

ERTH/GEOG 1030

Introduction to Physical Geography – Fall 2026

Department of Earth and Environmental Sciences

WHEN: MON, WED: 1:05PM—2:25PM

WHERE: C236 LIFE SCIENCES BUILDING (LSC)

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)/STUDENT RESOURCES

Name	Email	Office Hours
Professor: Dr. Jennifer M. Grek Martin	jgrekmartin@dal.ca	LSC, Room B3079
Teaching Assistant:		

COURSE OVERVIEW

This non-lab science course examines the nature of weather and climate, Earth's surface features and geomorphological processes as well as Earth's internal processes that contribute to landform development. An integral component of the course is the study of the representation and interpretation of physical geographic data through the examination of a variety of maps.

COURSE PREREQUISITES

None

COURSE EXCLUSIONS

None

COURSE DELIVERY

This course consists of an **in-person lecture component** that meets 2x per week in LSC C236 and a **separate in-person tutorial** that meets 1x per week, *check your tutorial day and time via Banner*, (**all tutorials are held in LSC rm B2055**). Tutorials are hands-on applications of lecture material; therefore, it is expected that you will attend both. Tutorials are designed to help students further understand principles and applications of lecture material. Please bring **a pencil, a ruler, and an eraser to all tutorials**.

If you miss a lecture: Lectures will not be recorded, but lecture slides will be provided via Brightspace.

If you miss a tutorial: Email us ASAP. We will arrange a make-up deadline or grade redistribution.

My goal is to give you a firm grounding in physical geography, whether as part of your degree program or simply to help you 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 this term will be an enjoyable learning experience!

LEARNING OBJECTIVES

Students who take this class will learn about the processes responsible for the development of the Earth's geomorphological features, the evolution of these features through time, and the impact of humankind on the environment. Upon completion of the course, students will have developed basic skills in the interpretation of maps and data analysis and familiarized themselves with the practical applications of the course content in daily life.

ASSESSMENT:

Tutorials

8 tutorial assignments are each comprised of two parts (except for the first one). Part one will be handed in at the end of tutorial and the second part will be completed outside of class and handed in at the start of the next tutorial.

Assignment	Date	total%
Tutorial assignments (8 @ 6% each)	Weekly	48%
Quiz 01 (in class, paper, 80 minutes)	7 October	16%
Quiz 02 (in class, paper, 80 minutes)	4 November	16%
Quiz 03 (paper, 2 hours)	(see Final exam schedule)	20%

Conversion of numerical grades to final letter grades follows the [Dalhousie Grade Scale](#)

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 ON MISSED OR LATE ACADEMIC REQUIREMENTS

LATE ASSIGNMENTS: Late assignments (i.e., Tutorials) will incur a mark deduction penalty of 10% per day. **No tutorial assignments will be accepted later than three days after the initial deadline unless we have approved an alternate deadline.**

MISSED QUIZ: Make-up quizzes will not be provided for any reason. If I approve your reason for missing a Quiz, I will reweight your extant quiz or quizzes. For example, if you miss Quiz 01, then Quiz 02 = 24% and Quiz 03 = 28%; if you miss Quiz 02 EITHER Quiz 01 = 24% and Quiz 03 = 28% OR Quiz 03 = 36% (whichever results in a higher Final Grade); if you miss both Quiz 01 and Quiz 02, Quiz 03 is worth 52%.

If you miss the final Quiz (Quiz 03) and I approve your reason for missing, you will take a **cumulative, essay-style final Quiz in January 2026.**

COURSE POLICIES RELATED TO ACADEMIC INTEGRITY

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

Quizzes: Individual work only.

THE USE OF GENERATIVE ARTIFICIAL INTELLIGENCE (AI) IN EARTH/GEOG 1030

I am interested in you. Generative AI has many uses, but it cannot replace **you**.

So, while I accept that you could use generative AI to study for my tests, in this course I strictly prohibit the use of generative AI tools (including ChatGPT, Gemini, Microsoft Copilot, and other AI writing, image or map generating, and coding apps) for creating assignments and submitting the results as your own original work. Suspected use of generative AI in this manner will be considered a violation of the university's Academic Integrity policy.

I don't do this to make 'busy work'. I do this because I care about what you learn and how you learn it.

I want you to know the facts. Generative AI tells you what you want to hear, whether it is true or not.

I want you to think for yourself. Generative AI takes this away from you. It replaces your authenticity with claims of efficiency.

I want you to be able to express yourself. Generative AI makes you sound mediocre, indistinct, like everyone else. In an era where we celebrate diversity, do you really want to sound like an algorithm?

I want you to do good things for the planet. The environmental costs of generative AI are immense and more varied than you might think. <https://news.mit.edu/2025/explained-generative-ai-environmental-impact-0117>

My use of Generative AI: all course materials, including lectures, lecture slides, assignment guidelines, and tests, **have been created by me or another human** without the use of generative AI.

COURSE MATERIALS

Luckily, there are a number of introductory textbooks that cover physical geography, 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, I will refer to the chapters from the following OER (PG) as readings in the course outline (NOTE: each unit is individually numbered, but the Table of Contents is consecutive):

Patrich, Jeremy. (2023). *Physical Geography*. Version 2. College of the Canyons/Zero Cost Textbook.

<https://oercommons.org/courses/introduction-to-physical-geography>

COURSE ACCESSIBILITY

I support students with accommodations and believe everyone has the right to learn! I will post my slides by the start of each lecture, which allows you to download the pdf and annotate it/take notes on each slide. If this does not satisfy your accommodation ('Access to Materials'), please see me after class or email me to discuss further options.

COURSE OUTLINE:

NOTE: DATES FOR COURSE TOPICS MAY BE ADJUSTED SLIGHTLY THROUGHOUT THE TERM

Week/date	Topics for the week	Chapter (PG)	Tutorials
Week01 9 September	Introduction and Fundamentals of Physical Geography	Unit 1	No Tutorial this week
Week02 14 September	Fundamentals of Cartography	Unit 1, Unit 4	
16 September	Earth in Space/Introduction to the Atmosphere	Unit 2, 5, 6	T1.1 Due in Tutorial
Week03 21 September	Air Temperature and Pressure	Unit 6	
23 September	Air Moisture and Precipitation *22 September = last day to add Fall courses, drop Fall courses with full refund	Unit 7	T1.2 Due T2.1 Due
Week04 28 September	Introduction to Climate & Climate Change		
30 September	University Closed: Truth and Reconciliation Day Observed		T2.2 Due T3.1 Due
Week05 5 October	Climate Change, continued, and Quiz01 prep	Unit 6, 7	
7 October	Quiz 01 (16%) – 7 October Material covered: 9 September – 5 October *7 October: Last day to drop Fall courses without 'W'	Unit 1-2, Units 4-7	No Tutorial this week
Week06 12 October	University Closed: Thanksgiving Day Observed		
14 October	Introduction to the Lithosphere: Rocks and the Rock Cycle	Unit 8-11	T3.2 Due T4.1 Due
Week07 19 October	Plate Tectonics	Unit 13	
21 October	Earthquakes and Volcanoes	Unit 14, 15	T4.2 Due T5.1 Due
Week08 26 October	Weathering and Slope Processes; Soils	Unit 12	
28 October	Soils & Desertification	Unit 12	T5.2 Due

T6.1 Due

Week09			
2 November	Aeolian Environments and Coastal Processes	Unit 16, 18	
4 November	Quiz 02 (16%) – 4 November Material covered: 12 October – 2 November *5 November: Last day to drop Fall courses with 'W'	Units 8-16, 18	No Tutorial this week
9-13 November	FALL STUDY BREAK!!		
Week10			
16 November	Biomes and Biogeography	TBA	
18 November	Biomes and Biogeography: Invasive Species	TBA	T6.2 Due T7.1 Due
Week11			
23 November	Introduction to the Hydrosphere	Unit 17	
25 November	Fluvial Geomorphology I	Unit 17	T7.2 Due T8.1 Due
Week12			
30 November	Fluvial Geomorphology II	Unit 17	No Tutorial this week
2 December	Glaciers and Glacial Environments	Unit 19	T8.2 Due in lecture/Dropbox
Week13 (lieu)			
7 December	Lecture catch up and Quiz 03 prep. See Final Exam Schedule for Day and Time of Quiz 03 (20%)	Unit 17, 19	
9 December	TBA		

FINAL EXAM (check schedule): **Quiz03 (Material covered: 16 November – 9 December) (20%)**

Note: If you miss the final exam (for any reason) the make-up exam will be cumulative

Syllabus Appendix

The new Syllabus Appendix guides students toward supports, university policies, and guidelines. It replaces the list of statements and policies of the syllabi you might have seen in previous years. The resources and policies are now hosted on a website, found at the link below, and will remain up-to-date as policies, statements, resources, and guidelines change or are amended.

[Syllabus Appendix: Student Supports & University Statements, Policies, and Guidelines](#)