

Cleveland State University
Levin College of Urban Affairs
Department of Urban Studies
Instructor: Winifred Weizer
Office: UR216 Hours by appointment

Physical Geography (UST 289 Sec. 1)
MWF 10:15 am to 11:05 am
UR 112 Dively Room
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Course Description: This course is an introductory examination of the development of the physical environment in which we live. The course covers physical environments, stressing relationships to people; study of the surface of the earth, including meteorology, science of weather, and geomorphology, the science of landforms. Additional material covered relates to the fields of biology and natural resources.

Course Objective: The objective of the course is to assist the student in understanding how the physical environment has developed and its impact on our metropolitan areas both suburban and urban. The student will also understand how general science knowledge is applicable to problem solving in their daily lives. The course is designed to meet the following learning objectives:

Knowledge

- Understand the steps used in the scientific method.
- Recognize how scientific inquiry can be used to understand the development of the natural world that the student lives in.
- Understand how advancement in measurement and observation tools have led to advances in data collection that have enhanced knowledge of how our physical environment has developed over time.
- Understand the design of experimentation, data gathering, and observation.
- Develop an appreciation of the difference of results using analysis, logic and deduction from the scientific method versus other more subjective means.

Skills – quantitative literacy

- Use technology to solve mathematical problems as well as to prepare graphs and charts.
- Understand how to interpret graphs, tables and schematics and to draw inferences from them.
- Represent differences of annual data over time in a symbolic, visual, or verbal manner that has clarity of result.
- Understand natural science phenomena by data collection and analysis using prescribed formulae.
- Recognize, understand and present the limitations of mathematical modeling used in the natural sciences.

Skills – writing

- Develop an ability to find the “real issue” in development of an argument.
- Understand how to apply material learned in the course to the natural world that the student lives in.
- Understand the process of developing an appropriate thesis statement for a paper and being able to apply it.
- Understand how to paraphrase material and to apply it in the context of a paper.
- Develop the ability to appropriately use a citation format.

General Education Statement: This course is approved as a general education course meeting the requirements for the natural science breath of knowledge. Skill areas for this class include writing and quantitative literacy.

Course Method: Although lectures by the instructor are the primary course method, other methods will also be used including guest speakers, videos and class discussion.

Students are expected to come prepared to discuss the material that is assigned.

Application and quantitative assignments exercises will allow the student to apply what is learned in the class to the natural environment that they live in.

Course Requirements: Students are expected to attend all class periods, submit application and quantitative assignments when due, and complete the midterms and final as scheduled. Student success is enhanced by keeping up to date with *required* readings. Class attendance is also critical to the student being successful. Students are also strongly encouraged to print out copies of the instructor’s PowerPoint presentations. These are accessible in .pdf format (3 up with lines for taking notes). The student can access them from home or school via the internet on Blackboard.

<https://bblearn.csuohio.edu/MACAuth/login.jsp>

Copies of the syllabus and other assignments will also be accessible there. Some items will not display on Blackboard unless your pop-up blocker is set to allow pop-ups from the site. Please be sure to allow pop-ups from the Blackboard site. We will also use blackboard as a communication medium between class sessions.

Grading Policy: Grades are based on the results of written assignments, tests, and class participation. There will be three tests given (two midterms and the final). There are three written assignments due at various points throughout the class. Two quantitative literacy assignments are also a part of this class. The grade will consist of the following;

Midterm One	10%	10 points
Midterm Two	15%	15 points
Final	20%	20 points
Citation Assignment	5%	5 points
Application Exercise 1	10%	10 points
Application Exercise 2	15%	15 points
Quantitative Assignment 1	5%	5 points
Quantitative Assignment 2	10%	10 points
Class Attendance/Participation	10%	<u>10 points</u>
		100 points total

Exam attendance is required. Makeup exams will **only** be given with the **prior approval** of the instructor. Late assignments are subject to a 5% grade penalty per week they are late.

Grading scale: 94- 100 A 93-90 A- 89-87 B+ 86-83 B 82-80 B- 79-75 C+
74-70 C 60- 69 D

How is your final grade determined? Each assignment is graded on a scale from 0 to 100. Each assignment does NOT count equally toward your final grade. (The weight of each assignment is listed on page 2). This means that if you receive a 100 on your first midterm and a 100 on your second midterm, that they will count differently toward your final grade. Your first midterm would give you 10 points and your second is worth 15 points towards the final grade. When I grade your assignments and tests, I include a fraction which will tell you how many out of the possible points your grade is worth. **Your citation assignment, the two application assignments and the quantitative assignments are worth a total of 45 points towards your final grade. Without these points, you cannot pass this class!!! Please be sure to turn in these assignments as well as taking your tests.** If you have questions as the semester progresses, please ask.

Change in schedule/requirements: This syllabus is a *guide* to the semester schedule and its requirements. *The instructor reserves the right to change this syllabus and any of its contents at any time during the course by notifying students verbally, by written addendum or by announcements through Blackboard.*

Text: Foresman, Timothy, Strahler, Alan. 2012. Visualizing Physical Geography Second Edition. Hoboken, NJ, John Wiley and Sons.

Class Schedule and Readings

Week 1: August 28 to September 1: Course Introduction, Discovering the Earth's Dimensions

September 1: Last day to join the course waitlist

September 1: Last day to drop with full refund

September 3: Last day to add using CampusNet Registration

Read Prologue, Chapter 1

This week: Tropical Storm Katrina formed in the Bahamas. Katrina would become the costliest weather disaster in US History. Damages estimates were greater than \$146 billion in 2012. The flooding of New Orleans displaced more than 250,000 people.

Week 2: September 4 to September 8: The Earth's Global Energy Balance

Read Chapter 2

September 4: Labor Day NO class

September 8: Last day to drop

September 8: Citation Assignment is due

Week 3: September 11 to September 15: Air Temperature

September 15: Quantitative assignment 1 is due

Read Chapter 3

This week: On September 13, 2012, an international team of meteorologists determined that the previous recorded world's hottest temperature of 136° at El Azizia, Libya was in error. The World Meteorological Organization now recognizes 134° at Greenland Ranch in California's Death Valley (7/10/1913) to the highest recorded world temperature.

Week 4: September 18 to September 22: Finish Air Temperature, Atmospheric Moisture and Precipitation

Read Chapter 4

This week: 2012 Arctic sea ice hit its lowest level in 33 yrs of satellite tracking. The ice pack measured 18% lower than the previously recorded low amount and 49% below the 1979-2000 average. 2013 did show a slight increase but still well below average amounts. Arctic sea ice continues to decrease through 2016 and now in some sections is thinner, melting earlier.

Week 5: September 25 to September 29: Atmospheric Moisture and Precipitation

Read Chapter 5

September 25 Review for Midterm 1 (Covers chapter 1-3)

September 29 Midterm 1 – Covers Chapter 1-3

This week: In 1983, North of Arizona's Grand Canyon, 200 acres of timber in Kaibab National Forest was completely destroyed by a thunderstorm downburst; another 3,300 acres had scattered damage

Week 6: October 2 to October 6: Finish Atmospheric Moisture and Precipitation, , Global Atmospheric and Oceanic Circulation,

October 6: Application One is due

Read Chapter 6

This week: Far south for this time of year, in 2011 an upper level low over Baja California brought monsoon moisture to south Nevada which fueled thunderstorms. An 8 to 10 inch wall of mud and water roared down Callville Wash into Lake Mead destroying part of the Callville Bay Marina and doing \$1 million in damage.

Week 7: October 9 to October 13: Weather Systems

October 10: Columbus Day (Tuesday – no classes – does not affect this class)

This week: 1989: Research shows that as the US became more urban and people worked indoors, lightning deaths dropped. For those that work outside, the danger still exists. Lightning struck the nose of a US Air jetliner at Orlando's International Airport also killing a ground maintenance worker that was standing near the nose of the plane when it hit.

Week 8: October 16 to October 20: Weather Systems

October 20: Quantitative 2 is due

October 20: Review for Midterm 2 (covers Chapters 4,5,6, and 7)

This week: In 1999 a waterspout came onshore at Ft Lauderdale, Fl. It blew out the windows of a bar injuring 8 and did significant damage to buildings on Los Olas Blvd.

Week 9: October 23 to October 27 Weather Systems and Climates

October 23: Midterm 2 (covers Chapters 4,5,6, and 7)

Read Chapter 8

This week: In 1994 the rampaging San Jacinto River (20 feet higher than normal) caused 8 pipelines carrying various petroleum products to rupture near Houston TX. This caused a spill onto the river which erupted into flames and smoke which shot 100s of feet into the air. Over 500 burn and inhalation injuries were reported. Luckily most were minor.

Week 10: October 30 to November 3: The Earth From the Inside Out

Read Chapter 9

November 3: Last day to withdraw

This week: 1992: 2 men working at a rock quarry near Cookson OK, were attaching blasting caps to 24 sticks of dynamite when a bolt of lightning struck about a quarter of a mile away. The resultant ground current caused by the lightning traveled to where they were working and ignited the dynamite killing both men.

Week 11: November 6 to November 10: Plate Tectonics, Earthquakes and Volcanoes (and a Tsunami to boot)

November 8: Application 2 is due

November 10: Veteran's Day, No class

This week: In 2005 a trade wind swell caused surf of 5 to 10 feet along Hilo Bay on the big island of Hawaii. The surf poured water and rocks over the Bayfront Highway closing the northbound lane for several hours.

Week 12: November 13 to November 17: Plate Tectonics, Earthquakes and Volcanoes (and a Tsunami to boot) Finish

Read Chapter 16

This week: 1933 A huge dust storm hit the plains and moved eastward. Visibility went to zero for a day in parts of South Dakota, Minnesota and Iowa. The dust caused a reduction in visibility in Tennessee on the next day. It also resulted in "black rain" falling on parts of New York and brown snow in parts of New England.

Week 13: November 20 to November 24: Biogeographic Processes

November 23 to November 26: Thanksgiving Recess

This week: In 2011 winds gusting to 70 mph made firefighting difficult in the Sierra Nevada foothills and near Reno, Nevada. Almost 2,000 acres burned, 32 homes were destroyed and 10,000 people had to be evacuated.

Week 14: November 27 to December 1: Biogeographic Processes

Read: Chapter 17

This week: In 2007 85 mph winds caused a dead 50 foot Douglass pine in the Wild Basin Area of Colorado's Rocky Mountain National park to snap and bounce off of 3 other trees. Unfortunately, 2 hikers were in the trail the pine came to rest on, killing one of them.

Week 15: December 4 to December 8: Global Biogeography

Friday December 8: Final Review

This week: 2012: December was the 10th warmest on record for the lower 48 states and 2012 was the warmest year of record for the Lower 48. On December 3, 292 record high temperatures were set (184 new, 108 tied) in 38 of the lower 48 states. These occurred from Oregon to Maine, from California to Georgia and 40 of these resulted in monthly records for those areas.

Monday December 11th: 10:15 am to 12:15 pm Final Exam

Additional Course Information:

COURTESY COUNTS! The use of cell phones for texting or laptops for web surfing and game playing during class lectures is disturbing to those around you and is not conducive to learning the material. The following requirements will be in effect for this class to minimize those distractions to other students.

- 1. Cell phones and pagers are to be turned off or set to vibrate during the class session. Texting should be reserved for non-class times. If you have a need to speak with someone or to text them, please leave the classroom. Cell phones and pagers are not to be out on the desk (or in your lap).**

- 2. Laptops are acceptable for note taking ONLY! Anyone using a laptop must sit in the last row of the lecture hall. If you use a laptop, you must email me a copy of your notes at the end of class. Please send them to w.weizer@csuohio.edu**

If the above requirements are not followed, cell phones, pagers and laptops will not be allowed in the lecture hall.

Instructor Availability: Students are strongly encouraged to email the Instructor with questions or problems they may be having. I am on campus almost every day of the week and check my email on a daily basis. I am also willing to meet with students that may be having difficulty with the material. Please contact me to set up a specific time and place.

A special note on plagiarism: All submitted work is to be to academic standards with appropriate citations. Material that is copied word for word and submitted without appropriate citations will be graded as an F for any assignment (40). If you are unsure about how to paraphrase material or how to cite correctly, please contact the instructor before you submit your work. Copy and paste answers, while easy, are not a good way to learn to write. I would much rather have you restate the material than to copy and paste the answer. Your citation assignment will assist me in determining if you are having problems citing correctly.

A good resource for learning how to paraphrase can be found at <https://owl.english.purdue.edu/owl/resource/563/01/>

If you do use copy and paste, you must enclose the material in quotes and cite your source appropriately. Please consult the individual assignments as I have put a limit to the number of quotes that you may use. **Wikipedia is NOT to be used as a source for your papers. There will be a 8 point penalty assessed on any assignment where Wikipedia is used.**

The Writing Center at Cleveland State is available to assist the student with writing issues. Information on the writing center is found at <http://www.csuohio.edu/academic/writingcenter/>

Other writing resources are also available at: <https://owl.english.purdue.edu/owl/>

Citation guide information can be found at <http://library.csuohio.edu/research/vrd/citations.html>

Instructor PowerPoint: The instructor will make copies of PowerPoint slides available to students in memo form as .pdf files (Adobe Acrobat). These can be accessed by going to the course page at Blackboard. The Content page for the site will have this material.

Questions regarding the university calendar (holidays and finals week schedule) can be resolved by using the following link to the registrar's office.

<http://www.csuohio.edu/enrollmentservices/registrar/calendar/index.html>

University Policies

Students should refer to the Undergraduate Bulletin for procedures regarding add/drop and withdrawals and any other policies that may apply.

Physically challenged/Special Needs

Educational access is the provision of classroom accommodations, auxiliary aids and services to ensure equal educational opportunities for all students regardless of their disability. Any student who feels he or she may need an accommodation based on the impact of a disability should contact the Office of Disability Services at (216)687-2015. The Office is located in MC 147. Accommodations need to be requested in advance and will not be granted retroactively.

Test taking/academic challenges: The University counseling center provides Academic counseling for students. Workshops are run throughout the semester to assist you in maximizing your note taking skills, test taking skill, assisting with test anxiety reduction, and managing time. The links below will take you to the Fall schedule which is posted. Please take a minute, go to the site and review the workshops. I have had many students tell me that they are grateful they took the time to attend one of these sessions (especially the one on how to reduce test anxiety).

<http://www.csuohio.edu/counselingcenter/academic-skills-development-workshops-0>

other resources at

<http://www.csuohio.edu/cehs/casal/counseling-academic-success-clinic/>

Workshops on improving academic success are also offered through the Tutoring Center as well as tutoring for some specific course content. Information on the Tutoring Center can be found at

<http://www.csuohio.edu/academic/advising/tutoring/>