

APPLIED SCIENCE AND MANAGEMENT DIVISION

GEOG 101

Introduction to Physical Geology I

3 Credit Course

Fall, 2020



COURSE OUTLINE

GEOG 101

INTRODUCTION TO PHYSICAL GEOGRAPHY I

3 CREDITS

PREPARED BY: Pamela Godin, Instructor

DATE: August 24, 2020

APPROVED BY: Joel Cubley, Chair, School of Science

DATE: August 29, 2020

APPROVED BY SENATE: Click or tap to enter a date

RENEWED BY SENATE: Click or tap to enter a date



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INTRODUCTION TO PHYSICAL GEOGRAPHY I

INSTRUCTOR: Pamela Godin

OFFICE HOURS: Zoom Tuesdays 1-3pm

LAB INSTRUCTOR: Stephanie Saal

OFFICE HOURS: By Appointment Only

OFFICE LOCATION: Zoom

CLASSROOM: MOODLE

E-MAIL: pgodin@yukonu.ca

LECTURE: ZOOM Thursdays 9-10:30am

ssaal@yukonu.ca

LAB: Fridays 1-4pm (3-4pm ZOOM questions)

DATES: September 1st – December 17th

COURSE DESCRIPTION

GEOG 101 and GEOG 101L is an introduction to the physical environment and methods of earth system research. The basic principles and processes that govern climate-weather-water 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 online laboratory investigations and principles of geographic information systems and remote sensing. The course will highlight a range of current research taking place throughout Yukon. GEOG 101 is the complementary course of GEOG 102.

PREREQUISITES

None.

EQUIVALENCY OR TRANSFERABILITY

Please see the website <http://bctansferguide.ca> for a complete list of transfer agreements for this course within British Columbia. A similar list for agreements with Alberta institutions may be found at <http://alis.alberta.ca/ps/tsp/ta/tbi/onlinesearch.html>. Receiving institutions always determine course transferability. Further information and assistance with transfers may be available from the School of Science.

LEARNING OUTCOMES

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

1. Understand the processes that govern Earth's weather, climate, and hydrological systems.
2. Understand the concept of earth systems research including the interactions between the landscape, climate, and biophysical features.
3. Have developed some comfort in a laboratory setting.
4. Be able to provide examples of current research and work taking place throughout the Yukon Territory and understand its implications.
5. Be able to critically analyze current media and peer-reviewed articles surrounding global climate change.

COURSE FORMAT

The class will combine both lectures and laboratory exercises in Moodle and Zoom.

Lectures

Lectures will be entirely online and presented in Moodle. Each week, a new module will be presented and students must complete that module by Thursday of that week. A small quiz will be given each week within Moodle; all quizzes must be completed to pass the course. There will also be two assignments and a final exam. Current Yukon research will be highlighted throughout the course material.

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. These labs will also be presented in Moodle with lab seven assignments due throughout the term.

ASSESSMENTS

Attendance & Participation

Each week the lecture component will be an online Moodle-based module. There will be 12 weeks of modules along with a weekly quiz. ALL modules need to be completed by the last day of classes (December 8th). The completed modules and quizzes will be worth 25% of your total marks for the course.

In addition, each week will include a Zoom discussion and question period to go over any questions you may have about the course and to openly discuss the week or any upcoming assignments. Participation in all aspects of the lecture and lab are strongly recommended in order to pass the course.

***NOTE The lecture and lab are being graded separately with 60% of your mark coming from the lecture and 40% from the lab. You need a passing grade in the lecture (minimum 30%) and lab (20%) as they are being marked separately. For example, a passing grade in the lecture and a zero in the lab will result in failure of the course.

Assignments

There will be two lecture assignments.

Assignment #1: You will compare two climate data sets for Yukon and a geographic location of your choice – two datasets collected from Environment Canada website for a similar time period. You will graphically display results and provide a written analysis interpreting the differences. **Due on MOODLE by 11:59pm on November 19th.**

Assignment #2: This assignment has two parts; working as a team and preparing for a climate change debate and writing a report. Throughout the term, you will work with classmates in teams working towards hosting a climate change debate on December 3rd. You are free to use online meeting spaces such as Moodle, Zoom, Google, etc. You will also read and critique 3 pieces of current media and 3 peer-reviewed research papers discussing climate change/global warming and then present your findings in a five-page report (double-spaced, 12 point font). The goal of this assignment is to introduce you to how science is presented in the media, to learn to critically evaluate, and to learn to articulate and present your work. **Debate will be held on December**

3rd and the paper is due on MOODLE by 11:59pm of that day.

Laboratory Assignments

Laboratory assignments will generally take the form of question sets that can be answered through Moodle assignments in laboratory sessions. They will be due at the beginning of the subsequent lab period. You will need a pen, pencil, coloured pencils, a ruler, calculator, and protractor to complete labs.

Tests

There will be no midterm exam due to the weekly quizzes and assignments. The final examination will be scheduled on **Thursday, December 17th**. It is vital that students wait to schedule any travel plans until they know their exam schedule as exceptions will not be made for missed exams. The exam may be on campus or delivered in an online format; more details will be provided closer to the date.

EVALUATION:

Assignments #1 and 2	20%
Weekly Quizzes/Module Completion (12)	25%
Lab Assignments	40%
Final Exam	15%
Total	100%

REQUIRED TEXTBOOKS AND MATERIAL

All course materials will be based around an Open Educational Resource (OER) Geography text that can be found here:

<https://courses.lumenlearning.com/chemeketa-geophysical/>

*The course material will be provided in Moodle so is not necessary to use this resource unless you want to jump ahead or use as a study guide.

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.

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.

TOPIC OUTLINE

Week	Day	Date	Type	Topic	Submission
1	Mon-Thurs	1-Sep	Moodle	Intro/geography 101 basics	
	Thursday	3-Sep	Zoom	Zoom Meet & Greet	
	Friday	4-Sep	Lab	Intro	
2	Mon-Thurs	8-Sep	Moodle	Geography Essentials/maps	
	Thursday	10-Sep	Zoom	zoom discussion/questions	MOODLE QUIZ 2%
	Friday	11-Sep	Lab	1. Map Reading	
3	Mon-Thurs	15-Sep	Moodle	Solar energy + seasons	
	Thursday	17-Sep	Zoom	zoom discussion/questions	MOODLE QUIZ 2%
	Friday	18-Sep	Lab	2. Energy Distribution	Lab 01
4	Mon-Thurs	22-Sep	Moodle	Atmosphere	
	Thursday	24-Sep	Zoom	zoom discussion/questions	MOODLE QUIZ 2%
	Friday	25-Sep		Working Period	Lab 02
5	Mon-Thurs	29-Sep	Moodle	energy balances	
	Thursday	1-Oct	Zoom	zoom discussion/questions	MOODLE QUIZ 2%
	Friday	2-Oct		NO LAB	
6	Mon-Thurs	6-Oct	Moodle	temperatures	
	Thursday	8-Oct	Zoom	zoom discussion/questions	MOODLE QUIZ 2%
	Friday	9-Oct	Lab	3. Global Temperatures	
7	Mon-Thurs	13-Oct	Moodle	Circulation 1	
	Thursday	15-Oct	Zoom	zoom discussion/questions	MOODLE QUIZ 2%
	Friday	16-Oct		NO LAB	Lab 03
8	Mon-Thurs	20-Oct	Moodle	review	
	Thursday	22-Oct	Zoom	Moodle QUIZ MANDATORY	MOODLE QUIZ 3%
	Friday	23-Oct	Lab	4. Wind	
9	Mon-Thurs	27-Oct	Moodle	Circulation 2	

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	Thursday	29-Oct	Zoom	zoom discussion/questions	MOODLE QUIZ 2%
	Friday	30-Oct		NO LAB	Lab 04
10	Mon-Thurs	3-Nov	Moodle	Water and Atmospheric Moisture	
	Thursday	5-Nov	Zoom	zoom discussion/questions	MOODLE QUIZ 2%
	Friday	6-Nov	Lab	5. Humidity	
11	Mon-Thurs	10-Nov	Moodle	weather	
	Thursday	12-Nov	Zoom	zoom discussion/questions	MOODLE QUIZ 2%
	Friday	13-Nov		NO LAB	Lab 05
12	Mon-Thurs	17-Nov	Moodle	water	Excel Assignment DUE
	Thursday	19-Nov	Zoom	zoom discussion/questions	MOODLE QUIZ 2%
	Friday	20-Nov	Lab	6. Water Budget	
13	Mon-Thurs	24-Nov	Moodle	climate systems/climate change	
	Thursday	26-Nov	Zoom	zoom discussion/questions	MOODLE QUIZ 2%
	Friday	27-Nov	Lab	7. Climate Change	Lab 06
14	Mon-Thurs	1-Dec	Moodle	Climate Change	
	Thursday	3-Dec	Zoom	Climate Change Debate assignment	
	Friday	4-Dec	Lab	Lab Review	Lab 07
15	Mon-Thurs	8-Dec	Moodle	Review	
	Thursday	10-Dec	Zoom	One on One Help Appointments	
16					
	Thursday	17-Dec		Final Exam	