



COURSE OUTLINE

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

Lab 02:

Instructor	Email	Phone	Office	Hours
Dr Rajeev Sasidharan Nair	mair@ucalgary.ca	403 220-4823	ES 152	By appointment

This is a field based course where the group will be spending the days outdoors which involve moderate hiking and appropriate field gear is required. Students must also prepare to work in variable weather conditions (rain/snow, hot) and should be prepared to dress accordingly. Some of the hiking takes place on informal trails and somewhat steep slopes and so appropriate footwear (hiking boots) with ankle support is required.

Students are encouraged to discuss any medical concerns with the instructor or teaching assistants so that appropriate safety measures can be discussed and planned for.

Students are advised that parking is not free on campus and should arrange to be dropped off and picked up as convenient.

In Person Delivery Details:

This section of field school runs from Aug 5-14. All the components of the course will take place in-person either in the field locations or on campus. On the first day (Aug 5) students will meet on campus and will do some field activities outdoors and an orientation meeting indoors. Aug 6-13 will be field activities that will involve day trips (transportation by bus) to various locations 2-3 hrs away from Calgary. We anticipate to leave from campus on those days around 7 am and return to campus around 7 pm. On some days we will return to campus earlier and will meet in classrooms to process the collected field data and do some office work. On the last day (Aug 14), the group will meet on campus to finish up all the remaining assignments. Alternatively, we may use this as a field day if we lose other field days due to weather conditions.

Point of departure and arrival on campus will be parking lot 21 (beside the Math Science Building). Students are expected to be punctual and the bus will leave at the scheduled time of departure.

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 B02-(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 %	Due Date
Stratigraphic Section (Drumheller)	10	*Aug 7
Stratigraphic Section (Exshaw)	15	*Aug 9
Mapping Project (Exshaw)	30	*Aug 12
Mapping Project (Hailstone Butte)	30	**Aug 14
Field Notebook	10	**Aug 14
Active Participation in the field	5	

* assignments due before boarding bus for the field

** due at the end of the day

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 %

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.

As most of the work occurs in field locations, missed field work cannot be made up. Therefore, in case of missed field work and provided sufficient field work has been carried out, student will be assessed based on completed field work.

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, *Geological Field Techniques (2010)*: Wiley-Blackwell.

Your textbook will serve as a valuable resource for this and future field courses. Instructors will provide/distribute supplementary information that is required for the field assignments.

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:

There is no formal examination for this course. Instructor and Teaching Assistant will ask students to demonstrate specific field techniques in the field.

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.

- 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
- 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:

- 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](#)).
- SU Wellness Services:** For more information, see www.ucalgary.ca/wellnesscentre or call [403-210-9355](tel:403-210-9355).
- 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) 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/policies/files/policies/sexual-violence-policy.pdf>)
- 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:** Students needing an accommodation because of a disability or medical condition should contact Student Accessibility Services in accordance with the procedure for accommodations for students with disabilities available at [procedure-for-accommodations-for-students-with-disabilities.pdf](#).

Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Teaching Professor of the Department of Geoscience, Jennifer Cuthbertson by email cuthberj@ucalgary.ca or phone 403-220-4709. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than **14 days** prior to the date in question. See [Section E.4](#) of the University Calendar.

- 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.

Tentative Itinerary Aug 5-14, 2021

DAY	Field location	Departure from campus	*Arrival on campus (estimate)
1	Varsity/Bowmont Pk, Calgary	TBA	
2	East Coulee, near/east of Drumheller	7:00 am	6:00 pm
3	Old Highway 1A Section, near Exshaw	7:00 am	5:00 pm
4	Old Highway 1A Section, Exshaw	7:00 am	3:00 pm
5	Grotto Mountain Canyon, Exshaw	7:00 am	5:00 pm

6	Grotto Mountain Canyon, Exshaw	7:00 am	5:00 pm
7	Grotto Mountain Canyon, Exshaw	7:00 am	2:00 pm
8	Hailstone Butte, near Longview	7:00 am	7:00 pm
9	Hailstone Butte, near Longview	7:00 am	7:00 pm
10	On campus to finish-up Hailstone Butte assignment, Calgary	9.00 am to 5.00 pm (or as needed)	

* Please note that the arrival times on campus are best estimates and may not be accurate.

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 - Jul 16 2021 08:42

Department Approval

Electronically Approved - Jul 20 2021 09:24

Associate Dean's Approval