



University Canada West
GEOG 104 - Physical Geography
Course Outline

Course Instructor:

TBA

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Work:

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1. Course Objective

Physical Geography is an introduction to processes that shape the physical environment around us through the interconnectedness of four spheres of Earth: the atmosphere, hydrosphere, lithosphere, and biosphere. The course focuses on atmospheric circulation, energy exchanges, basic geologic processes, surface processes and landforms, hydrology, soils, and ecosystems. These topics are important in understanding the physical environment around us and processes that influence global and environmental change.

2. Underlying Principles

1. The surface of our planet is ever changing and shaped by many interconnected, natural processes.
2. Changes to Earth's surface are governed by interrelations of solid earth, water, the atmosphere, and life.
3. Physical geography is important in understanding natural phenomena in the world around you, including global change.

3. Course Outcomes

By the end of the course you should be able to:

1. Appreciate the natural world around you and understand the forces that have shaped it.
2. Recognize how major systems produce continual change experienced by our dynamic planet.
3. Explain Earth's energy budget and describe how the atmosphere and oceans interact to influence Earth's climatic patterns.
4. Relate plate tectonic theory to Earth's composition and hazards (earthquakes and volcanoes).
5. Distinguish major surficial features of the Earth and describe processes that formed them (climate, slope, groundwater, rivers, glaciers, waves, and wind).
6. Describe how physical processes influence the biosphere.
7. Integrate lecture material, case studies, group discussions, and field trips to explore real-world examples of physical phenomenon.
8. Recognize how interconnected Earth systems produce continual change in the world around you.

4. Evaluation and assignments

Biweekly team case study syntheses (5 total, including field trip report)	25%
Weekly individual written assignments	10%
Midterm Exam	30%
Final Exam	35%

5. Textual

Text: Christopherson, R.W., Geosystems: An Introduction to Physical Geography, 5th Edition. Prentice Hall, 660pp.

6. Schedule:

Unit	Topic	Case Study	Chapter
1	Introduction and Overview of Earth Systems		Ch. 1 (p. 1-15)
2	Global Energy System, Earth's Atmosphere		Ch. 2-5 (p. 43-50; 65-72; 93-103; 121-128)
3	Atmospheric and Oceanic Circulation, Weather Systems, Global Climate Systems	1: Climate Change	Ch. 6-10 (p. 150-160; 170-172; 211-220; 275-317)
4	Earth's Structure and Tectonic System		Ch. 11-12 (p.323-331; 340-355; 357-374)
5	Earth's Materials and Processes: Natural Resources and Natural Hazards	2: Natural Resources & Natural Hazards	
6	Landscape Evolution, Weathering and Mass Wasting		Ch. 13 (p.399-415)
7	Hydrologic Cycle, Geomorphologic Processes: Fluvial, Glacial, Coastal and Eolian Systems	3: Processes and Landforms	Ch. 9, 14-17 (p.181-186; 245-248, 259-273; 429-458; 463-485; 519-550)
8			
9	Soils and Soil Properties	4: Group field reports	Ch. 18 (p. 557-583)
10	Global Ecosystems, Biosphere Cycles, Biogeography		Ch. 19-20 (p.587-621; 625-648)
11	Dimensions of Global Change and Environmental Issues—Pollution, Climate Change, Urbanization, Biodiversity, and Extreme Events	5: Global Change & Environmental Issues	Ch. 21 (p. 651-654) Case studies
12	Course Review and Wrap-Up		