

Course Prefix/Number/Title: Environmental Science – BIOL 124 (online)

Number of Credits: 4

Course Description: Relation of humans to their environment. 1. Understanding basic principles of Natural Resource Management. 2. Understand the human cause of current environmental problems and possible solutions. 3. Population demography 4. Sustainable practices 5. Applying principles of ecology that are associated with the study of environmental science. 6. Learn to apply critical thinking in environmental science. 7. Using the scientific method of inquiry to inform environmental science perspectives.

Pre-/Co-requisites: None.

Course Objectives: Students successfully completing this course will:

- 1.) Know and understand the scientific principles of environmental issues.
- 2.) Explain major environmental issues of the day and their causes.
- 3.) Understand how environmental factors influence society and how society impacts the environment.
- 4.) Explain how and why society addresses environmental issues.

Instructor: Michelle Cauley

Office: Molberg 20

Office Hours: M/W/F 2:00 – 3:00 PM

*Available to meet online during this time as well or by appointment

Phone: 701-228-5498

Email: Michelle.cauley@dakotacollege.edu

Lecture/Lab Schedule: TBD

Textbook(s): McKinney, M., R.M. Schoch, and L. Yonavak. 2013 Environmental Science; Systems and Solutions. Jones and Bartlett Publishers 6th Edition. Other resources and readings will be provided as well.

Course Requirements: This is an introductory course that allows for building a foundation in many learning areas. Students are graded on a variety of learning tasks including weekly assignments, quizzes, exams, and labs.

Honors Option: This course DOES include an Honors Option for those interested. Students who are interested in taking the Honors Section of this course will be required to do an additional reading from a given selected books and complete a Citizen Science and Society Project in their locality to showcase their work in Environmental Science and Education. Please see the instructor for more information.

Assessment Tool:	Percentage of your Grade:		Grading Scale
Quizzes	10%		A = 90 – 100%
Labs	30%		B = 80 – 89.9%
Assignments / Homework	20%		C = 70 – 79.9%
Unit Tests	30%		D = 60 – 69.9%
Final Exam and Project	10%		F = 59.9% and below

Quizzes: There will be a series of about 16 quizzes throughout the semester from various chapters. The two lowest scores will be dropped from your grade. All quizzes must be attempted – no scores of 0 will be dropped. Quizzes are open-note and open-book. They are not timed.

Labs: Labs will give an opportunity to connect lectures and readings with interactive and hands-on opportunities.

Assignments / Homework: There will be a combination of assigned readings, worksheets, and traditional assignments. Homework must be submitted on time to receive full credit.

Unit Tests: There will be three unit-based tests throughout the semester. These will be available to be completed online through Blackboard. Unit Tests will be open for one week (approximately 7 – 10 days) and you will have unlimited time to take them within the testing window. These unit tests are not timed and are open -note and open -book tests.

Final Exam and Project: Your final exam will be a cumulative review of the main topics of the course. You will have approximately a week (7 – 10 days) to complete the exam. It is not timed. Your final project will be posted approximately three weeks before the end of the semester to allow appropriate time to finish.

Late Work Policy: All assignments must be turned in and completed on time to receive full credit. Any assignments, homework, or quizzes turned in late will receive a 10% total points deduction for every week they are late. Unit Tests, Final Exam and Project, and Labs will not be accepted after a week past the submission deadline.

Tentative Course Outline:

Week	Over Arching Topics / Chapters	Reading Assignments	Tests / Quiz Schedule
January 8 - 12	Introduction, Overview, Review Syllabus	Welcome Letter, Syllabus, Chapter 1	Syllabus Quiz
January 15 - 19	Human Population Growth	Chapter 2	Chapter Quiz
January 22 - 26	The Biosphere	Chapter 3	Chapter Quiz
January 29 – Feb 2	Distribution of Life, Earth Dynamics	Chapter 4, 5	Exam 1 (Ch. 1-5)
February 5 -9	People and Natural Resources	Chapter 6	Chapter Quiz
February 12 - 16	Fundamentals of Energy	Chapter 7 / 8	Chapter Quiz

	Renewable / Alternative Energy		
February 19 - 23	Water Resources	Chapter 9	Chapter Quiz
February 26 – Mar 1	Mineral Resources	Chapter 10	Exam 2 (Ch. 6 – 10)
March 4 – 8	Spring Break	No Reading	No Assignment
March 11 - 15	Conserving Biological Resources	Chapter 11	Chapter Quiz
March 18 - 22	Land Resources Management / Food and Soil Resources	Chapter 12 / 13	Chapter Quiz
March 25 - 29	Principles of Pollution	Chapter 14	Chapter Quiz
April 1 - 5	Water Pollution	Chapter 15	Exam 3 (Ch. 11 - 15)
April 8 - 12	Local Air Pollution	Chapter 16	Chapter Quiz
April 15 - 19	Global Air Pollution	Chapter 17	Chapter Quiz
April 22 - 26	Solid and Hazardous Waste	Chapter 18	Chapter Quiz
April 29 – May 3	Historical and Cultural Perspectives	Chapter 20	Chapter Quiz
May 6 - 10	Finish Activities / Review for Final	Finals Week!	Final Exam (Ch. 1 – 18, 20)

General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s):

1. Demonstrates an understanding of the natural environment.
 - a. Chooses best management practices for sustainability of the natural environment.
 - b. Explains the impact of human activity on the environment.
2. Applies the Scientific Methods of Inquiry
 - a. Utilizes the scientific process to solve problems.
3. Applies scientific information in everyday life.
 - a. Recognizes the role of science in nature and society.

Relationship to Campus Focus: A greater understanding of the Earth, its resources, and our connection to the planet's systems. Through this class we will explore how decisions in our lives impact the planet's resources and their viability for the future.

Classroom Policies:

- Students are expected to be polite and respectful of the instructor and other students through any communication and activities.
- If a student is to miss an exam or quiz, it must be taken ahead of time for full credit.
- When in doubt – communicate! Email and office hours are the easiest ways to let your instructor know of any issues or emergencies that arise.

Student Email Policy: Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by

the Campus for official mailings. The liability for missing or not acting upon vital information conveyed via campus email rests with the student.

Academic Integrity: According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

A note on the use of Artificial Intelligence (AI): Understanding how and when to use generative AI tools is going to be an important skill for your chosen career path. To preserve the integrity of the course, students are not permitted to submit text that is generated by artificial intelligence (AI) systems for any classwork or assessments. **It is a violation of the DCB student policy on plagiarism to misrepresent work that you submit from an AI generator as your own to your instructor.** This includes using AI to generate answers to assignments, exams, or projects, or using AI to complete any other course-related tasks. Using AI in this way undermines your ability to develop critical thinking, writing, or research skills that are essential for this course and your academic success. Students may use AI as part of their research and preparation for assignments, or as a text editor, but text that is submitted must be written by the student. For example, students may use AI to generate ideas, questions, or summaries that they then revise, expand, or cite properly. Students should also be aware of the potential benefits and limitations of using AI as a tool for learning and research. AI systems can provide helpful information or suggestions, but they are not always reliable or accurate. Please ask me if you have questions about the appropriate use of AI in this course.

Disabilities or Special Needs: Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

Title IX: Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy, and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.