

**APPLIED SCIENCE AND MANAGEMENT DIVISION**

**GEOG 102**

**Introduction to Physical Geography II**

**3 Credits**

**Winter, 2021**

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## **COURSE OUTLINE**

### **GEOG 102 INTRODUCTION TO PHYSICAL GEOGRAPHY II**

**3 CREDITS**

PREPARED BY: Mary Samolczyk, Instructor/Coordinator, Earth Sciences

DATE: November 4, 2020

APPROVED BY: Joel Cubley, Chair, School of Science

DATE: November 6, 2020



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## INTRODUCTION TO PHYSICAL GEOGRAPHY II

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**INSTRUCTOR:** Mary Samolczyk

**OFFICE HOURS:** By appointment

**OFFICE LOCATION:** T1090

**CLASSROOM:** Lecture: delivered online  
(synchronous and asynchronous)  
Lab: T1090

**E-MAIL:** msamolczyk@yukonu.ca

**TIME:** *Lecture:* T 9:00 – 10:25 AM; a second  
lecture will be delivered asynchronously each  
week  
*Lab:* Th 2:30 – 5:30 PM (face-to-face delivery)

**TELEPHONE:** (867) 456 6958

**DATES:** Jan. 5 – Apr. 22 2020

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### 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.

### **RELATED COURSE REQUIREMENTS**

Students will require a computer with a stable internet connection. A headset with a microphone is recommended. Lab instruction will take place on campus using face-to-face instruction.

### **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 analyse a piece of peer-reviewed literature and discuss it with their peers.

## **COURSE FORMAT**

This course consists of two 90-minute lectures and one 3-hour laboratory period per week. The schedule included in this course outline details the major topics covered in the lecture section; laboratory activities are complimentary to lecture material. Please note that this schedule will likely be modified during the term to accommodate lecture topics that may not be finished within the predicted lecture time.

Lectures for the Winter 2021 offering of this course will be delivered remotely using the online Zoom platform and Moodle. The scheduled lecture period in this course will be delivered synchronously. Students are expected to join the synchronous lecture session so that they can ask questions in real-time and directly engage with the instructor and their peers. The synchronous lecture will not be recorded. A second lecture/activity will be delivered asynchronously each week and will be made available to students on the Moodle course page. Students will not be able to complete lab assignments remotely and must attend each lab session. Midterms and exams will be delivered either on campus or remotely. Your instructor will notify you of the delivery method prior to each test.

## **ASSESSMENTS:**

### **Attendance & Participation**

Students are expected to attend all synchronous lectures and laboratory exercises, as well as complete asynchronous course content each week. Laboratory exercises can only be completed during laboratory periods and materials may not be available outside of these hours. Accommodation for a missed lab is not always possible. It is the responsibility of the student to inform the instructor if they will be missing lecture or lab, and, in the case of a missed lab, to contact the instructor to determine if alternative scheduling is possible.

### **Assignments**

This course includes 10 laboratory exercises that are due one week from the initial laboratory activity unless otherwise indicated by the instructor. Successful completion of these activities is critical for understanding and reinforcing lecture material. You must bring a pen, pencil, coloured pencils, a ruler, calculator, and protractor to labs.

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 analyse 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 analysing 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.

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).

### **Tests**

This course has two lecture examinations: a midterm and a final. The midterm exam is conducted during scheduled lecture time; the final exam is conducted during the final exam period scheduled by the Office of the Registrar. The midterm lecture exam is a 1.5-hour exam and the final exam are designed to take 3 hours.

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.

## EVALUATION

<b><i>Tests and Assignments</i></b>	<b><i>Weight</i></b>
Weekly Lab Assignments	30%
Lecture Midterm Exam	15%
Lecture Final Exam	25%
Assignment #1	15%
Assignment #2	15%
Total	100%

## REQUIRED TEXTBOOKS AND MATERIAL

This course will use a Physical Geography Open Educational Resource (OER) and supplementary readings provided by the instructor. Additional details will be provided by the instructor in the first lecture period.

## 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 University.

### **YUKON FIRST NATIONS CORE COMPETENCY**

Yukon University 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 University program, you will be required to achieve core competency in knowledge of Yukon First Nations. For details, please see [www.yukonu.ca/yfnccr](http://www.yukonu.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 University Academic Regulations (available on the Yukon University website). It is the student's responsibility to seek these accommodations. If a student requires an academic accommodation, they should contact the Learning Assistance Centre (LAC): [lac@yukonu.ca](mailto:lac@yukonu.ca).



**TOPIC OUTLINE**

<b>Module</b>	<b>Course topic(s)</b>
1	Introduction to physical geography
2	Earth's crust, Earth materials and the rock cycle
3	Plate tectonics: theory, crustal formation and deformation, orogenesis
4	Earthquakes: anatomy of an earthquake, global earthquake zones, intensity and magnitude, forecasting
5	Volcanoes: volcanic settings, materials and landforms, eruption types
6	Weathering: chemical and physical weathering, landform denudation, karst topography
7	Mass movement: processes and classification
8	River systems: basic fluvial concepts, fluvial processes, channel patterns and fluvial landforms, floods and river management
9	Oceans and coastal systems: coastal environment, coastal system actions, depositional and erosional features
10	Wind processes: erosion, deposition, and related landforms
11	Glaciers: formation and types, movement, mass balance, erosional and depositional landforms
12	Periglacial environments: distribution, processes and landforms
13	Soils: soil forming factors and processes, soil horizons, Canadian classification system
14	Ecosystem essentials and biogeography: Earth's major terrestrial biomes and biogeographic divisions, introduction to energy flows and nutrient cycles, communities and species distributions, invasive species