# GEOG 280: Environmental Science & Sustainability Online Web Class

"Everything has to do with geography." – Judy Martz

SUMMER 2022 INSTRUCTOR: JILL BROWN E-MAIL: <u>JILL.BROWN@WKU.EDU</u> OFFICE LOCATION: EST 428 OFFICE PHONE #: (270)745-2407

\*This is an online asynchronous course, which means you work on the materials and turn things in on or before the due date. We will not have a specific time each week that we meet over zoom. Course materials will be available through Blackboard and submitted through Blackboard. A google shared drive will be used if need arises.

Course Dates: Monday, 6/6/22, to Friday, 7/15/22

**OFFICE HOURS:** Please reach out through email any time a course task is unclear to you. We can meet by appointment over zoom. Plan for appointments, it is unlikely that I will be able to zoom with you on the same day you send the email.

**COURSE DESCRIPTION**: GEOG 280 provides a general understanding of how the environment functions, the complexity of human-environmental interactions, and the application of geoscience in solving environmental problems. The lab component provides practical experiences associated with the theories outlined in the course content. Course Fee.

**COLONNADE & GENERAL EDUCATION CREDIT**: GEOG 280 fulfills both the Colonnade and General Education programs.

- Enrollment prior to Fall 2014: This course satisfies the General Education Category D Science (non-lab).
- Enrollment Fall 2014 or after: This course satisfies the Colonnade Explorations, Natural and Physical Sciences with a lab.

**COURSE STRUCTURE**: The course is online and delivered through Blackboard. All work must be completed on your own. You will be expected to complete the work and submit assignments through Blackboard by the due dates. Exams will be administered on Blackboard on specific dates within a specified time. The class will be paperless. Assignments will be turned in electronically through Blackboard and occasionally shared through Google. The course materials are set up on Blackboard by unit, so everything you need for each unit will be together in one place. There are 9 units in the course:

| Unit 1: Intro to Environmental Science | Unit 4: Agriculture | Unit 7: Energy                     |
|--|---------------------|------------------------------------|
| Unit 2: Biodiversity                   | Unit 5: Water       | Unit 8: Atmosphere & Air Pollution |
| Unit 3: Human Population & Development | Unit 6: Waste       | Unit 9: Climate                    |

**REQUIRED MATERIALS / RESOURCES:** Students will have access to a variety of resources (course materials) through Blackboard, in addition to the PowerPoints and lectures. There will be lab readings, podcasts, videos, news articles, and journal articles, among other items. Some of the posted material (resources) have accompanying questions to consider, which will help you to understand the course material. Students will also take an active role in finding resources for the course, including searching for peer-reviewed journal articles. There is no textbook required for the course.

"The reading of all good books is like a conversation with the finest minds of past centuries." - Rene Descartes

**GRADING SCALE:** Grade is determined using a percentage system.

A = 90-100% B = 80-89 % C = 70-79% D = 60-69% F = 59% and lower

#### GRADE DETERMINATION:

| Exams          | 65%  |
|----------------|------|
| Labs           | 25%  |
| Unit Materials | 10%  |
| Total          | 100% |

**EXAMS – 65%** - There will be 3 exams; each exam will be made up of 3 units. The online, timed exams will contain a variety of question types, so be sure to read the instructions for each question. The exams will take place on specific dates and must be completed within the specified time frame. Be sure to have a place with reliable internet to take the exams. Any issues with exams must be reported to the instructor immediately. Exam windows will be wide; they will be open for the whole day.

LAB EXERCISES – 25% - Lab reports will be due throughout the semester. Lab due dates will not always match up with the unit assignment due dates. Labs will have varying point values of anywhere from 20 to 60 points. The 60-point labs include more research, analysis and writing; and therefore, are worth higher point values.

**UNIT MATERIALS – 10%** - There will be various opportunities for points throughout the semester in each unit. Activities may include, but are not limited to homework assessments, map activities, quizzes, essays and writing assignments, participation, and discussion boards.

\*Note – Grades are weighted, which means the 60-point, more difficult labs are weighted more heavily than the 20-point labs. The 30-point unit homework assessments are weighted more heavily than the 5-point activities that you can do over and over again.

## "When ideas are shared, they don't add up, they multiply." – John Lehrer

**COURSE OBJECTIVES**: At the successful completion of the course, students should be able to demonstrate a clear understanding of the following concepts:

- Describe the differences between sustainability and environmental science
- Explain the three "E's" of sustainability, with the goal of proposing applications that are relevant, both locally and globally, to the 21<sup>st</sup> century
- Describe the role of sustainability in balancing present and future needs
- Describe the contemporary environmental conditions and problems driving the environmental science discipline
- Show an understanding of the scientific method and knowledge of natural science and its relevance in our lives
- Discuss the categories of ecological systems and their interrelations
- Explain the differences and connections between ground and surface water systems
- Classify categories of pollution and describe the implications for the environment
- Explain the difference between climate change and weather
- Describe the three main categories of energy resources (renewable, non-renewable fossil fuel, unclear), including their differences, similarities, pros/cons
- Outline the contemporary trends in human population and development, and draw conclusions with respect to implications for future environmental change
- Explain the interrelationship between food production inputs (i.e. soils, fertilizers, climate, water) and outputs (i.e. crop yield, environmental degradation)
- Describe how natural and human-induced factors influence climate change, and discuss the key scientific issues associated with interpreting climate-related data

### "Education is the most powerful weapon which you can use to change the world." – Nelson Mandela

### POLICIES FOR MAKING UP MISSED WORK:

### Lab exercises will be accepted up to 3 days late for half credit.

Unit materials will be accepted up to 3 days late for half credit.

<u>Exams</u> will be handled on a case-by-case basis. Make-up exams must be completed as soon as possible, with a maximum of 3 days (including weekends). Students who do not make up the exam in 3 days will have to take a comprehensive final that counts as 2 grades (the missed exam and the last exam).

### "Action is the foundational key to all success." – Pablo Picasso

**PLACE LOCATIONS**: In this class, we learn about many places around the world. The place locations discussed in class lectures and the reading assignments will show up on the exams.

#### "The world is a book, and those who do not travel, read only a page." – Saint Augustine

OGDEN STUDENT COURSE ATTENDANCE STATEMENT: The faculty and staff of Ogden College of Science and Engineering are committed to providing you with learning experiences and opportunities. You must assume ownership of your education and be an active participant in the classroom and laboratory to take advantage of these opportunities. Active participation requires you to attend. Scientific studies have shown that attendance during scheduled classroom and laboratory meetings is directly correlated to your performance on assignments and exams and the potential to earn higher grades. Additionally, if you do not regularly attend class, you are missing important information about course topics, due dates, and assignment details that are crucial to your success in the course. Therefore, as a student enrolled in an Ogden course, you are expected to attend every class meeting and to inform your instructor regarding the reasons for any absences as soon as practical. Your instructor may incorporate class attendance/participation as part of the grading criteria.

### "An investment in knowledge pays the best interest." – Benjamin Franklin

**ATTENDANCE POLICY & CLASS PARTICIPATION**: Attendance is monitored through the students Blackboard activity. Falling behind and missing assignments will greatly jeopardize your grade.

#### "Eighty percent of success is showing up." – Woody Allen

**FIELD TRIP**: There will be opportunities to go outside for lab work. For example, you will have to go outdoors in your local community to identify an environmental problem for the last lab.

#### "Wherever you go, go with all your heart." – Confucius

**TECHNOLOGY:** Students should have basic computer skills, be able to navigate the Internet, and be able to send and receive e-mails.

- <u>Blackboard</u>: Blackboard will be used for announcements, access to course materials, and grades. You will also submit activities, lab reports, and assessments through Blackboard. You will be responsible for looking on Blackboard prior to each class meeting, printing the handouts and PowerPoints, and bringing them to class. You may use your phone to pull up documents in class. Grades on Blackboard are for your information and may not reflect the most up-to-date grades; the instructor keeps a copy of the official grades for each student. \*If you are not familiar with Blackboard, then it is important that you go through the student tutorial.
- <u>E-mail:</u> Be sure to have access to your WKU e-mail address. This form of communication will be used to contact individuals during the semester. All students should be familiar with proper e-mail etiquette, such as addressing the recipient (Ms. Brown), using correct grammar and spelling, and signing your name. E-mails are answered Monday through Friday during office hours.
- <u>General Question and Answer Discussion Board Forum</u>: Questions that apply to the whole class should be submitted through discussion board in the general Q & A (question and answer) forum in Blackboard. Students can answer each other's questions on discussion board. Examples of questions that apply to the whole class include: questions regarding assignments, the exams, and lecture material. Questions that apply only to you should be submitted via e-mail; for example: questions regarding grades or absences.

"Thanks to technology, we can instantly communicate across the world, but it still doesn't help us know what to say." - Jonathan Sacks

**DISRUPTIVE BEHAVIOR POLICY**: Be respectful in assignments and discussion boards. This is not the place to rant.

"Behavior is the mirror in which everyone shows their image." - Johann Wolfgang von Goeth

**CHEATING/ACADEMIC DISHONESTY**: There is ZERO tolerance for cheating. Students that are caught cheating will be dropped from the course with an F. This includes cheating on tests, copying another student's homework, forged excuses, and plagiarism in written papers, among other actions.

When writing, copying another person's work without giving credit is PLAGIARISM (this includes photographs, written words, and another student's paper). If you copy the exact words of another person and give credit, it is still plagiarism unless you indicate which words are yours and which are the other person's through the use of quotation marks. A good rule of thumb is not to use more than three consecutive words of another's work and rephrase the rest of the ideas into your own words. *All assignments in this class are to be written in your own words. The writing assignments in this class are short, so no quotes are allowed.* 

### *"Time will inevitably uncover dishonesty and lies, history has no place for them." – Norodom Sihanouk*

**NO EXTRA WORK AT THE END OF THE SEMESTER:** No extra work will be assigned at the end of the semester to increase an individual's grade. If you are on **academic probation** or need a specific grade in the course, then do your very best throughout the semester, do all the assignments on time, and utilize the instructor as a resource.

**SCHOOL CLOSURE ASSIGNMENTS:** In the case of missed class(es) due to school closure, we will follow the recommendations of the school regarding whether to have assignments due online that day.

### **UNIVERSITY POLICIES:**

#### COLONNADE EXPLORATIONS, NATURAL AND PHYSICAL SCIENCES OBJECTIVES:

- 1. Demonstrate an understanding of the methods of science inquiry
- 2. Explain basic concepts and principles in one or more of the sciences
- 3. Apply scientific principles to interpret and make predictions in one or more sciences
- 4. Explain how scientific principles relate to issue of personal and/or public importance

**SCHEDULE CHANGE POLICY**: The student is responsible for meeting all deadlines in regards to adding, dropping, or changing the status of a course. Deadlines will be waived only in exceptional cases. The student schedule exception appeal form shall be used to initiate all waivers. This form requires a written attachment of appropriate documentation. Poor academic performance, general malaise, or undocumented general stress factors are not considered as legitimate circumstances. The last day to drop a course with a W is listed on the academic calendar.

ADA ACCOMMODATION: In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing Student Union, Room 1074. The SARC can be reached by phone number at 270-745-5004 [270-745-3030 TTY] or via email at sarc.connect@wku.edu. Please do not request accommodations directly from the professor or instructor without a faculty notification letter (FNL) from The Student Accessibility Resource Center.

**CRITICAL THINKING INITIATIVE:** This course contains critical thinking tactics to build critical thinking skills. Critical thinking activities include lab work, short writing assignments, and exam questions among other activities.

### "We cannot solve our problems with the same thinking we used when we created them." – Albert Einstein

**INTERNATIONAL CONTENT:** This course provides students with many opportunities to explore world cultures.

#### "Diversification and globalization are the keys to the future." - Fujio Mitarai

**TITLE IX:** Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) at <a href="https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf">https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf</a> and

#### Discrimination and Harassment Policy (#0.2040)

at <u>https://wku.edu/policies/hr\_policies/2040\_discrimination\_harassment\_policy.pdf</u>.Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and MUST report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's <u>Counseling and Testing Center</u> at 270-745-3159.

**WKU Statement on COVID-19:** All students are strongly encouraged to <u>get the COVID-19 vaccine</u>. Out of respect for the health and safety of the WKU community and in adherence with CDC guidelines and practices of all public universities and colleges in <u>Kentucky</u>, the University requires that a cloth face covering (reusable or disposable) that covers both the nose and mouth must be worn at all times when in public areas within all buildings. Students must properly wear face coverings while in class regardless of the room size or the nature of the classroom activities. Students who fail to wear a face covering as required will be in violation of the WKU Student Code of Conduct and will be asked to comply or will face disciplinary action, including possible dismissal from the University. Accommodations can be requested in special cases through the Student Accessibility and Resource Center (<u>SARC</u>): <u>270-745-5004</u> (voice), <u>270-745-3030</u> (TTY), or <u>270-288-0597</u> (video).

All students must immediately report a positive Covid-19 test result or close contact with a person who has tested positive to the Covid-19 Assistance Line at 270-745-2019. The assistance line is available to answer questions regarding any Covid-19 related issue. This guidance is subject to change based on requirements set forth by public health agencies or the office of the governor. Please refer to the Healthy on the Hill website for the most current information. www.wku.edu/healthyonthehill

**COURSE SCHEDULE:** The schedule and procedures in this course are subject to change according to class progress. Assignments and due dates will be made available during the semester.

#### IMPORTANT CLASS & WKU DATES ARE POSTED IN BLACKBOARD WITH THE SYLLABUS AND UPDATED IN THE COURSE ANNOUNCEMENTS.

LAST UPDATED: Saturday, May 18, 2022