

Applied Science and Management
Geography 101 and 101L
3 Credit Course
Fall, 2018



COURSE OUTLINE

**GEOG 101
& GEOG 101 Lab**

Introduction to Physical Geography I

**45 HOURS
3 CREDITS**

PREPARED BY: Brian Horton
APPROVED BY: Margaret Dumkee

DATE: August 1, 2018
DATE: August 3, 2018

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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Geography 101: Introduction to Physical Geography

Lecture and Lab

INSTRUCTOR: Brian Horton (Lecture) Stephanie Saal (Lab)	OFFICE HOURS: By Appointment
OFFICE LOCATION: NR34 Yukon Research Centre	CLASSROOM: A2204 (Lecture)
E-MAIL: bhorton@yukoncollege.yk.ca ssaal@yukoncollege.yk.ca	TIME: Tuesdays 6:00 to 8:55 PM (Lecture) Thursdays 6:00 to 8:55 PM (Lab)
TELEPHONE: 867-456-8636	DATES: Tues, September 11 - December 6, 2018

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 field and 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.

RELATED COURSE REQUIREMENTS

None.

EQUIVALENCY OR TRANSFERABILITY

This course transfers as first-year geography (one semester) to most Canadian Universities. Please see the BC Transfer Guide or contact the School of Science for more information on transferability.

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 Yukon Territory and understand its implications.*
- 5. Be able to critically analyze current media surrounding global climate change.*

COURSE FORMAT

The class will combine lectures and laboratory exercises.

Lectures

Lectures will primarily follow the course text but will expand upon the material covered. 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.

ASSESSMENTS:

Attendance & Participation

Attendance is mandatory. A student may be dismissed from a course or program if more than ten percent (10%) of the scheduled contact hours are missed in any one course. Dismissal from a course may result in loss of full-time status and loss of sponsorship funding.

Assignments

Lecture Assignments

There will be two lecture assignments.

Assignment #1: You will compare two climate data sets for Yukon - a historical dataset collected by the Whitepass and Yukon Route prior to the inception of Environment Canada monitoring and a "present day" dataset from Whitehorse Airport. You will graphically display results and provide a written analysis interpreting the differences. **Due on at start of class on November 13th.**

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Geography 101 and 101L
3 Credit Course
Fall, 2018**

Assignment #2: You will read, digest, and critique 10 pieces of current media 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. **Due at start of class on December 4.**

Laboratory Assignments

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

Tests

A mid-term examination is scheduled during class on Tuesday, October 23rd. The final examination will be scheduled during the exam period, December 10 - 20th (final date To Be Determined). 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.

EVALUATION:

Lab Assignments	40%
Lecture Assignments	30%
Midterm Exam (October 23)	10%
Final Exam (Date TBD)	20%
Total	100%

REQUIRED TEXTBOOKS AND MATERIALS

Lecture material will be based on: Christopherson, R.W., Birkeland G.H., Byrne, M.L., and Giles, P.T. 2016. Geosystems: An introduction to Physical Geography. Updated 4th Canadian Edition. Pearson Canada, Inc.: Toronto. 768 pp. You may purchase the e-text access card

A copy of the textbook will be on reserve for short-term loan at the Learning Commons.

There are two alternatives to the course text. You may use the hardcover 4th edition of Geosystems, or an open educational resource (OER) alternative to the textbook. The OER version is available from the following link:
<https://www.opengeography.org/physical-geography.html>

Content is largely similar, so you may choose to use the online material as a study tool, however, exams and lecture materials will be based on the electronic copy of the textbook.

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

**Applied Science and Management
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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

Date	Topic	Notes
September 11	Course Intro and Essentials of Geography	Chapter 1
September 18	The Energy Atmosphere System	Chapter 2 and 3
September 20	Lab 1	
September 25	Atmospheric Structure	Chapter 3
September 27	Lab 2	Lab 1 due
October 2	Energy Balances	Chapter 4
October 4	NO LAB - HAPPY THANKSGIVING	
October 9	Water and Atmospheric Moisture	Chapter 7
October 11	Lab 3	Lab 2 due
October 16	Water Resources and Review	Chapter 9
October 18	Study period for Midterm	
October 23	Mid-term Exam (10% of Final Grade)	
October 25	Lab 4	Lab 3 due
October 30	Weather Systems	Chapters 5 and 8
November 1	Lab 5	Lab 4 due
November 6	Atmospheric and Oceanic Circulation	Chapter 6
November 8	Working Period for Lecture Assignment #1	
November 13	Global Climate Systems	Chapter 10; Assignment 1 Due
November 15	Lab 6	Lab 5 due
November 20	Climate Change	Chapter 11
November 22	Lab 7	Lab 6 due
November 27	Climate Change	Chapter 11
November 29	Working period for Lecture Assignment 2	Lab 7 due
December 4	Review	Assignment 2 Due
TBD	Final Exam	