-
90 – 95	A	71 – 76	B-	55 – 58	D+
86 – 89	A-	65 – 70	C+	50 – 54	D
81 – 85	B+	62 – 64	C	0 – 49	F

Flexible Grade Option (CG Grade)

<https://www.ucalgary.ca/pubs/calendar/current/f-1-3.html>

Additional Course Information

- All students are expected to attend discussion sessions and laboratory sessions in person; however, in the event of illness or quarantine, reasonable accommodations will be made.
- Students are expected to participate orally in discussions, and to provide written communication in lab reports, discussion questions, and short answer examination questions.
- A rubric will be provided for both weekly discussions (oral) and participation.
- Students needing an in-term deferred exam must provide a declaration by email to the instructor, explaining the circumstances under which they were unable to take the test during the available period. Your email is considered an official oath that the excuse is valid. You will be provided with an access window and the same exam duration unless you have academic accommodations.

Discussion Board Policy

The university seeks to create and maintain a positive and productive learning, working, and living environment; an environment in which there is:

- respect for the dignity of all
- equitable treatment of individuals
- respect for academic freedom

This means that students, as well as faculty, must act ethically, honestly and with integrity, and in accordance with the principles of fairness, good faith, and respect. In other words, instances of racism, sexism, or other derogatory remarks, or remarks that may cause a reasonable person to fear for their safety or suffer emotional or mental distress will not be tolerated. Such remarks made in the discussion boards will be immediately deleted and the person responsible may be subject to University sanctions for non-academic misconduct. If you find a post that does not adhere to these principles, please contact the instructor immediately. For more information see: <https://ucalgary.ca/policies/files/policies/non-academic-misconduct-policy.pdf>

Disagreements between individuals are inevitable, and it is important in the interests of academic freedom that individuals can express their views without fear of repercussion. It is also through understanding other points of view that we learn. When disagreements do occur, it is important to maintain respect for the dignity of all. It is also possible that remarks may be made that, while not intended to be offensive, may be hurtful to others.

Exams & Deferrals <https://www.ucalgary.ca/registrar/exams>

Supplementary Fees

Not applicable.

Referencing Standard

In written work presented in this class, the accepted method for referencing the work of others will be the Chicago Manual of Style: <https://www.chicagomanualofstyle.org/home.html>

Important Dates

The last day to drop this course and receive a tuition fee refund is **Thursday, September 16th, 2021**. The University will be closed on **Thursday, September 30th, 2021** to commemorate the tragic history and ongoing legacy of residential schools. The last day to withdraw from this course is **Thursday, December 9th, 2021**.

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

University of Calgary Academic Integrity Policy

Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. 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: <https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-procedure>

For students wishing to know more about what constitutes plagiarism and how to properly cite the work of others, the Department of Geography recommends that they attend Academic Integrity workshops offered through the Student Success Centre: <https://www.ucalgary.ca/student-services/student-success/learning/academic-integrity>

Instructor Intellectual Property

Information on Instructor Intellectual Property can be found at <https://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.

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 and assignments cannot be dropped off at the Department 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: <https://www.ucalgary.ca/pubs/calendar/current/b-6-1.html>

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: <https://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).

Learning Technologies and Requirements

In order to successfully engage in their learning experiences at the University of Calgary, students taking blended courses are required to have reliable access to the following technology, including:

- A computer with a supported operating system, as well as the latest security and malware updates
- A current and updated web browser
- A UofC email account
- Broadband internet connection
- In the event of Zoom meetings, you should also have a webcam and microphone

Use of internet and electronic devices in class

Computing technology is permitted in the classroom if it is being used for the course (ex: taking notes, looking up a term). If you are not interested in engaging with lecture, you are invited to view the online lecture materials at your leisure.

Course evaluations and student feedback

Student feedback will be sought at the end of the course through the standard University Student Ratings of Instruction (USRI) and Faculty course evaluation forms.

Accessibility

Lectures available online will be recorded via Yuja and posted to D2L.

Copyright Legislation

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright <https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy> and requirements of the copyright act (<https://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/>).

Students requiring assistance are encouraged to email the **Student at Risk line** if they or others appear to need wellness assistance: sar@ucalgary.ca For more immediate response, please call: 403-210-9355 and select option #2.

Sexual Violence Policy

The University recognizes that all members of the University Community should be able to learn, work, teach and live in an environment where they are free from harassment, discrimination, and violence. Please see the policy available at <https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf>

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/

Emergency Evacuation/Assembly Points

Assembly points for emergencies have been identified across campus. Assembly points are designed to establish a location for information updates from the emergency responders to the evacuees; from the evacuated population to the emergency responders. For more information, see the University of Calgary's Emergency Management website: <https://www.ucalgary.ca/risk/emergency-management> *The muster point for the Earth Sciences building is the ICT food court.*

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.