

# **Environment Around Us**

## **BIO 113**

### **Summer 2021**

**Lecture/Lab:** Online asynchronous

#### **Instructor Information:**

Instructor: Sabrina Brown, Ph.D.

Office: Rowe 111

Office Hours: Mondays & Thursdays 9:30-11:00 AM (virtual) or by appointment. You can access my virtual office hours on Google Meet: <https://meet.google.com/fsa-tcxk-bgk>

E-mail: [sabrown@defiance.edu](mailto:sabrown@defiance.edu)

Office Phone: 419-783-2598

Mailbox: Mailroom (Hubbard Hall)

#### **Required Materials**

- This course uses a free, open educational resource (OER) textbook, which can be found here: <http://opengeology.org/textbook/>.
- Required to purchase the relevant lab package.

#### **Course Description & Learning Outcomes**

This course examines the characteristics of communities, ecosystems, and landscapes, the ways in which they change with time, and the impact of human activities on those changes. Included will be the study of the science behind current issues such as resource management, pollution, and global climate change, etc. In this course students will be introduced to the basic principles of ecology and environmental science, investigate how these affect the Earth's capacity to sustain life, and be able to apply these principles to understanding the environmental consequences of human activities.

Upon successful completion of this course, you will be able to:

- Demonstrate understanding of the physical processes that shape the Earth
- Apply knowledge of Earth's processes to both personal and public choices
- Demonstrate the correct use of laboratory equipment
- Apply critical thinking and teamwork skills to address scientific questions
- Explain the impact of human influences on Earth's four spheres

#### **Course Delivery**

This course is online and asynchronous.

## Grading

**Grading Scale:** Grades will be calculated based on the following scheme.

Grade	Cutoff
A	93%
A-	90%
B+	87%
B	83%
B-	80%
C+	77%
C	73%
C-	70%
D+	67%
D	63%
D-	60%
F	<60%

**Grading Components:** Grades for the course will be determined by the following items:

• Lecture	
Exam (2 exams – 200 points each)	<b>400 pts</b>
Lecture Assignments (8 assignments – 25 points each)	<b>200 pts</b>
Discussion Board (8 assignments – 25 points each)	<b>200 pts</b>
Final Project (100 points)	<b>100 pts</b>
Lab Assignments (8 labs – 25 points each)	<b>200 pts</b>
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	<b>1,100 pts total</b>

## Exams

Lecture exams will be given virtually (see the tentative course schedule for dates).

- Lecture exams will be a mix of multiple choice, matching, fill-in-blanks, and short answer questions.
- Lecture exams (with the exception of the final) are not comprehensive and will only cover the material since the last exam. However, many concepts in environmental science build upon each other so material we cover early in the semester is relevant to things we'll learn later.
- Optional study guides will be available on Moodle before each exam.
- Lecture exams are open book/res

## Lecture & Lab Assignments

In addition to exams, a portion of your grade will be based upon lecture quizzes, laboratory assignments, and discussion board participation.

- Most weeks, excluding those with exams, you will have a lecture assignment due on **Thursday by 11:59 PM**. Virtual lectures and associated assignments will be posted to Moodle in sufficient time to complete before the deadline. Please note that late assignments will automatically be capped at 50% partial credit. Work more than three days late will not be graded. Class attendance and participation will be determined using a mix of formal and informal in-class activities.
- Additionally, most weeks you will have a lab assignment to complete during your scheduled lab meeting. Completed lab assignments will be due at the end of lab unless otherwise stated. If you are unable to attend a lab meeting, please contact me **before** your absence so that we can schedule a make-up session for you.
- Each week you will have a required discussion board posting.

## Final Project

You must submit **ONE** of the following by the end of the semester

- Select a popular (or independent) film with a plot that revolves around some geological, paleontological, oceanographic, or climatological concept (ex: Geostorm, Journey to the Center of the Earth, Jurassic Park, Finding Nemo). Write a review summarizing the plot, the scientific concepts depicted, and discuss whether the science is presented realistically. Minimum 5 pages double-spaced, size 12 Times New Roman or similar font. Sources must be cited properly with in-text citations and a references list. The film must be approved by the instructor before beginning this assignment. Points will be assigned via a grading rubric (available on Blackboard).
- Choose a topic covered during class and develop a creative project (ex: short story, scrapbook, children's craft or book, invention idea or prototype, song, movie trailer, interpretive dance...). Topic and project must be approved by the instructor before beginning this assignment. Points will be assigned via a grading rubric (available on Blackboard).

## Student Responsibilities

- Students are responsible for all material covered during lecture, quizzes, lab, and are expected to read and/or watch associated materials.
- Lectures, handouts, assignments, and grades will be posted to **Moodle**. It is the student's responsibility to check Moodle regularly for announcements and materials.

## Instructor Responsibilities

- I will have assignments available and provide feedback within a reasonable timeframe (generally one week).
- I will respond to emails in a timely manner.

## **Academic Integrity**

Students must complete their own work, and properly cite outside sources that they use for course work. Plagiarism and academic dishonesty will not be tolerated in this course and appropriate action (ex: a zero for the assignment, a zero for the course) will be taken at the instructor's discretion. The Defiance College Student Handbook states: "All members of the DC community are expected to engage in their academic tasks with integrity and respect for others. A major part of the learning accomplished in college is the development of critical thinking skills, and these skills are only developed when each person's work reflects his or her own original thought. Defiance College is committed to helping each student to understand and practice the highest degree of integrity in his or her academic work, and to take from that work the greatest intellectual and ethical benefit." Additional information about academic honesty and plagiarism is available in the Student Handbook:

<http://www.defiance.edu/registrar/documents/dc-undergrad-catalog-10-11.pdf>

## **Disability Support Services**

The Defiance College Student Handbook states "Defiance College is committed to providing educational opportunities for qualified students with documented disabilities through the provision of reasonable accommodations, in compliance with the provisions of the Americans with Disabilities Act (ADA) of 1990 and Section 504 of the Rehabilitation Act of 1973 (Section 504). The purpose of accommodations is to provide equal access to educational opportunities without altering essential elements of programs or courses. All requests for accommodations are evaluated on an individual basis after review and evaluation of documentation. It is the responsibility of students to request necessary accommodations and they should do so as early as possible, as some accommodations may require time to implement.

Students with a documented physical or psychological disability should consult first with the Vice President for Student Engagement, who will help the student to make contact with the appropriate office based on the nature of the accommodations requested. Students with a documented learning disability should consult with Lisa Marsalek, Assistant Dean of Students / Director of Career Development."

## **Student Academic Support Services**

Student Academic Support Services in the Pilgram Library provides free tutoring and writing assistance. SASS writing consultants can help with writing assignment at any stage of the writing process. SASS also offers supplemental instruction for some courses, administers the structured study program, as well as provides study skills workshops, handouts, and LibGuides to help students succeed in their classes. Further information is available at

<https://library.defiance.edu/SASS/> or by emailing [SASS@defiance.edu](mailto:SASS@defiance.edu).

## **Tentative Course Schedule**

Subject to change at instructor's discretion!

<b>Week</b>	<b>Topic</b>
<b>1</b>	Introduction & Earth's Spheres
<b>2</b>	Geology & Natural Resources
<b>3</b>	Geologic Hazards
<b>4</b>	Climate & Climate Change
<b>5</b>	Air & Water Pollution
<b>6</b>	Climate & Climate Change
<b>7</b>	Ecological Principles
<b>8</b>	Conservation & Sustainability