

# GEOG 104: Principles of Physical Geography

**Professor:** Dr. Nathaniel Brunsell  
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**Class time and Place:** TR 2:30-3:45, LINDLEY HALL 412

**Office Hours:** TR 4-5 or by appointment

**Prerequisites:** None

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## Course Overview:

Physical geography is the study of the natural world. In this course, we will take a systems approach and examine how various physical processes shape the world around us. Specifically, we will examine how the various spheres of the Earth interact. These spheres are the (1) atmosphere, (2) biosphere, (3) hydrosphere and (4) lithosphere. We are interested in looking at how the processes act to produce the wide spatial variability that we observe in the natural world. In addition, we are interested in understanding how the processes are manifested at different scales ranging from the local to regional to global scales.

By the end of this course, you will:

- (1) Be able to explain the dominant physical processes occurring within each of the spheres
- (2) Have an appreciation for the interconnectedness of the various processes
- (3) Gain familiarity with some of the major tools that geographers use to gain knowledge about the natural world
- (4) Develop critical reasoning skills to help apply your understanding of the processes to different areas of the world

## Textbook:

***Discovering Physical Geography*** (1<sup>st</sup> edition) by Alan F. Arbogast. This text is very well-written, concise, and well-illustrated; it is particularly well-suited for our introductory course. There are 2 ways you can get the textbook: new paperback paperback, OR as an E-Book from the publisher's (Willey & Sons) website. Since this is a new book, no used copies are available yet.

## Assessment:

There will be four exams given throughout the semester. Exam format will include multiple choice, so a soft-leaded pencil is required. The subject matter will consist of material primarily drawn from the lectures and supplemented from the readings. These exams will not be cumulative. Each exam will be worth 25% of the course grade.

The grade scale will follow standard scoring:

- A: 90 – 100%
- B: 80 – 89%
- C: 70 – 79%
- D: 60 – 69%
- F: 0 – 59%

I reserve the right to curve the class, however each grade will be curved a maximum of one letter grade and under no circumstances will a grade of less than 50% receive a passing grade.

**Tentative Schedule:**

<b>Week</b>	<b>Topic</b>	<b>Reading</b>
Aug 16	Introduction to Physical Geography	1
Aug 21	The Geographer's Tools	2
Aug 23	Earth-Sun Geometry and the Seasons	3
Aug 30	The Global Energy System	4
Sept 4	Global Temperature Patterns	5
Sept 11	Atmospheric Pressure, Wind and Global Circulation	6
<b>Sept 13</b>	<b>EXAM 1</b>	
Sept 18	Atmospheric Moisture and Precipitation	7
Sept 25	Air Masses and Cyclonic Weather Systems	8
Oct 2	Global Climates and Climate Change	9
<b>Oct 9</b>	<b>EXAM 2</b>	
<b>Oct 11</b>	<b>Fall Break</b>	
Oct 16	Plant Geography	10
Oct 23	The Global Distribution of and Character of Soils	11
Oct 30	Earth's Internal Structure, Rock Cycle	12
Nov 1	Tectonic Processes and Landforms	13
<b>Nov 8</b>	<b>EXAM 3</b>	
Nov 13	Weathering and Mass Wasting	14
Nov 15	Groundwater and Karst Landscapes	15
Nov 20	Fluvial Systems and Landforms	16
<b>Nov 22</b>	<b>Thanksgiving Break</b>	
Nov 27	Glacial Geomorphology	17
Dec 4	Arid Landscapes and Eolian Processes	18
Dec 6	Coastal Processes and Landforms	19
<b>Dec 11 (Tues)</b>	<b>Final exam: EXAM 4: 1:30 - 4:00</b>	

**Cheating:**

Cheating in any manner will not be tolerated. Note that cheating includes handing in for credit work that is not your own (including copying from other students or plagiarism). Any student discovered cheating will be given an F for the course and a letter explaining that the grade was given for academic misconduct will be sent to the student's school or college. **If you have any question about what constitutes academic misconduct, please ask me in advance to avoid any confusion.**

**Students with Disabilities:**

The staff of Services for Students with Disabilities (SSD), 135 Strong, 785-864-2620 (v/tty), coordinates accommodations and services for KU courses. If you have a disability for which you may request accommodation in KU classes and have not contacted them, please do so as soon as possible. Please also see me privately in regard to this course.

**Statement on Intellectual Property Rights**

Course materials prepared by the instructor, together with the content of all lectures and review sessions presented by the instructor are the property of the instructor. Video and audio recording of lectures and review sessions without the consent of the instructor is prohibited. On request, the instructor will usually grant permission for students to audio tape lectures, on the condition that these audio tapes are only used as a study aid by the individual making the recording. Unless explicit permission is obtained from the instructor, recordings of lectures and review sessions may not be modified and must not be transferred or transmitted to any other person, whether or not that individual is enrolled in the course.

**Important Note**

The use of cell phones, laptop computers, i-pods etc. during the lecture is strictly prohibited.