

Effective: Fall 2025

COURSE INFORMATION

Course Title: Introduction to Physical Geography

Course Number: GEOG 104

Credits: 4

Total Weeks: 14 (Fall, Spring)
12 (Summer)

Total Hours: 52

Course Level: ☒ First Year ☐ Second Year
☒ New ☐ Revised Course
☐ Replacement Course

Department: Geography Department **Head:** Audrey McDougall **Former Course Code(s) and Number(s) (if applicable):** N/A

Pre-requisites (If there are no prerequisites, type NONE): None

Co-requisite Statement (List if applicable or type NONE): None

Precluded Courses: N/A

COURSE DESCRIPTION

This course offers an introduction to physical geography and examines the powerful environmental forces and events that influence our daily lives, and in turn, the ways that humans are altering Earth's systems.

LEARNING OUTCOMES

Upon successful completion of the course, students will be able to:

- Distinguish between endogenic and exogenic systems that shape the Earth and the driving forces behind them.
- Integrate how the four spheres interact with each other – hydrosphere, atmosphere, lithosphere and biosphere.
- Diagram the rock cycle and link the three rock types to the processes involved.
- Synthesize plate tectonics, volcanic landforms, and earthquake fault mechanisms and their impact on the physical landscape.
- Explain weathering and recognize the resultant physical processes and the types of mass movements generated.
- Connect the processes involved in fluvial and glacial action and the subsequent landform alterations.
- Link aeolian erosion and transport of dust and sand and the creation of unique landforms.
- Integrate the dynamic nature of processes that constantly alter coastlines.
- Critically analyze the human impact on Earth systems.

INSTRUCTION AND GRADING

Instructional (Contact) Hours:

Type	Duration
Lecture	24
Seminars/Tutorials	
Laboratory	24
Field Experience	4
Other (<i>specify</i>):	
Total	52

Grading System: Letter Grades ☒ Percentage ☐ Pass/Fail ☐ Satisfactory/Unsatisfactory ☐ Other ☐

Specify passing grade: 50%

Evaluation Activities and Weighting (total must equal 100%)

Assignments: 10% <i>Field Trip Assignment</i>	Lab Work: Three labs 15%	Participation: 5%	Project:
Lab Exam: 25%	Midterm Exams: 25%	Final Exam: 20%	Other:

TEXT(S) AND RESOURCE MATERIALS

Christopherson, Robert W., Birkeland, Ginger H., Byrne, Mary-Louise, and Philip T. Giles (2016) Geosystems: Fourth Canadian Edition. Upper Saddle River, New Jersey: Pearson Education, Inc. Contact the library to find out how to get access to the textbook.

COURSE TOPICS

Week 1: Introduction Themes in Geography; Topographic Maps

Week 2: Structure of the Earth

Week 3: Lithosphere, Earth Materials (elements, minerals, rocks, soils)

Week 4: Earth-Atmosphere Interface, Biosphere

Week 5: Ecosystems - Components, Relationships, Communities, Succession

Week 6: Midterm Exam

Vegetation, Biogeography, Biomes, Climate Change, Population Growth

Week 7: Plate Tectonics and the Earth Energy System

Week 8: Folding, Faulting, Earthquakes and Volcanoes

Week 9: Structure of the Atmosphere

Week 10: Solar Energy, Radiation, Circulation, Climate Controls, Air Masses

Weather - Air Temperature, Pressure, Humidity, Precipitation

Week 11: Hydrosphere – Water Storage, Runoff, Streamflow, Drainage

Week 12: Geomorphologic Processes and Landforms

chemical/mechanical weathering and mass wasting

fluvial, glacial, coastal, and aeolian systems

Week 13: Environmental Issues – soil/water/air pollution, deforestation, urbanization

Week 14: Final Exam

NOTES

1. Students are required to follow all College policies. Policies are available on the website at: [Coquitlam College Policies](#)
2. To find out how this course transfers, visit the BC Transfer Guide at: [bctransferguide.ca](#)