

Geology 1– Fall 2026

Department of Earth and Environmental Sciences

When: Mon, Wed: 5:35pm—6:55pm

Where: Life Sciences Building (LSC), Room LSC 236

Dalhousie University acknowledges that we are in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People and pays respect to the Indigenous knowledges held by the Mi'kmaq People, and to the wisdom of their Elders past and present.

The Mi'kmaq People signed Peace and Friendship Treaties with the Crown, and section 35 of the Constitution Act, 1982 recognizes and affirms Aboriginal and Treaty rights. We are all Treaty people.

Dalhousie University also acknowledges the histories, contributions, and legacies of African Nova Scotians, who have been here for over 400 years.

Course Instructor(s)

Name	Email	Office Hours
Professor: Dr. Simone Booker	Simonebooker7@gmail.com	By email
Lab Instructor: Christiane Zoghbi	christiane.zoghbi@dal.ca	By email LSC, 3rd Floor, Room 3085

Course Overview

This is an introductory Earth Sciences (geology) course: 3 credit hours, with a lab. EARTH 1080 is a required course for Earth Science majors; an excellent course for anyone requiring a lab credit course or interested in Earth Sciences. This course only requires a minimal background in science and math; no prior geology is required! This course focuses on the solid earth (geosphere) and how it evolved throughout Earth's vast history and continues to evolve today. The processes involved are recorded in the rocks and minerals of our earth, and we explore these natural processes and materials as a way to understanding our earth.

Course Prerequisites

None

Course Exclusions

None

Course Delivery

This course consists of in person **lectures** that meet 2x per week (M, W @ 5:35pm-6:55pm) in LSC 236. You are encouraged to attend the lectures to ask questions! There is also **a separate in-person lab** that meets 1x per week. Labs are hands-on applications of lecture material; therefore, it is expected that you will attend both. Course registration involves **one** of the following tutorial times:

Tuesday: 2:35pm-5:25pm (**B01**) Room LSC 2055

Thursday: 11:35am-2:25pm (**B02**) Room LSC 2055

Thursday: 2:35pm-5:25pm (**B03**) Room LSC 2055

Labs are designed to help students further understand principles and applications of lecture material. Please bring **a pencil, a ruler, and an eraser to all labs**.

If you miss a lecture: Lecture notes will be posted on Brightspace.

If you miss a lab: Email Ms.Zoghbi and professor ASAP. We will arrange a make-up deadline or grade redistribution. If you know ahead of time that you will be missing a lab, please let us know early so we can arrange another lab section for you that week.

The goal of this course is to provide students with a firm grounding in geology, whether as part of a degree program or simply to help students see the world around you in a different way. I am committed to teaching – in class, by email, in marking assignments and exams; you can expect me to be fair and to want you to learn. I encourage questions and a safe and inclusive learning environment.

For your part, I hope the respect will be mutual and that the next several weeks will be an enjoyable learning experience!

Learning Objectives

- Identify and classify common earth materials and the processes that form them, by interpreting the evidence within the rocks themselves
- Explain plate tectonic theory and begin to apply the principles in understanding earth materials and processes
- Describe the essential nature of planet earth in terms of physical and chemical composition, and the distribution of materials within and on earth
- Identify and explain the basic principles of spatial, temporal, and dynamic thinking about planet earth
- Begin to develop a questioning approach to interpreting information about the physical earth and “think like a geologist”

Brightspace Learning Management System (LMS):

Important course announcements are delivered through the Brightspace Learning Management System. Lecture PowerPoint slides will be posted, but lecture recording will not.

Student Declaration of Absence:

This course has opted into the student declaration of absence in lieu of sick notes for the in-class test. This mechanism is meant to substitute for sick notes from a doctor related to short absences (less than three days) and does not provide an automatic exemption from any missed assessments. Accommodating the absence is at the discretion of the course instructor. Student Declarations of Absence are only necessary for the in-class test (more information can be found [Student Declaration of Absence - Faculty of Computer Science - Dalhousie University](#)). SDAs are not required for missed Lab or classes (see above).

Assessment:

Labs

Labs begin the week of September 20th. All labs are scheduled to be in-person. Room 2055 Life Sciences Centre.

Optional lab manual: Laboratory Manual for Introductory Geology, Ludman and Marshak (4th Edition) is available at the bookstore as either E-book or in print.

<https://bookstore.dal.ca/CourseSearch/?course%5B%5D=SUB,FALL22,ERTH,ERTH1080,01&>

The labs are worth a total of 30% of the course grade. Seven lab exercises account for 14% (2% each), 6% for participation, and two in-lab rock and mineral identification quizzes account for 10%. Lab exercises will be completed in small groups and will be graded and returned at the beginning of the following lab period.

Labs will be introduced at the beginning of each lab period, a handout will be provided, and labs are designed to be completed in the 3-hour lab period. Most labs are completed as group exercises. If you require more time, labs will be accepted up to 24 hours after your assigned lab period, but you will need to coordinate with your lab partners. Beyond the 24-hour grace period, labs will be penalized 10%/day up until the following lab period when they will not be accepted. You are able to miss one lab without penalty, but it is recommended that all labs are attended and completed. If you do miss a lab you must contact your lab instructor as soon as possible to make alternative arrangements.

In class activities

Throughout the term there will be activities during class time. These are intended to aid your learning. Each of these activities will be weighted equally. There will **be no make-up for in class-activities**. No SDA is necessary.

Midterm test

The midterm is an “in class” and “closed book” test. You will need to bring a pen or pencil. Any other requirements will be announced in class and on BrightSpace. There are no make up tests; if you miss a test due to illness, family emergency, or other acceptable reason, the exam will have a higher value (45%). Missed tests require a Student Declaration of Absence (see below).

Final Exam

The Faculty of Science requires all first-year science classes to have a formal exam (during the December exam period). **Do not make travel arrangements until after the exam schedule is posted.** Accommodations will not be made for students who leave before the scheduled exam. The final exam is cumulative. The exam will be in person and closed book. Required materials for the exam will be announced in class and on BrightSpace.

Assignment	Date	total%
Lab assignments (7 @ 2% each)	Weekly	14%
Lab Quiz 01	Week of Oct 19	5%
Lab Quiz 02	Week of Nov 30	5%
Lab Participation	Weekly	6%
In class exercises	Random	10%
Midterm Test	October 21	25%
Final Exam	(see Final exam schedule)	35%

Note: You MUST pass BOTH the lab component and the non-lab component in order to pass the course. (50% is a passing grade).

Conversion of numerical grades to final letter grades follows the

A+ (90-100)	B+ (77-79)	C+ (65-69)	D (50-54)
A (85-89)	B (73-76)	C (60-64)	F (0-49)
A- (80-84)	B- (70-72)	C- (55-59)	

Course Policies Related to Academic Integrity

Labs: collaboration during tutorials is encouraged but each student submits their own work for assessment.

Quizzes: Individual work only.

Note: Generative AI (i.e., ChatGPT) may be very useful as a study tool! However, work turned in for assessment should not use generative AI for content.

Course Materials

There are a number of introductory textbooks that cover introductory geology, so if you see a copy of one of the following resources for a reasonable price – go for it! The current Open Educational Resources (OERs) are also pretty good, so if you want a supplemental resource to the lectures that is freely available online. An online text is provided on BrightSpace, suggested reading in the calendar related to this textbook.

[Preface – Physical Geology](#)

[OpenGeology – Free Open Educational Resources for the Geosciences](#)

University Policies and Statements

Recognition of Mi'kmaq Territory

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel, and support. Visit or e-mail the Indigenous Student Centre at 1321 Edward St.

Internationalization

At Dalhousie, 'thinking and acting globally' enhances the quality and impact of education, supporting learning that is "interdisciplinary, cross-cultural, global in reach, and orientated toward solving problems that extend across national borders."

Academic Integrity

At Dalhousie University, we are guided in all our work by the values of academic integrity: honesty, trust, fairness, responsibility, and respect. As a student, you are required to demonstrate these values in all the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity.

Accessibility

The Student Accessibility Centre is Dalhousie's centre of expertise for matters related to student accessibility and accommodation. If there are aspects of the design, instruction, and/or experiences within this course (online or in-

person) that result in barriers to your inclusion, please contact the Student Accessibility Centre () for all courses offered by Dalhousie with the exception of Truro. For courses offered by the Faculty of Agriculture, please contact the Student Success Centre in Truro.

Conduct in the Classroom – Culture of Respect

Substantial and constructive dialogue on challenging issues is an important part of academic inquiry and exchange. It requires willingness to listen and tolerance of opposing points of view. Consideration of individual differences and alternative viewpoints is required of all class members, towards each other, towards instructors, and towards guest speakers. While expressions of differing perspectives are welcome and encouraged, the words and language used should remain within acceptable bounds of civility and respect.

Diversity and Inclusion – Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness (Strategic Priority 5.2).

Student Code of Conduct

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner - perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution.

Fair Dealing Policy

The Dalhousie University Fair Dealing Policy provides guidance for the limited use of copyright protected material without the risk of infringement and without having to seek the permission of copyright owners. It is intended to provide a balance between the rights of creators and the rights of users at Dalhousie.

Originality Checking Software

The course instructor may use Dalhousie's approved originality checking software and Google to check the originality of any work submitted for credit, in accordance with the Student Submission of Assignments and Use of Originality Checking Software Policy. Students are free, without penalty of grade, to choose an alternative method of attesting to the authenticity of their work and must inform the instructor no later than the last day to add/drop classes of their intent to choose an alternate method.

Student Use of Course Materials

Course materials are designed for use as part of this course at Dalhousie University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as books, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this course material for distribution (e.g. uploading to a commercial third-party website) may lead to a violation of Copyright law.