

COURSE OUTLINE

GEOG 102 INTRODUCTION TO PHYSICAL GEOGRAPHY II 3 CREDITS

PREPARED BY: Mary Samolczyk, Earth Sciences Instructor

DATE: January 1, 2020

APPROVED BY: Stephen Mooney, Interim Dean

DATE: January 2, 2020

APPROVED BY ACADEMIC COUNCIL: Click or tap to enter a date RENEWED BY ACADEMIC COUNCIL: Click or tap to enter a date





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COURSE TITLE

INSTRUCTOR: Mary Samolczyk **OFFICE HOURS:** By appointment.

OFFICE LOCATION: M105 (CNIM) CLASSROOM: Lec. M111 (CNIM)

E-MAIL: msamolczyk@yukoncollege.yk.ca TIME: Lec. F 1:00 - 3:55 PM

Lab. M 4:00 - 6:55 PM

TELEPHONE: (867) 456 6958 **DATES:** Jan. 6 - Apr. 29, 2020

COURSE DESCRIPTION

GEOG 102 is an introduction to the physical environment and methods of earth system research. The basic principles and processes that govern climate-landform-vegetation-soil systems on the surface of the earth will be examined from a systems perspective. Natural and human-induced changes in environmental systems through time will also be addressed. Issues of spatial and temporal scale, in the context of earth systems, will be demonstrated by map construction, map and airphoto interpretation, field and laboratory investigations and principles of geographic information systems and remote sensing. GEOG 102 is the complementary course of GEOG 101; the two courses are taught as a single unit.

PREREQUISITES

There are no prerequisites for this course.

EQUIVALENCY OR TRANSFERABILITY

UBC with GEOG 102, GEOG 101 (3)
SFU GEOG 111 (3)
UVic GEOG 213 (1.5) or GEOG 100PL (1.5)
UNBC GEOG 210 (3)
URegina with GEOG 102, GEOG 221 (6)
UAF GEOG 205 (3)
UAS GEOG 205 (3)
BCOU GEOG 110 (3)

LEARNING OUTCOMES

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

- Understand the development of the planet through geologic and tectonic activity.
- Be able to identify surface formations created by fluvial, glacial, aeolian, weathering, mass movement and coastal processes.
- Understand the concept of earth systems research including the interactions between the landscape, climate, and biophysical features.
- Have developed some comfort in a field setting.
- Be able to provide examples of current research and work taking place throughout Yukon Territory and understand its implications.
- Be able to critically analyze a piece of peer-reviewed literature and discuss it with their peers.

COURSE FORMAT

The class will combine lectures and laboratory exercises.

Lectures

One three-hour lecture will be delivered each week. Lectures will primarily follow the course text but will also expand upon the material covered.

Laboratory Exercises

Laboratory exercises will explore geographic principles introduced in the lectures and readings. They are designed to give students experience with tools used in Geography (ie. air photos, topographic maps, compasses, etc.) and hands-on experience. Some labs will take the form of field excursions.

ASSESSMENTS:

Attendance and Participation

Students are strongly encouraged to attend all lectures and laboratory exercises. Lab exercises can be completed only during lab periods and materials may not be available

outside these hours. Off-campus field exercises must be completed during the allocated time with the instructor present.

It is the responsibility of the student to determine any materials that were missed due to an absence in lecture or lab. Students must make up for missed activities on their own time.

Lecture Assignments

There will be two lecture assignments: critique of peer-reviewed literature (Assignment #1) and current events podcast presentation (Assignment #2).

The critique of peer-reviewed literature assignment will require you to read, digest, and critique a peer-reviewed journal article and then present your findings in a formal presentation to the class. The goal of this assignment is to introduce you to the world of peer-reviewed literature, including instruction on where to find articles on a chosen topic, how to navigate the content of a journal article, and how to critically analyze and summarize an article's content.

The current events assignment will require you to stay up-to-date with geography-related news stories throughout the term. Using guidelines given to you by your instructor, you will create two podcast presentations each detailing and analyzing a current event. The podcasts will be made available to your classmates on Moodle. The goal of this assignment is to develop an awareness of current geography topics in the news and practice communicating scientific information to the public.

Laboratory Assignments

Laboratory assignments will generally take the form of question sets that can be answered through hands-on participation in laboratory sessions. You must bring a pen, pencil, coloured pencils, a ruler, calculator, and protractor to labs.

Examinations

A midterm examination is scheduled half-way through delivery of the course material. The Instructor will provide a detailed schedule of due dates and exams on the first day of class.

EVALUATION

Tests and Assignments	Weight
Weekly Lab Assignments	30%
Lecture Midterm Exam	15%

Lecture Final Exam	25%
Assignment #1	15%
Assignment #2	15%
Total	100%

DUE DATES

Lecture assignments are due at the start lecture on the date assigned by the instructor. Laboratory assignments will be due at the start of the following laboratory period unless otherwise indicated by the laboratory instructor. Late assignments will be graded based on the following scheme: a deduction of 10% per day up until a total deduction of 50% is reached, following that, assignments must be submitted prior to the date that the instructor hands back the graded assignment (set by the instructor), unless otherwise indicated by the instructor.

Missed exams will be assigned a grade of 0% unless re-scheduling for a valid reason is approved and determined **in advance** of scheduled exam date. If there are known conflicts with exam scheduling, please see the instructor as soon as possible to discuss an alternative examination date.

REQUIRED TEXTBOOKS AND MATERIAL

Christopherson, R.W. & Byrne, M.L. 2016. Geosystems: An introduction to Physical Geography—Fourth Canadian Edition. Canadian Edition. Prentice-Hall Canada, Inc.: Toronto.

Laboratory materials will be distributed during the lab sessions.

Various other reference materials may be used throughout the course. These will be announced by the course instructor prior to a required reading assignment.

ACADEMIC AND STUDENT CONDUCT

Information on academic standing and student rights and responsibilities can be found in the current Academic Regulations that are posted on the Student Services/ Admissions & Registration web page.

PLAGIARISM

Plagiarism is a serious academic offence. Plagiarism occurs when a student submits work for credit that includes the words, ideas, or data of others, without citing the source from which the material is taken. Plagiarism can be the deliberate use of a whole piece of work, but more frequently it occurs when students fail to acknowledge and document

sources from which they have taken material according to an accepted manuscript style (e.g., APA, CSE, MLA, etc.). Students may use sources which are public domain or licensed under Creative Commons; however, academic documentation standards must still be followed. Except with explicit permission of the instructor, resubmitting work which has previously received credit is also considered plagiarism. Students who plagiarize material for assignments will receive a mark of zero (F) on the assignment and may fail the course. Plagiarism may also result in dismissal from a program of study or the College.

YUKON FIRST NATIONS CORE COMPETENCY

Yukon College recognizes that a greater understanding and awareness of Yukon First Nations history, culture and journey towards self-determination will help to build positive relationships among all Yukon citizens. As a result, to graduate from ANY Yukon College program, you will be required to achieve core competency in knowledge of Yukon First Nations. For details, please see www.yukoncollege.yk.ca/yfnccr.

ACADEMIC ACCOMMODATION

Reasonable accommodations are available for students requiring an academic accommodation to fully participate in this class. These accommodations are available for students with a documented disability, chronic condition or any other grounds specified in section 8.0 of the Yukon College Academic Regulations (available on the Yukon College website). It is the student's responsibility to seek these accommodations. If a student requires an academic accommodation, he/she should contact the Learning Assistance Centre (LAC): lac@yukoncollege.yk.ca.

TOPIC OUTLINE

Tentative Lecture Topic Schedule 2020

Date	Topic	Related Reading
F January 10	Course introduction, the geologic timescale, Earth's crust	Chapter 12
F January 10	Earth materials and the rock cycle, introduction to plate tectonics	Chapter 12 and 13
F January 17	Plate tectonics as it applies to crustal formation and deformation, orogenesis	Chapter 13
F January 17	Earthquakes: anatomy and major global earthquake zones, intensity and magnitude, forecasting	Chapter 13
F January 24	Volcanoes: volcanic settings, materials and landforms, eruption types	Chapter 13
F January 24	Assignment #1 Work Period	
F January 31	Weathering: chemical and physical	Chapter 14
F January 31	Weathering: landform denudation and karst	Chapter 14

F February 7	Mass movement: processes and classification	Chapter 14
F February 7	River systems: drainage basins and patterns, basic fluvial concepts	Chapter 15
F February 14	River systems: Fluvial processes, and channel patterns	Chapter 15
F February 14	River Systems: Fluvial landforms, floods and river management	Chapter 15
F February 21	HERITAGE DAY HOLIDAY – NO CLASS	
F February 28	Midterm Review	
F February 28	Midterm	
F March 6	Oceans and coastal systems: coastal environment, coastal system actions, depositional and erosional features	Chapter 16
F March 6	Wind processes: erosion, deposition, and related landforms	Chapter 16
F March 13	Glacial Processes: formation and types, mass balance, movement	Chapter 17
F March 13	Glacial Landforms: erosional and depositional landforms	Chapter 17
F March 20	READING WEEK – NO CLASS	
F March 27	Periglacial processes and landscapes, Pleistocene glaciations and the state of the cryosphere today	Chapter 17
F March 27	Soils: soil forming factors and processes, soil horizons, classification	Chapter 18
F April 3	Ecosystem essentials: biogeography, energy flows and nutrient cycles	Chapter 19
F April 3	Ecosystem essentials: communities and species distributions, biodiversity and ecosystem stability	Chapter 19
F April 10	GOOD FRIDAY – NO CLASS	
T April 14	Terrestrial biomes: biogeographic divisions, invasive species	Chapter 20
T April 14	Terrestrial biomes: Earth's major terrestrial biomes and human uses and modification	Chapter 20
W April 15	Assignment #2 Due Final Exam Review	