

GG102 Spring 2021

Physical Geography

Course Information:

Title: GGS102 DL3 Physical Geography

CRN: 22078

Virtual lecture and office hours : 10:00AM -Noon, Mondays 01/25/21-05/10/2021

Instructor: [Prof. John J. Qu](#), Phone: (703) 993-3958 E-mail: jqu@gmu.edu

Teaching Assistant (TA): Ms. Amy Tal Rose, E-mail: arose20@masonlive.gmu.edu

Office Hour: 10:00AM —12:00 PM Mondays or make appointment

Course Description:

This is an introductory course to physical geography. This course will introduce the students to the basic concepts and fundamentals of the Earth system. The course will cover earth-sun relations, weather, climate, soils, vegetation, geology, and landforms; and introduce the students to types and uses of maps. Physical characteristics of the Earth system and “Earth from Space” will be the focuses. Through this Mason natural science core course, students explore new ideas, engage in inquiry and experiential learning, and learn how to integrate this learning into their chosen major and beyond. It will incorporate the diverse of Google Earth. We will focus on physical geography and climate change in Spring 2021.

Prerequisites

There are no formal prerequisites.

Final project:

The description of the individual final project can be discussed in the first virtual lecture.

Grading:

Grades will be based upon your performance on the homework exercises, tests/g midterm, class attendance and final term paper and presentation. The weighted contribution of each of these items to your final grade is given below:

Homework 20 %

Tests/quizzes 20 %

Midterm 20 %

Final Project and term paper 35 %

Class participation and discussions (online) 5%
 (A=90-100, B=80-89, C=70-79, D=60-69, F=<60)

Textbook:

Required Textbook: Introducing Physical Geography, Alan Strahler, Wiley, 6th Editions, pp 624

Detailed Schedule

Week one	Introduction Chapter 1 Earth as a Rotating Planet
Week two	Chapter 2 The Earth's Global Energy Balance & Chapter 3 Air Temperature Quiz one
Week three	Chapter 4 Atmospheric Moisture and Precipitation & Chapter 5 Winds and Global Circulations
Week four	Chapter 6 Weather System Quiz two Chapter 7 Global Climates and Climate Change
Week five	Chapter 8 Biogeographic Processes & Chapter 9 Global Biogeography
Week six	Research topic discussion & Google Earth Demonstration Mid-term
Week seven	Chapter 10 Global Soils & Chapter 11 Earth Materials and Plate Tectonics
Week eight	Chapter 12 and Chapter 13 Quiz three
Week nine	Chapter 14 Freshwater of the Continents & Chapter 15 Landforms Made by Running Water
Week ten	Geography of Carbon Cycle & Climate Change (virtual lecture) by Guest speaker (Dr. Z. Zhu, USGS)
Week eleven	Chapter 16 Landforms Made by Waves and Wind & Chapter 17 Glacial and Periglacial Landforms Quiz four
Week twelve	Final project presentation (Group 1)
Week thirteen	Final project presentation (Group 2)
Week fourteen	Final project presentation (Group 3)
Week fifteen	Final term paper (due date)

Honor code:

Students must follow the GMU Scholastic Honor Code. Please show respects to everyone during virtual lectures and final project presentations. Copying homework (mid-term or quiz) is considered cheating.

