



GEOGRAPHY FINAL COURSE OUTLINE: WINTER 2018
GEOGRAPHY 413
(Archaeology 413)
H(3-2)

Soil Characteristics and Formation

Section	Days	Times	Location
LECO1	TuTh	17:00 – 18:15	ES 342
LAB01	Fr	15:00 – 16:45	ES 355

Instructor: Aaron Williams	Office: ES 446
Telephone: 220 6200	Email: awill@ucalgary.ca

Please note: *The appropriate emergency evacuation assembly point for all classes taught Earth Sciences is ICT Food Court.*

Official Course Description:

Characteristics of soils and the processes and factors of soil formation. Soil development related to geomorphic materials, geomorphic events, anthropogenic sources and erosional and depositional landscapes.

Course Objectives:

The course objectives are to study advanced concepts of soil formation, soil classification and controls on physical, chemical and biological properties. Patterns of vegetation structure and productivity and its relationship with climate and soils will be investigated at multiple scales. Further the critical importance of soil quality, management, sustainability and impacts of climate change relating to agriculture, food security, and preservation are also objectives for Geography 413.

The objective of the Lab component of the course will to be to provide support of course material that investigates fundamental soil physical properties through the application of advanced methods of soil testing and analysis.

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 they facilitate and the expected level of achievement.

Course Learning Outcomes	PLO(s)	Level(s)
Students should be able to explain soil and vegetation relationships.	1,2,3,4,5,6,7,8	3
Students should be able to effectively evaluate the properties and characteristics of soils within Canada and the world.	1,2,3,4,5,6,7,8	3
Students should be able to apply concepts of ecological land classification within their coursework	1,2,3,4,5,6,7,8	3
Students should be able to conceptualize the significance of soils and vegetation within our environment.	1,2,3,4,5,7,8	3

Students should be able to evaluate human disturbance, land degradation, and the impacts of climate change.	1,2,3,4,5,6,7,8	3
Students should be able to explain and evaluate various soil testing and methods of analysis within laboratory assignments and projects	1,2,3,4,5,6,7,8	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, (3) Advanced.

Prerequisite: Geography 313

Learning Resources:

Text(s)/Readings: Brady and Weil, The Nature and Properties of Soils, 15th Ed., 2016

Grading/Weighting

Midterm 1: February 27 th	20%
Soil case study.....	15%
Labs (5 x 7%).....	35%
Midterm 2: March 20 th	20%
Take home final Exam: April 10 th	10%

Lab Schedule:

TBA

(note – follow-up lab time outside of scheduled lab time may be required for certain labs)

Exemptions to the Examination and Tests Regulations

- It is not essential to pass all elements/components to pass the course as a whole.
- Only pens, pencils and erasers are allowed in exams. No other materials or devices are allowed.
- **THERE WILL BE NO MAKEUP OR DEFERRED EXAMS** under any circumstances, nor may the examinations be written early. Students unable to write an exam because of documented illness; family emergency or religious observance will have the weight shifted to another component.
- There is no Registrar-scheduled final examination in this course.

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

Human subjects

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

Supplementary Fees

N/A

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

SUPPLEMENTAL INFORMATION**Writing across the Curriculum**

Writing skills are not exclusive to English courses and, in fact, should cross all disciplines. The university supports the belief that throughout their university careers students should be taught how to write well, so that when they graduate their writing abilities will be far above the minimal standards required at entrance. Consistent with this belief, students are expected to do a substantial amount of writing in their university courses and, where appropriate, faculty members can and should consider quality of writing as a factor in the evaluation of student work. The services provided by Writing Support Services can be utilized by all undergraduate and graduate students who feel they require further assistance: www.ucalgary.ca/ssc/writing_support/overview.

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/access/accommodations/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/policies/files/policies/student-accommodation-policy.pdf.

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

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/pubs/calendar/current/k-5.html.

Internet and electronic communication device information:

There is no restriction 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. The use of any calculators and/or devices during examinations may be allowed depending on the nature of exam questions.

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 schedule 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.

Faculty of Arts Program Advising and Student Information Resources

Have a question, but not sure where to start? The Faculty of Arts Students Centre is your information resource for everything in Arts! Drop in at SS 102, call us at 403-220-3580, or email us at ascarts@ucalgary.ca. You can also visit the Faculty of Arts website at <http://arts.ucalgary.ca/undergraduate>, which provides detailed information about common academic concerns.

For guidance on course registration (add, drop, swap), information about paying fees, and assistance with your Student Centre, contact Enrolment Services at 403-210-7625 or visit them at the MacKimmie Block.

Contact Information for Student and Faculty Representation

- SU VP Academic Phone: 220-3911 and e-mail: suvpaca@ucalgary.ca
- SU Faculty Rep. Phone: 220-3913 and e-mail: arts1@ucalgary.ca
- The students ombudsman office information can be found at: www.ucalgary.ca/ombuds/

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/>).

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.

USRI Surveys

At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses (www.ucalgary.ca/usri). Your responses make a difference, so please participate in USRI surveys.