



COURSE OUTLINE

1. **Course:** GLGY 337, Introduction to Geologic Field Methods - Summer 2021

Lab 03:

Instructor	Email	Phone	Office	Hours
Dr Alan Hildebrand	ahildebr@ucalgary.ca	403 220-2291	ES 760A	TBA
Dr. Jennifer Cuthbertson	cuthberj@ucalgary.ca	403 220-4709	ES 520	By Appointment

In Person Delivery Details:

The course is built around in-person geological activities done outdoors at different locations within easy driving distance/time from Calgary. On the 1st day (Aug 7) field activities will be in Calgary, within walking distance from the UofC campus. On the last day (Aug 16) the students will work on finalizing the assignments from the previous days field activities. On all other days students and instructor and TA will leave from a parking lot next to the Earth Science Building to be driven by bus and a secondary support vehicle to the location selected for geological field work. Correspondingly, in the afternoons or early evenings of the field days the entire class will arrive back on campus -see general itinerary below.

On some days we plan to return relatively early from the field work (by 1 or 2 pm) and on those afternoons the class will reconvene in a classroom in the Earth Science Bldg to work on presentation of the data and observations recorded in the field in the form of stratigraphic columns, geologic maps and/or cross-sections and brief reports. On other days we will return relatively late from the field work (after 5 pm) and we may only reconvene very briefly in a classroom to summarize progress made and plan upcoming activities.

Re-Entry Protocol for Labs and Classrooms:

To limit the spread of COVID-19 on campus, the University of Calgary has implemented an Instructional Space Re-Entry Protocol that must be followed. Details are found in the [Covid-19 Protocol for Class and Lab re-entry.pdf](#) document.

Course Site:

D2L: GLGY 337 B03-(Summer 2021)-Introduction to Geologic Field Methods

Note: Students must use their U of C account for all course correspondence.

2. **Requisites:**

See section [3.5.C](#) in the Faculty of Science section of the online Calendar.

Prerequisite(s):

Geology 333, 343, 381 and admission to programs in Geology or Geophysics Environmental Science (Geology concentration) or Natural Sciences (Geoscience concentration) and consent of the Department.

Note(s):

- This course occurs in rugged field conditions and varying weather, for which participants must be prepared and equipped. A supplementary fee will be assessed to cover additional costs associated with this course. Students will require consent of the department to drop this course.

3. **Grading:**

The University policy on grading and related matters is described in [F.1](#) and [F.2](#) of the online University Calendar.

In determining the overall grade in the course the following weights will be used:

Component(s)	Weighting %	Date
Stratigraphic column at East Coulee, AB	10	*Aug 9
Stratigraphic column w/brief interpretation at Hwy 1A, near Exshaw, AB	15	*Aug 11
Geologic map and cross-section w/brief description, near Exshaw, AB	30	*Aug 14
Geologic map, cross-section w/brief description, and geologic history, Hailstone Butte area	30	**Aug 16
Field Notebook (marked during and after the end of the course)	10	
Active participation in the field	5	

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the student will be assigned a grade. The student's grade for each component listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.

The conversion between a percentage grade and letter grade is as follows.

	A+	A	A-	B+	B	B-	C+	C	C-	D+	D
Minimum % Required	95 %	90 %	85 %	80%	75%	70 %	66 %	62%	58%	54 %	50 %

The University of Calgary offers a [flexible grade option](#), Credit Granted (CG) to support student's breadth of learning and student wellness. Faculty units may have additional requirements or restrictions for the use of the CG grade at the faculty, degree or program level. To see the full list of Faculty of Science courses where CG is not eligible, please visit the following website: <https://science.ucalgary.ca/current-students/undergraduate/program-advising/flexible-grading-option-cg-grade>

4. Missed Components Of Term Work:

The university has suspended the requirement for students to provide evidence for absences. Please do not attend medical clinics for medical notes or Commissioners for Oaths for statutory declarations.

In the event that a student legitimately fails to submit any online assessment on time (e.g. due to illness etc...), please contact the course coordinator, or the course instructor if this course does not have a coordinator to arrange for a re-adjustment of a submission date. Absences not reported within 48 hours will not be accommodated. If an excused absence is approved, one possible arrangement is that the percentage weight of the legitimately missed assignment could also be pro-rated among the components of the course. This option is at the discretion of the coordinator and may not be a viable option based on the design of this course.

5. Scheduled Out-of-Class Activities:

There are no scheduled out of class activities for this course.

6. Course Materials:

Required Textbook(s):

Angela Coe and others, *Geological Field Techniques (2010)*: Wiley-Blackwell.

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

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam/Camera (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Stable internet connection.

For more information please refer to the UofC [ELearning](#) online website.

7. Examination Policy:

No aids are allowed on tests or examinations.

Students should also read the Calendar, [Section G](#), on Examinations.

8. Approved Mandatory And Optional Course Supplemental Fees:

There are no mandatory or optional course supplemental fees for this course.

9. Writing Across The Curriculum Statement:

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section [E.2](#) of the University Calendar.

10. Human Studies Statement:

Students will not participate as subjects or researchers in human studies.

See also [Section E.5](#) of the University Calendar.

11. Reappraisal Of Grades:

A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See [Section I.3](#) of the University Calendar.

- a. **Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within **ten business days** of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall submit the Reappraisal of Graded Term work form to the department in which the course is offered within 2 business days of receiving the decision from the instructor. The Department will arrange for a reappraisal of the work within the next ten business days. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. See sections [I.1](#) and [I.2](#) of the University Calendar
- b. **Final Exam:** The student shall submit the request to Enrolment Services. See [Section I.3](#) of the University Calendar.

12. Other Important Information For Students:

- a. **Mental Health** 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, [Mental Health Services Website](#)) and the Campus Mental Health Strategy website ([Mental Health](#)).
- b. **SU Wellness Services:** For more information, see www.ucalgary.ca/wellnesscentre or call [403-210-9355](tel:403-210-9355).
- c. **Sexual Violence:** The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email ([svsa@ucalgary.ca](mailto:svs@ucalgary.ca)) or phone at [403-220-2208](tel:403-220-2208). The complete University of Calgary policy on sexual violence can be viewed at (<https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Sexual-and-Gender-Based-Violence-Policy.pdf>)
- d. **Misconduct:** 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. Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional [Code of Conduct](#) and promote academic integrity in upholding the University of Calgary's reputation of excellence. Some examples of academic misconduct include but are not limited to: posting course material to online platforms or file sharing without the course instructor's consent; submitting or presenting work as if it were the student's own work; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; borrowing experimental values from others without the instructor's approval; falsification/fabrication of experimental values in a report. Please read the following to inform yourself more

on academic integrity:

[Student Handbook on Academic Integrity](#)
Student Academic Misconduct [Policy](#) and [Procedure](#)
[Research Integrity Policy](#)

Additional information is available on the [Student Success Centre Academic Integrity page](#)

e. Academic Accommodation Policy:

It is the student's responsibility to request academic accommodations according to the University policies and procedures listed below. The student accommodation policy can be found at: <https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Accommodation-Policy.pdf>

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/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf>.

Students needing an accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, by filling out the [Request for Academic Accommodation Form](#) and sending it to Jennifer Cuthbertson by email cuthberj@ucalgary.ca preferably 10 business days before the due date of an assessment or scheduled absence.

f. Freedom of Information and Privacy: This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see [Legal Services](#) website.

g. Student Union Information: [VP Academic](#), Phone: [403-220-3911](tel:403-220-3911) Email: suvpaca@ucalgary.ca. SU Faculty Rep., Phone: [403-220-3913](tel:403-220-3913) Email: sciencerep@su.ucalgary.ca. [Student Ombudsman](#), Email: ombuds@ucalgary.ca.

h. Surveys: At the University of Calgary, feedback through the Universal Student Ratings of Instruction ([USRI](#)) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.

i. Copyright of Course Materials: All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of student academic or [non-academic misconduct](#), in addition to any other remedies available at law.

Locations and itinerary - Aug 7-16, 2021

Day, Field location, Departure time from campus & Arrival on campus (estimate)*

- 1 Varsity/Bowmont Pk, in Calgary Walking distance from campus; times to be announced
- 2 East Coulee, near Drumheller, AB 7:00 am 5:00-7:00 pm
- 3 Old Highway 1A Section, near Exshaw, AB 8:00 am 5:00 pm
- 4 Old Highway 1A Section, near Exshaw, AB 8:00 am 1:00-2:00 pm
- 5 Grotto Mountain Canyon, near Exshaw, AB 8:00 am 5:00 pm
- 6 Grotto Mountain Canyon, near Exshaw, AB 8:00 am 5:00 pm
- 7 Grotto Mountain Canyon, near Exshaw, AB 8:00 am 1:00-2:00 pm
- 8 Hailstone Butte, near Longview, AB 7:30 am 7:00 pm
- 9 Hailstone Butte, near Longview, AB 7:30 am 7:00 pm
- 10 On campus and/or at home to finish-up Hailstone Butte assignment, Calgary 9:00 am to 5:00 pm (or as needed)

* Exact on-campus location for boarding the bus each morning and arrival back on campus for Days 2-9 to be announced.

NOTE that arrival times on field days are best estimates to allow as much time as possible in the field yet

reasonable to allow time to do the 'office work' required to finish the assignments after returning from the field. On some days arrival times back on campus might be earlier than the times listed but they are not likely to be later.

Course Outcomes:

- Locate themselves on a topographic map, and recognize the expression of landscape features on a topographic map.
- Operate a compass for successful navigation and orienteering.
- Describe, sketch, and interpret a rock outcrop using geologic terminology.
- Measure a stratigraphic section and construct a field log of the section, including description of rock units.
- Measure the orientation of planar and linear geologic features.
- Construct a geologic map that includes contacts, geologic symbols, and a legend.
- Construct a geologic cross-section based on data collected in the field.
- Recognize and describe a variety of surficial deposits and sedimentary, igneous, and metamorphic rocks in the field.
- Visualize in 3-D the geologic structures revealed by the cross section(s) both (virtually) above and below ground.

Electronically Approved - Aug 06 2021 14:51

Department Approval

Electronically Approved - Aug 09 2021 15:27

Associate Dean's Approval