COLLEGE OF THE ROCKIES

Introduction to Physical Geography – GEOG 101

University Studies Program

Course Outline

COURSE IMPLEMENTATION DATE: **Pre 1998**
OUTLINE EFFECTIVE DATE: **September 2021**
COURSE OUTLINE REVIEW DATE: **April 2026**

GENERAL COURSE DESCRIPTION:

This course examines the concepts and processes of physical geography that govern the function of the atmosphere, lithosphere, hydrosphere, and biosphere using an earth-systems approach. Course lectures and lab topics introduce the sciences of cartography, meteorology, climatology, geomorphology, hydrology, biogeography, and soils. A focus on how human activities impact the environment, such as climate change and other real world issues will also be addressed.

Program Information: This course is intended for University Studies and Business Management diploma and degree students. It can also be used as an elective for BMGT diplomas and the Bachelor in Business Administration (Sustainable Business Practices) degree.

Delivery: This course is delivered face-to-face and synchronous alternate.

COTR Credits: 3

Hours for this course: 90 hours

Typical Structure of Instructional Hours:

Instructional Activity	Duration
Lecture Hours	45
Seminars / Tutorials	
Laboratory / Studio Hours	45
Practicum / Field Experience Hours	
Other Contact Hours	
Total	90

Practicum Hours (if applicable):

Type of Practicum	Duration
On-the-job Experience	N/A
Formal Work Experience	N/A
Other	N/A
Total	

Course Outline Author or Contact:
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Signature

APPROVAL SIGNATURES:

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Dean Signature

EDCO

Valid from: September 2021 – April 2026

Education Council Approval Date

COURSE PREREQUISITES AND TRANSFER CREDIT:

Prerequisites: None

Corequisites: None

Flexible Assessment (FA):

Credit can be awarded for this course through FA ☑ Yes ☐ No

Learners may request formal recognition for flexible assessment at the College of the Rockies through one or more of the following processes: External Evaluation, Worksite Assessment, Demonstration, Standardized Test, Self-assessment, Interview, Products/Portfolio, Challenge Exam. Contact an Education Advisor for more information.

Transfer Credit: For transfer information within British Columbia, Alberta and other institutions, please visit http://www.cotr.bc.ca/Transfer

Students should also contact an academic advisor at the institution where they want transfer credit.

Prior Course Number: N/A

Textbooks and Required Resources:

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date the following textbooks were in use:

Gervais, B. 2019. *Living Physical Geography*. Freeman. 2nd edition.

Please see the instructor's syllabus or check COTR's online text calculator http://go.cotr.bc.ca/tuition/tCalc.asp *for a complete list of the currently required textbooks.*

LEARNING OUTCOMES:

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

- Explain physical geography processes and concepts in all four major spheres of the Earth using an earth-systems approach;
- Demonstrate foundational knowledge in physical geography in preparation for upper level and advanced topics in Geography and other subjects;
- Evaluate the impact of human activities on the physical environment and how physical geography can be applied to address real world issues;
- Describe the significance of temporal and spatial scales to scientific research in physical geography;
- Apply the scientific method to explain natural processes shaping the physical environment; and
- Demonstrate competence in:
    - basic geographical skills including: the interpretation of topographic maps and airphotos; the construction of topographic cross-sections; using Google Earth to observe geographical features; and use of basic meteorological and hydrological instrumentation
    - scientific research and data analysis including: the construction and reading of graphs; the visual and mathematical analysis of topographic maps; collection, presentation and analysis of environmental data to describe physical geographic phenomena;
    - communicating science including: written, numeric, graphic, and oral methods; and
    - working collaboratively with other students and teams

COURSE TOPICS:

- Introduction to physical geography, systems, and scientific method
    - Mapping of Earth's systems
- The Atmosphere
    - Structure and composition of the atmosphere
    - Global radiation and energy balance
    - Atmospheric and oceanic circulation patterns
    - Global temperatures
- Weather, water, and climate

    - Weather systems
    - Hydrologic cycle
    - Water resources
    - Climate systems
- The Earth-Atmosphere Interface
    - Crustal and tectonic processes
    - Earthquakes and volcanoes
    - Weathering, erosion and mass movement
    - Fluvial, Karst, Aeolian, Glacial, and Coastal processes and landforms
- Soils and the Biosphere
    - Soil formation, classification, and distribution
    - Biogeography and ecosystems
    - Biogeoclimatology of British Columbia

See instructor's syllabus for the detailed outline of weekly readings, activities and assignments.

EVALUATION AND ASSESSMENT:

Assignments	% of Total Grade
Lab	
Lab Assignments	40%
Class	
Weekly Reading Reviews	10%
Quizzes	30%
Final Exam	20%
Total	100%

Please see the instructor's syllabus for specific classroom policies related to this course, such as details of evaluation, penalties for late assignments, and use of electronic aids.

Note: Students must attain a 50% average on all lab-based assignments and exams and a 50% average on all class-based assignments and exams to pass Geography 101.

EXAM POLICY:

Students must attend all required scheduled exams that make up a final grade at the appointed time and place.

Individual instructors may accommodate for illness or personal crisis. Additional accommodation will not be made unless a written request is sent to and approved by the appropriate Department Head prior to the scheduled exam.

Any student who misses a scheduled exam without approval will be given a grade of "0" for the exam.

COURSE GRADE:

Course grades are assigned as follows:

Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F
Mark (Percent)	≥ 90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	< 50

A grade of "D" grants credit, but may not be sufficient as a prerequisite for sequential courses.

ACADEMIC POLICIES:

See www.cotr.bc.ca/policies for general college policies related to course activities, including grade appeals, cheating and plagiarism.

COURSE CHANGES:

Information contained in course outlines is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational, employment, and marketing needs. The instructor will endeavour to provide notice of changes to students as soon as possible. The instructor reserves the right to add or delete material from courses.