GEOGRAPHY FINAL COURSE OUTLINE: FALL 2019

GEOGRAPHY 412 GFC HOURS (3-2)

Soil Science

Section	Days	Time	Location
LEC 01	TuTh	12:30 - 13:45	ST 129
LAB 01	Мо	11:00 - 12:50	ES 355
LAB 02	Tu	14:00 - 15:50	ES 355

Instructor: Andrea Freeman	Office: ES 842
Telephone: 403 220 2792	Email: freeman@ucalgary.ca

Please note: The emergency evacuation assembly point for all classes taught in Science Theatres is Professional Faculties Food Court and Earth Sciences is ICT Food Court.

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 in this course will learn advanced concepts in soil science including elemental cycles, the cycling of nutrients, and interactions among various actors that are part of the soil system. A focus on the application of soil science will be a key part of the course, with students participating in the discussion of peer-reviewed articles.

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

Prerequisite: 3 units from Geography, 211, 308, 310.

Learning Resources

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

Grading (Weighting)

Two, weekly group discussions (5% each)	10%
Two, individual summaries (10% each)	20%
Annotated Bibliography	5%
Midterm Tests (x3, 20%, 10%, 10%)	40%
Labs (5X5%)	25%

Notable dates: October 8 (Test #1: 20% closed book exam), November 19 (Test #2, 10% open note), December 5 (Test #3, open note), Dec 6 (Annotated Bibliographies due). Weekly discussions begin Oct. 17, summaries due the day of discussion.

There is no final examination for this course.

- All components must be attempted in order 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.
- Only pens, pencils and erasers are allowed in exams. No other materials or devices are allowed unless otherwise stated.
- 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 must be accompanied by a Statutory Declaration.

Grading System

Use EITHER this type of grading system (percentage values may be changed, but you must include all the letter grades):

96 – 100	A+	77 – 80.9	В	59– 61.9	C-
90-95.9	А	71 – 76.9	B-	55 – 58.9	D+
86-89.9	A-	65 – 70.9	C+	50 – 54.9	D
81-85.9	B+	62 - 64.9	С	0-49	F

Students needing an in-term deferred exam must provide a statutory declaration and use the Department of Geography rescheduling system (information to be provided on D2L).

Supplementary Fees

There are no supplementary fees for this course.

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

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 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: <u>www.ucalgary.ca/pubs/calendar/current/k-3.html</u>. 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: <u>www.ucalgary.ca/pubs/calendar/current/k-5.html</u>.

Instructor Intellectual Property

Information on Instructor Intellectual Property can be found at <u>https://www.ucalgary.ca/policies/files/policies/Intellectual%20Property%20Policy.pdf</u>

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 will NOT participate in human subjects research as part of this course.

Internet and electronic communication device information

Laptops and tablets may be used in class if they are used to take notes or find information relevant to the class, <u>and</u> 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: <u>www.ucalgary.ca/access/accommodations/policy</u>. 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: <u>www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf</u>.

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: david.goldblum@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 https://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-bycopyright.pdf) 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 disciplines 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, <u>https://www.ucalgary.ca/wellnesscentre/services/mental-health-services</u>) and the Campus Mental Health Strategy website (<u>http://www.ucalgary.ca/mentalhealth/</u>).

Contact Information for Student and Faculty Representation

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

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.