

Instructor: Lexie Arnott, PhD.

Email: Lexie@dal.ca Office: LSC 3081 (Biology Wing) Office hours: Book online through BrightSpace.
Classes: Monday & Wednesday 5:35-6:55pm Rowe 1011 (sometimes other spaces, as required)

Land Acknowledgement: Throughout this term we are learning about Earth Sciences on the unceded land of the Mi'kmaq. It is important to acknowledge that the exploitation of mineral, energy, and water resources has its roots in colonialism, and this continues to disproportionately affect the Inuit, Metis, and First Nations people of Canada.

Calendar Description: Earth systems introduced in Geology I are explored in greater detail, with an emphasis on change through time, earth resources, and on geologic systems that are connected to human actions. This course provides a strong background to pursue further work in the environmental sciences and is the required course for Earth Sciences majors.

Learning Outcomes:

- Summarize and interpret key events in earth history, and begin to develop an understanding of deep time in terms of Earth's physical world and the fossil record
- Identify and critique modern geologic problems and the geologic aspects of global change
- Identify and interpret a variety of geologic processes, such as fluvial, groundwater, glacial, and coastal processes using maps and other graphical representations where applicable
- Explain, evaluate, and appreciate the varied nature of interactions between the physical earth, the environment, and humans
- Classify and discuss a variety of Earth's mineral and water resources
- Develop basic critical reasoning skills as they relate to the study of the earth
- Further develop thinking and working in 4 dimensions

Course Delivery: Attendance in class is expected. There is course material that will be assigned outside the class time, but all lectures and tests will take place during the dedicated class time. Interacting with the course material in different ways (lectures, quizzes, assignments, etc.) aid in learning. It is important to remember that the purpose of taking a class is to learn, not to achieve a grade. In class activities cannot be completed outside class time. No recordings will be posted.

Student Resources: There are virtual resources provided on BrightSpace (supporting videos, OER texts, etc). These should all be available at no cost. If you encounter a paywall, please let me know. Please bring a pen or pencil to class as we will be doing daily in person activities.

Accommodations: Accommodations are an important tool that allows you to access the course in the most effective way. If your accommodations have not been processed yet (you're waiting on a meeting or a decision, etc) please let me know. If you have concerns about how your accommodations are being met in this course, please reach out to me and your facilitator.

Discussion Boards: Questions about course content (eg. explanations of lecture materials, test and assignment expectations, and clarifying information about where to find materials), should be directed at the appropriate discussion board on BrightSpace. This allows the instructor to answer the question once for everyone.

Generative AI and large language models (eg. ChatGPT) are not permitted for any part of this class (eg. assignments, reflections, etc).

Student declaration of absence: SDAs are required for missed tests and assignments. These must be submitted to the appropriate dropbox and an email with an explanation should be sent to the instructor.

Office hours: Next week, students can make appointments through the Bookings linked on BrightSpace. If the hours provided don't work, email for an appointment time.

Marks to grade equivalent: Numerical results will be converted to letter grades as follows:

A+ (90-100)	B+ (77-79.9)	C+ (65-69.9)	D (50-54.9)
A (85-89.9)	B (73-76.9)	C (60-64.9)	F (<50)
A - (80-84.9)	B - (70-72.9)	C - (55-59.9)	

COURSE ASSESSMENT COMPONENTS

Grading Scheme

Quizzes	8%
Reflections	5%
In class activities	10%
Reading Assessments	12%
Assignments	25%
Midterm	15% (2 tests, no make ups)
Exam	25% (set by registrar. No alternate dates possible)

Week (M/W)	Topics
Jan 7	Introduction to Geology 2
Jan 12	Water Resources
Jan 19	Water Resources
Jan 26	Water Resources
Feb 2	Monday (class reading discussion)/Wednesday (test)
Feb 9	Geologic Time
Feb 16	Break
Feb 23	Geologic Time
Mar 2	Geologic Time
Mar 9	Monday (Class reading discussion)/ Wednesday (test)
Mar 16	Mineral Resources
Mar 23	Mineral Resources
Mar 30	Mineral Resources
April 6	Monday (class reading discussion)

COURSE ASSESSMENT COMPONENTS

Assignments and Readings (37%):

We will be doing assignments both in and out of class throughout the term; these will be worth 37% of your final mark. These assessments are meant to give you an understanding of how what we are learning can be applied. Some assessments will support your growth as a scientist and a communicator. There will be associated readings/podcasts/ or videos that must be completed outside class time.

Most materials will be supplied; some assessments completed in class will require a ruler, pencil, and calculator for some of them. You will be expected to work in groups in class, but most submissions will be individual. Please make sure that you use your own words in your answers, not just copies of someone else's work.

Late policy: Missed Assignments require an SDA and email explanation. Students missing a submission deadline should contact the instructor to arrange submission. The penalty for lateness is 20%/day. Once marks are released or assignments returned a mark of 0 will be recorded and submissions will no longer be accepted.

Quizzes (8%)

There will be BrightSpace quizzes weekly intended to aid your learning. These will comprise 8% of your final grade. The quizzes will be based on assigned reading or previous classwork. Quizzes will be open for at least a week with multiple attempts possible.

Reflections (5%)

An important part of scientific inquiry is reflecting on our learning. To aid this, there will be reflections on some of the course work worth 5% of your final mark. These will be completed in class but some thoughts before class will aid your submission.

In class activities (10%)

Short in-class reflections, questions, drawings, etc. will comprise 10% of your final grade. These will happen at least once a week. There is an activity planned outside of class time, but this has not been confirmed yet. Details to come! To accommodate missed classes due to illness or other unforeseen events, only the best 90% of these grades will be counted towards your final activities mark.

Term Tests (15%): The term tests are each worth 7.5% of your final grade and will be delivered during class time (**4th February and 11th March**). There are no make-up tests; if you miss a test for an accepted reason, the exam will have a higher value. Please submit an SDA for missed tests BEFORE the test when possible. Email the instructor explaining your absence.

Exam (25%): Faculty of Science requires all first-year science classes to have a formal exam (April 11th - 27th). **Do not make travel arrangements until after the exam schedule is posted** in early February. Accommodations will not be made for students who leave before the scheduled exam.

Please note: These components make up your final mark. There will be no redistribution of marks and no extra work given at the end of term. If you are concerned about your grades, please see me at the time the grade is given or within a reasonable period.