University of Texas at El Paso
College of Science
Department of Geological Sciences

PHYSICAL GEOGRAPHY - GEOG1306-2 (3 credit hours) Syllabus

Part 1: Course Information

Instructor Information

Instructor: Dr. Laura V. Alvarez
Learning Management Site: UTEP blackboard
Classroom: Recorded virtual sessions in Blackboard
Lectures: 2 asynchronous lectures (with embedded quizzes) that students must attend anytime within Monday and Friday of each week.
Virtual Office: Blackboard Collaborate Ultra
Office Hours: Tue 3:00 PM – 4:30 PM or by appointment
Course Communication: Blackboard Course Messages platform
Teaching Assistant: Ph.D Student David Lankford-Bravo

Course Description

Physical Geography brings together elements of astronomy, climatology, hydrology, oceanography, geology, geomorphology, biology and ecology to understand the processes responsible for the physical patterns of climate, water soils, vegetation, and landforms found over the earth.

Textbook & Course Materials

- Geosystems: An Introduction to Physical Geography (10th Edition). Robert Christopherson and Ginger Birkeland. Prentice Hall.
- You will find my presentations, exam review documents, and additional information in our UTEP Blackboard course. If you encounter any problems accessing this course within Blackboard, please contact the UTEP helpdesk (helpdesk@utep.edu).
- The Laboratory section for Physical Geography (GEOG1106) is highly recommended to better grasp the concepts covered during the theoretical part of the course. Students that have not enrolled yet in this section are highly encouraged to do so at their earliest convenience.

Overarching Goals and Learning Outcomes

- Students should be able to describe the major concepts, terms, principles, and tools used by physical geographers to interrelate the elements of the physical environment in terms of both patterns and processes. Specifically, students should be able to identify the processes responsible for climate, vegetation and soil and landform patterns, and water resources distribution.
- Given an unfamiliar region on the globe, students should be able to predict natural patterns of climate, vegetation, and landforms within this region.

- Students should be able to describe the major environmental hazards in the world today and what possible impacts these have on society.

My expectations of You

- You will read materials for a particular class period before the start of class.
- Per the nationwide standard for university scholarship, you will study (read, review, reflect, practice, do homework) at least two hours for every hour you are in lecture.

Teaching Philosophy

- Learning is a process. To learn, a student must engage in the process. I design my courses to facilitate the learning process, but a student will only learn if they engage with the course contents through reading, video, interactions and assessments.
- Learning takes time and effort. You are building new connections in your brain when learning. This cannot be done quickly or without effort. It is important to take time to study, practice, and reflect in this course.

Course Structure

- This course is structured in 80 minute, asynchronous virtual lectures. During each week, students need to watch the two pre-recorded lectures at their pace. The recorded lectures are accompanied by PDF files of each class presentation for further studying.
- The required textbook provides a solid background for the course. However, there may be material in the lectures that is not in the text.
- Attendance to the virtual sessions is mandatory. The subject of physical geography cannot be fully appreciated or grasped without the synthesis of the many topics we learned about throughout the semester. This is a fast-paced course; therefore it's particularly important that you keep up with the lectures, readings and evaluations.

Class Recordings

The use of recordings will enable you to have asynchronous access to the class lectures. Our use of such technology is governed by the Federal Education Rights and Privacy Act (FERPA) and UTEP's acceptable-use policy. A recording of class sessions will be kept and stored by UTEP, in accordance with FERPA and UTEP policies. Your instructor will not share the recordings of your class activities outside of course participants, which include your fellow students, teaching assistants, or graduate assistants, and any guest faculty or community-based learning partners with whom we may engage during a class session. You may not share recordings outside of this course. Doing so may result in disciplinary action.

Learning Modules

This course is designed using a modular format—that is, each week is "packaged" as a single module so that all the materials, lecture recordings, lecture notes and submission areas are in one area for a given week.

Technology Requirements

- Course content is delivered via the Internet through the Blackboard learning management system. Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Google Chrome and Mozilla Firefox are the best browsers for Blackboard; other browsers may cause complications. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

- You will need to have access to a computer/laptop, scanner, a webcam, and a microphone. You will need to download or update the following software: Microsoft Office, Adobe Acrobat Reader, Windows Media Player, QuickTime, and Java. Check that your computer hardware and software are up-to-date and able to access all parts of the course.

- If you do not have a word-processing software, you can download Word and other Microsoft Office programs (including Excel, PowerPoint, Outlook and more) for free via UTEP's Microsoft Office Portal.

- IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP Help Desk as they are trained specifically in assisting with technological needs of students. Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!

Course Communication: How we will stay in contact with each other

Because this is an online class, we won't see each other in the ways you may be accustomed class time, small group meetings, and office hours. However, there are a number of ways we can keep the communication channels open:

- **Office Hours**: We will not be able to meet on campus, but I will still have office hours for your questions and comments about the course. My office hours will be held within our GEOG1306 Blackboard Collaborate Ultra.

- **Class Communication**: Within Blackboard please use the Course Messages link to contact the instructor. Please use this form of communication as an efficient way to get feedback and responses that pertain to the course. Emails could be a rather inefficient way for the high number of daily academic messaging in the instructor's mailbox. Also, please take advantage of the office hours for direct interaction with the instructor.

- **Announcements:** Check the Blackboard announcements frequently for any updates, deadlines, or other important messages.

Network Etiquette (Netiquette)

- Office hours will be held through synchronous Blackboard meetings during the established office hours.

- As we know, sometimes communication online can be challenging. It's possible to miscommunicate what we mean or to misunderstand what our classmates mean given the lack of body language and immediate feedback. Therefore, please keep this netiquette

guidelines in mind. Failure to observe them may result in disciplinary action.

- Always consider audience. This is a college-level course; therefore, all communication should reflect polite consideration of other's ideas.
- Respect and courtesy must be provided to classmates and to the instructor at all times. No harassment or inappropriate postings will be tolerated.
- When reacting to someone else's message, address the ideas, not the person. Post only what anyone would comfortably state in a face-to-face situation.
- Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professor only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space.

Course Resources: Where you can go for assistance

UTEP provides a variety of student services and support: Technology Resources

- Help Desk: Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

Academic Resources Relevant to this Course

- UTEP Library: Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- University Writing Center (UWC): Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- Math Tutoring Center (MaRCS): Ask a tutor for help and explore other available math resources.
- History Tutoring Center (HTC): Receive assistance with writing history papers, get help from a tutor and explore other history resources.
- RefWorks: A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.

Individual Resources

- Military Student Success Center: Assists personnel in any branch of service to reach their educational goals.
- Center for Accommodations and Support Services: Assists students with ADA-related accommodations for coursework, housing, and internships.
- Counseling and Psychological Services: Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.

Part 2: Tentative Schedule (subject to slight changes)

Wk. #	Week	Lec. #	Topic	Book Ch.	Lab.* (Optional)
1	**Jan. 19th-22nd**	1	Preliminaries and introduction to the course.	1	0.Intro
		2	**ESSENTIALS OF GEOGRAPHY:** The science of geography. Earth system concepts. Location and time on Earth. Maps and cartography. Modern tools and techniques for geosciences.	1	
2	**Jan. 25th-29th**	3	**SOLAR ENERGY TO EARTH AND THE SEASONS:** The solar system. Sun and Earth. The solar energy.	2	1. Orientation, scale, maps
		4	**SOLAR ENERGY TO EARTH AND THE SEASONS:** Earth seasons and the annual cycle of energy	2	
3	**Feb. 1st-5th**	5	**EARTH'S MODERN ATMOSPHERE:** Atmospheric layers. Atmospheric composition, temperature and function. Pollutants in the atmosphere.	3	2. Location and seasons
		6	**ATMOSPHERIC ENERGY:** Radiation, types of heat transfer, energy pathways, albedo.	4	
4	**Feb. 8th-12th**	7	**SURFACE ENERGY BALANCES:** Energy balance at the Earth's surface, greenhouse effect, urban heat island effect.	4	3. Global temperatures and precipitation
		8	**GLOBAL TEMPERATURES:** Temperature concepts and measurements. Principal temperature controls. Earth's temperature patterns and human response to trends.	4	
5	**Feb 15th 5PM-6PM**	9	**EXAM 1: Lectures 1 through 8 Monday, February 15th of 2021 from 5 PM to 6 PM**	1-4	4. Atmos. Circulat.
	Feb. 15th-19th	10	**ATMOSPHERIC AND OCEANIC CIRCULATIONS:** Wind essentials. Driving forces within the atmosphere. Atmospheric patterns of motion. Oceanic currents. Natural oscillations in global circulation.	5	
6	**Feb. 22nd-26th**	11	**WATER AND ATMOSPHERIC MOISTURE:** Water's unique properties. Humidity.	6	5. Moisture & atmos stability
		12	**WATER AND ATMOSPHERIC MOISTURE:** Atmospheric stability. Phase changes. Clouds and fog.	6	
7	**Mar. 1st-5th**	13	**WEATHER:** Air masses. Atmospheric lifting mechanisms. Cold and warm fronts. Mid latitude cyclonic systems.	7	6. Air masses and weather
		14	**WEATHER:** Violent weather. Thunderstorms, tornadoes, tropical cyclones.	7	
8	**Mar 8th 5 PM - 6 PM**	15	**EXAM 2: Lectures 10 through 14 Monday, Mar 8th of 2021 from 5 PM to 6 PM**	4-7	7. Water budget
	Mar. 8th-12th	16	**WATER RESOURCES:** Water on earth. The hydrologic cycle. Precipitation, evapotranspiration, soil moisture. Water budget and resource analysis.	8	
9	**Mar. 15th-19th**		**Spring Break**		

Wk. #	Week	Lec. #	Topic	Book Ch.	Lab.* (Optional)
10	**Mar. 22nd- 26th**	17	**WATER RESOURCES:** Surface and groundwater resources.	8	No Lab
		18	**EARTH'S CLIMATE AND ITS VARIABILITY:** Review of Earth's climate system, classifying Earth's climates. Fundamentals of climate change.	9-10	
11	**Mar. 29th- Apr. 2nd**	19	**THE DYNAMIC PLANET:** The pace of change. Earth's structure and internal energy. Buoyancy and isostasy.	11	8. Earth interior and the rock cycle
		20	**THE DYNAMIC PLANET:** Earth materials and the rock cycle. Plate tectonics. The geologic cycle.	11	
12	**Apr. 5th- 9th**	21	**TECTONICS, EARTHQUAKES AND VOLCANISM:** Major topographic regions of the world. Earth's hypsometry. Crustal formation and deformation. Orogenesis. Earthquakes. Volcanoes.	12	9. Plate tectonics
		22	**WEATHERING, KARST LANDSCAPES, AND MASS MOVEMENT:** The landscape system and the dynamic equilibrium approach. Weathering factors and processes. Karst topography.	13	
13	**Apr. 12th 5 PM- 6 PM**	23	**EXAM 3: Lectures 16 through 21 Monday, April 12th of 2021 from 5 PM to 6 PM**	8-12	No lab.
	Apr. 12th- 16th	24	**WEATHERING, KARST LANDSCAPES, AND MASS MOVEMENT:** Mass-movement processes and types.	13	
14	**Apr. 19th- 23rd**	25	**RIVER SYSTEMS:** Drainage basins, rivers and drainage patterns. Basic fluvial concepts. Discharge.	14	10. River systems and sand dunes
		26	**RIVER SYSTEMS:** Urbanization and hydrologic response, fluvial transport, channel patterns, depositional landforms, floodplains, alluvial fans, river deltas.	14	
15	**Apr. 26th- 30th**	27	**GLACIAL AND PERIGLACIAL LANDSCAPES:** The basis of glaciers. Types of glaciers. Glacial processes. Glacial landforms.	17	11. Glacial Process
		28	**GLACIAL AND PERIGLACIAL LANDSCAPES:** Periglacial landscapes. Permafrost distribution. Artic and Antarctic Regions.	17	
16	**May 3rd- 6th**	29	**THE GEOGRAPHY OF SOILS:** Pedology and soil horizons. Soil properties. Soil formation factors and desertification. Soil taxonomy	18	12. Soils
		30	**OCEANS AND COASTAL SYSTEMS. EOLIAN PROCESSES:** Global oceans and seas. Ocean chemistry. Coastal system components. Tides. Waves. Tsunami. Coastal processes and landforms, coral formations and reefs, coastal wetlands, coastal salt marsh, mangroves. Wind erosion, transportation and depositional forms.	16, 15	
17	**May 10th 4-6 PM**	31	**FINAL EXAM: Lectures 22 through 30 Monday, May 10th of 2021 from 4 PM to 6 PM**	13-18	No lab

*Lab column only applies only for students that are also taking GEOG1106 (Lab session of Physical Geography)

Part 3: Grading Policy

Graded Course Activities

Percent	Description
80	4 Exams (20% each)
20	Online Quizzes
100	Total Points Possible

Final grade table

Percent grades will be rounded to one decimal place and letter grades will have the following equivalence:

Letter Grade	Grade Point	Percentage
A	4.0	89.5 to 100
B	3.0	79.5 to 89.4
C	2.0	69.5 to 79.4
D	1.0	59.5 to 69.4
F	0.0	59.4 to 0

Exams and Proctoring Software

There will be four exams worth 20% each that are not cumulative. Review documents will be posted on Blackboard providing examples of the exam questions.

Such four exams will make use of Respondus Lock Down Browser and Respondus Monitor inside of Blackboard to promote academic integrity. You are encouraged to learn more about how to use these programs prior to the first test.

Please review the following guidelines:

- The assessments will only be available at the times identified on the course calendar.
- A reliable Internet connection is essential to completing the exam. If you must go to a location to take the exam (such as the library), be sure to follow their health and safety requirements.
- You will only have one attempt to take the test. Once the window closes, your answers will be saved, and no changes can be made
- Respondus Lockdown Browser will require that all internet tabs are closed prior to the start of the test.
- Respondus Monitor requires a webcam and microphone.
- You will be required to show the webcam your student ID prior to the start of the test.
- Your face should be completely visible during the test. Blocking the camera will disable the test.
- No notes or textbook materials are permitted during the test. Respondus Monitor requires you to take a video of your surrounding area (desk, chair, walls, etc.)
- You should not have conversations with other people and/or leave and return to the area during the test.

Quizzes

- There will be in-class, pop-up quizzes that will account for 20% of the total course grade. Quizzes will be embedded into the pre-recorded lectures and the results accounted for into the quiz item in your grades. The questions are designed to evaluate and reinforce specific topics of the course and are intended to reward class attendance and participation. A number of questions will be distributed during each recorded lecture time and the students will need to respond to all questions in order to receive full credit. There will be 4 attempts to take those quizzes within the scheduled week and the last attempt will be recorded as final grade of that quiz. The correct answers will be provided only one week later through blackboard.
- I consider submitting quiz answers for a fellow student to be a violation of the University Honors Code. If you are caught polling for another student or have answers in a class that you did not attend, you will forfeit all quiz points and may face additional disciplinary actions.

Copyright Assessment for Course Materials

All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

Part 4: Course and University Policies

- Should you decide to drop this course for whatever reason, you must submit the relevant forms to the Office of the Registrar by the appropriate date. Failing to do so will result in an F grade for the course. If at the time you withdraw from the course you are scoring a failing grade, you will receive an F grade. If not, you will receive a W for withdrawn.
- It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required classwork that may fall on religious holidays. Please contact me as soon as possible to make appropriate arrangements for classroom or rescheduling of exams.
- The University is committed to providing reasonable accommodations for all students with disabilities. If you have a disability that may prevent you from fully demonstrating your abilities, contact me as soon as possible so that accommodations can be made. Students must be registered with the UTEP Center for Accommodations and Support Services (CASS: https://www.utep.edu/student-affairs/cass/) prior to receiving accommodations in this course. You are expected to be familiar with and abide by the UTEP Academic Misconduct Code. Information on this code is at https://www.utep.edu/student-affairs/osccr/student-conduct/academic-integrity.html.
- Anything that appears to be cheating, plagiarism, or other forms of academic misconduct will not be tolerated. Apparent misconduct will be dealt with by immediate referral of the circumstances through the regular university channels.
- The instructor has the right to institute new policies during the semester to ensure safety and positive learning environment for all students.

Part 5: Diversity, Equity and Inclusion Statement

We must treat every individual with respect. We are diverse in many ways, and this diversity is fundamental to building and maintaining an equitable and inclusive campus community. Diversity can refer to multiple ways that we identify ourselves, including but not limited to race, color, national origin, language, sex, disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status, or genetic information. Each of these diverse identities, along with many others not mentioned here, shape the perspectives our students, faculty, and staff bring to our campus. We, at UTEP, will work to promote diversity, equity and inclusion not only because diversity fuels excellence and innovation, but because we want to pursue justice. We acknowledge our imperfections while we also fully commit to the work, inside and outside of our classrooms, of building and sustaining a campus community that increasingly embraces these core values.

Each of us is responsible for creating a safer, more inclusive environment. Unfortunately, incidents of bias or discrimination do occur, whether intentional or unintentional. They contribute to creating an unwelcoming environment for individuals and groups at the university. Therefore, the university encourages anyone who experiences or observes unfair or hostile treatment on the basis of identity to speak out for justice and support, within the moment of the incident or after the incident has passed. Anyone can share these experiences using the resources listed in UTEP's diversity and inclusion initiative https://www.utep.edu/provost/diversity-equity-and-inclusion/index.html