



## COURSE OUTLINE

### 1. **Course:** GLGY 343, 3D Geologic Structures and Methods - Winter 2021

Lecture 01: MWF 10:00 - 10:50 - Online

Instructor	Email	Phone	Office	Hours
Dr Rodolfo Meyer	rmeyer@ucalgary.ca	403 210-7848	ES 110	Weekly office hours will be announced following consultation with the students.

#### Online Delivery Details:

This course is being offered online in real-time via scheduled meeting times, you are required to be online at the same time.

To help ensure Zoom sessions are private, do not share the Zoom link or password with others, or on any social media platforms. Zoom links and passwords are only intended for students registered in the course. Zoom recordings and materials presented in Zoom, including any teaching materials, must not be shared, distributed or published without the instructor's permission.

This course has a registrar scheduled, synchronous final exam. The writing time is 2 hours + 50% buffer time.

Regularly scheduled **Office Hours** for both Rudi (course instructor) and the Teaching Assistants will be established in the 1st week of classes in consultation with the entire class. Aside from regularly scheduled office hours with the instructor(s), virtual appointments can be scheduled via email.

**NOTE** that overall the instructors will aim to respond to your email inquiries related to the course within 24 hours, except on weekends and holidays.

Both Lecture and Lab periods will be scheduled to run as synchronous classes.

**Lectures** (MWF 10:00-10:50am) will be presented as Zoom classes with live interaction made possible both verbally and as text entries into the Chat box. Lecture presentations will be posted beforehand on the Class Management System, d2L -see tentative schedule of lecture topics at the bottom of this outline

During regularly scheduled **Lab periods**, Tuesdays 11:00-1:50pm (B01) and 2:00-4:50 pm (B02), the TA (and at times, Rudi) will be connected with students in the class via Zoom to introduce the given lab exercise/assignment, communicating and working with the students on the required tasks, and respond to questions. Any given Lab Assignments will be posted beforehand on d2L.

#### Course Site:

D2L: GLGY 343 L01-(Winter 2021)-3D Geologic Structures and 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 381.

### 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
Quiz 1	9	Wed. Jan 27
Quiz 2	9	Mon. Feb 22
Quiz 3	9	Mon. March 8
Quiz 4	9	Mon. March 22
Quiz 5	9	Mon. April 12

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
<b>Minimum % Required</b>	95 %	90 %	85 %	80%	75%	70 %	66 %	62%	58%	54 %	50 %

The Top Hat classroom response mark of 5% is based on participation only. Note that students don't have to be present for every question – a score of about 85% usually corresponds to a full mark. If you wish to opt-out of this mark the corresponding 5% will be added to the weight of the Final Exam.

To opt-out of TopHat marks students must inform the instructor via email by Friday April 9.

This course will have a final exam that will be scheduled by the Registrar. [The Final Examination Schedule](#) will be published by the Registrar's Office approximately one month after the start of the term. The final exam for this course will be designed to be completed within 2 hours.

The final exam will be administered using an on-line platform. Per section [G.5](#) of the online Academic Calendar, timed final exams administered using an on-line platform, such as D2L, will be available on the platform. **Due to the scheduling of the final exams, the additional time will be added to the end of the registrar scheduled synchronous exam to support students. This way, your exam schedule accurately reflects the start time of the exam for any synchronous exams. E.g. If a synchronous exam is designed for 2 hours and the final exam is scheduled from 9-11am in your student centre, the additional time will be added to the end time of the synchronous exam. This means that if the exam has a 1 hour buffer time, a synchronous exam would start at 9 am and finish at 12pm. - updated April 6, 2021**

**Five (5) Quizzes**, delivered synchronously via d2L, will be written outside of regularly scheduled lecture periods -see dates/times in grade distribution table and in the Out-of-Class Activities list. The Quizzes normally require the full 50 minutes of a traditional lecture period to complete. Hence, 90 minutes are scheduled for each Quiz to allow sufficient time for completion and to deal with potential complications arising from any hardware and/or software issues.

Labs take place on Tuesdays and the corresponding Lab Assignments can be substantially completed during the 3-hour lab periods. **Lab Assignments will be due by 6 pm on the Friday following each Lab** with the idea that instructors will be able to mark the assignments, and provide feedback, by the start of the next Lab. Lab Assignments will be submitted in d2L *-pdf file format required*.

Every Lab will have a Dropbox set-up for the purpose of assignment submission. NOTE that this means that you will have a Lab Assignment to complete every week of the semester except for the 1st week of classes and the week of Feb 15 (term break). To obtain the **grade for the Lab Assignments** the lowest mark obtained will be ignored when calculating the average of all the other Lab Assignments.

The **Final Exam**, delivered via d2L, will run synchronously for the entire class. It is designed to be a 2-hour exam for which up-to 50% extra time is scheduled to accommodate any potential complications arising from any hardware and/or software issues.

#### 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, then the percentage weight of the legitimately missed assignment could also be pro-rated among the components of the course.

**Lab Assignments will be due** by 6 pm on the Friday following each Lab to give the TAs time to mark the assignment prior to the next Lab period. Due dates can only be changed for legitimate reasons (e.g. illness or other justified conflict) with consent from the TA, who at times may consult with the course instructor. Any accommodations are decided on a case-by-case basis. Aside from the above, **late submissions of Lab Assignments are assigned a penalty of 25% per day, up to a maximum of 2 days (50%).**

## 5. Scheduled Out-of-Class Activities:

The following out of class activities are scheduled for this course.

Activity	Location	Date and Time	Duration
Quiz 1	synchronous online Quiz	Wednesday, January 27, 2021 at 5:00 pm	90 Minutes
Quiz 2	synchronous online Quiz	Monday, February 22, 2021 at 5:00 pm	90 Minutes
Quiz 3	synchronous online Quiz	Monday, March 8, 2021 at 5:00 pm	90 Minutes
Quiz 4	synchronous online Quiz	Monday, March 22, 2021 at 5:00 pm	90 Minutes
Quiz 5	synchronous online Quiz	Monday, April 12, 2021 at 5:00 pm	90 Minutes

**REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY.** If you have a conflict with the out-of-class-time-activity, please contact your course coordinator/instructor no later than **14 days prior** to the date of the out-of-class activity so that alternative arrangements may be made.

The Quizzes scheduled outside of regularly scheduled lecture periods are needed to provide more time for Quizzes that require a full 50 minutes of a standard 'in-person' lecture period. ALL Quizzes will be held synchronously online 5-6:30 pm on the indicated dates. Lecture periods are cancelled on those days and additional class times will be cancelled to compensate for the extra time taken for the Quizzes.

For most (perhaps all) of these Quizzes students will need to download a single letter-sized (8.5x11") sheet to complete a technical drawing (map) either by hand or digitally. If drawn by hand the completed drawing must be imaged with a scanner or photographed with a phone camera to submit the corresponding file to a d2L Dropbox available for this purpose.

## 6. Course Materials:

Required Textbook(s):

Bennison, Olver and Moseley, *Introduction to Geological Structures & Maps*: Routledge.

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:

(1) All of the Quizzes and the Final Exam, administered synchronously online, will be open-book tests. That means that to answer the questions students may use the textbook or lecture notes but no other published sources, in-print and/or digital.

(2) During the tests (Quizzes or Final Exam) students should not communicate in any way with any other person except the course instructor.

(3) With the above in mind students are expected to turn their phone devices OFF during the tests. If, for special, justified reasons students must leave their phone ON, it may not be used for any matters related to the tests.

Exceptions to the above rules will only apply upon explicit specifications, provided with anticipation, by the instructor of the course.

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](http://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: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>).
- 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:** 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](mailto: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 (FOIP). 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](mailto:suvpaca@ucalgary.ca). SU Faculty Rep., Phone: [403-220-3913](tel:403-220-3913) Email: [sciencerep@su.ucalgary.ca](mailto:sciencerep@su.ucalgary.ca). [Student Ombudsman](#), Email: [ombuds@ucalgary.ca](mailto: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.

### GLGY 343-W21 Course Topics Schedule

	<b>WEEK of</b>	<b>LECTURES (synchronous, online) - MWF 10-10:50</b>	<b>LABS (synchronous, online) - 11 am and 2 pm</b>
<b>1</b>	Jan 11	Introduction: organization, objectives, assessments, expectations.	

### Course Outcomes:

- Use appropriate terminology to define the orientation of lines and surfaces (planar/curved) in order to describe the geometry of simple geological bodies.
- Construct scaled geological maps based on information of the location and orientation of features of

geological interest e.g. unit contacts, unconformities, faults.

- Construct scaled geological cross-sections from surface and subsurface maps in order to illustrate and expose the true structure of given terrains.
- Interpret simple geological maps and cross-sections to derive a sequence of geological events based on relative position and cross-cutting relationships between the geological units present.
- Use stereonetts to determine the angular relationships between linear and planar geological features e.g. true vs. apparent dips of cross-bedding, fold limbs and axial planes.
- Know basic techniques of acquisition of geological data in the field including field notes, compass measurements, and measurement of stratigraphic columns.
- Visualize the shape and dimensions of common geological structures represented on maps, cross-sections, photos, as well as on digital 3D terrain images

Electronically Approved - Jan 07 2021 21:50

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**Department Approval**

Electronically Approved - Apr 08 2021 09:56

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**Associate Dean's Approval**