

Syllabus for Physical Geography Fall 2024
GEOG 1306 - CRN 12257
Mondays & Wednesdays: 1:30-2:50 pm

Instructor:

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Office Hours: Mondays and Wednesdays 11:00 - 12:00 pm or by appointment

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Office Hours: Tuesdays and Thursdays 11am - 12pm

Course Description: During the course we will study the different layers composing the Earth's surface, looking into detail the atmosphere, weather, and climate; the Earth's geologic structure and surface features – focusing upon landforms, soil, and ecological systems. We will examine the interactions between humans and our natural environment. For this, we will draw examples from North America, but we will also look globally. We will begin to understand concepts of balance and equilibrium in complex environmental systems that are subject to change over several time scales. Our focus will be geographical and spatial: where things are, why and how they got there, and how place and spatial relationships modify the landscapes that we observe on our planet.

Text:

Required eBook: The Physical Environment An Introduction to Physical Geography
Open Educational Resource material available at: <https://edx.hydrolearn.org/courses/course-v1:UTEP+GEOG1306+Fall2024/about>

Course Objectives:

1. to describe how locations and spatial relationships of properties of the earth's atmosphere and surface are displayed on maps;
2. to explain the Earth's radiation energy balances and their relationships to temperatures;
3. to describe the circulations of the lower atmosphere and upper oceans, and relate them to associated weather systems;
4. to explain the global hydrologic cycles and the distribution of global and US water resources;
5. to describe how soils and ecological communities develop and are structured;
6. to describe how the gross topography of the Earth is related to its plate tectonic framework;
7. to explain how landscapes are shaped by rivers, wind, ice, and coastal ocean waters;
8. to identify how human activity is affecting environmental change;
9. to explain how scientific methods, models, and theories are used to describe and explain environmental processes and patterns; and
10. to understand the framework for the scientific consensus on global climate change.

Examinations: The examinations for this course consist entirely of **fifteen (15) weekly Tests**. Each of them will have 8 to 10 questions but will always be worth 100 points, meaning some questions will be

worth more than point. The total number of points for the course is thus **300 points**.

There is **no mid-term** and there are **no cumulative or comprehensive final exams**. The last week of lecture will be on the first week of **May**. The test on the last week's lectures will be Test 15 and that will take place in the Final Exam Week (second week of May). There is **no other final examination** requirement.

The weekly Tests will take place in the first 20 minutes of each Wednesday class, and will address the material and assigned readings that we dealt with in **the previous week's lecture classes**.

The format of the tests will be mostly multiple-choice questions and possibly short answers. Diagrams are very important in science and some questions will ask you to label or interpret diagrams – but no artistic or drawing skills will be required.

Grades:

Grades will be earned as follows:

A...>90% B ... 80-89% C ... 70-79% D ... 60-69% F ... < 60%
270-300 points 240-269 210-239 180-209 and 179 or less

Academic dishonesty

A student's submission of work for academic credit indicates that the work is the student's own. Cooperation during the class is encouraged, however, homework and all assignments must be done and written by each individual student.

Cellular and electronic devices

Cell phones and tablets are not only allowed during class time, they will be essential for your class excercises. However, you should not use them for any other reason than working on your class. This means you cannot make calls, send text messages, or use social media during class. The innapropriate use of your devices will not be allowed.

Attendance

Attendance is very important for your succes on this class. Attendance will be recorded by your TA, and no more than 2 missed classes will be allowed. If you need to miss the class for any justifiable reason you need to notify me at least a day in advance. It will be at my discretion to grant you permission to miss the class. More than 2 unjustified absenties will drop you from the class.

Make-up tests

If you have a legitimate, unavoidable reason to miss a test you may take a **Make-Up**. We will try to make up the test during the following week or two. Please send me an email to schedule an appointment at my office – 227A Geological Sciences Building.

Re-Takes tests

Re-Takes (for tests you took and made a low score that you believe you can improve): You may re-take **up to two** of the weekly tests **during the Final Exam Week meeting**. If you improve your score, you may substitute the points you earn in the Re-Takes for those you earned in the original tests. I will ask you to sign up for Re-Takes in the last week (Week 15). These are entirely your choice.

Accommodations & Support Services

I will make any reasonable accommodations for students with limitations due to disabilities, including learning disabilities. Please see me personally before or after class in the first two weeks or make an appointment, to discuss any special needs you might have. If you have a documented disability and require specific accommodations, you will need to contact the Center for Accommodations and Support Services (CASS) at 915-747-5148. They're located in Union Building East Rm. 106 or you can reach them by e-mail at cass@utep.edu. All discussions and documentation are kept confidential.

If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at (915) 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at <https://www.utep.edu/student-affairs/cass/>.

Assignments, Homework and Blackboard:

We will use Blackboard for the class Homework and Assignments and also to post materials for reading and studying for your weekly tests. We will link our Blackboard class to your Pearson e-book material and the Assignments and Homework will be made available electronically. You will also submit those electronically. Details on how to link your Pearson to Blackboard will be provided during the second class. Assignments and Homework will count as 20% of your total grade.

Recapping

Test = 100 point weekly test at the beginning of the Wednesday class **every week**.

Assignments & Homework = Provided through Blackboard, will count as 20% of the final

Make-Up Test = when you missed a regular weekly test (for a legitimate, unavoidable reason).

Re-Take = to improve your score on 1 or 2 tests where you did poorly; your choice; these are taken at our Final Exam Week meeting.

Last Weekly Exam meeting and time to be defined

Final Grade:

Your final grade for the class will be obtained as follows:

- Final grade from weekly exams = 80%
- Final grade from Homework and Assignments = 20%

Tentative Course Schedule for Physical Geography

Spring 2024 – (subject to change)

Reading assignments	Topics	Text chapters
Week 1	Geography, Scientific method,	1
Week 2	Tools of the Geographer, Maps, Scale Projections, Remote Sensing, GIS, GPS and Locational Systems	1
Week 3	Geography and the environment, The Solar system	1,2
Week 4	The Earth in the Solar System, Seasons, Continents and Oceans, Natural systems and the concept of equilibrium	2
Week 5	Earth Systems, Feedback loops, Tipping points and Environmental change	2
Week 6	Biogeochemical Cycles	2
Week 7	Atmospheric Composition and Structure	3
Week 8	Energy, Heat, Radiation Balance	4
Week 9	Energy Balance, Latent Heat, Sensible Heat, Ground Heat	4
Week 10	Air Temperature, Temperature Patterns and trends, Air Masses and Fronts	5
Week 11	Atmospheric Circulation, Pressure & Wind, General Circulation of the Atmosphere, El Niño	6
Week 12	Oceanic Circulation, Atmospheric Moisture, Phases of Water, Air stability	6,7
Week 13	Clouds, Precipitation, Global Patterns of Precipitation	7
Week 14	Hydrosphere, Distribution of Water, Water cycle components	8
Week 15	Biosphere, Terrestrial Flora and Fauna	Video material
Week 16	Exam Week: Last Weekly Test (#15) and up to 2 Re-takes	Finals