

Course Prefix/Number/Title: BIOL 124 Environmental Science

Number of Credits: 4

Course Description: An introductory course for the non-life science major. A study of the effect of man and his technology on the environment.

Pre-/Co-requisites: none

Course Objectives: Students successfully completing the course will demonstrate

- 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 the environmental science.
- 6. Learn to apply critical thinking in environmental science.
- 7. Using the scientific method of inquiry to inform environmental science perspectives

Instructor: Janelle Green

Office: NSC 113

Office Hours: MWF: 10:00-11:50AM

Phone: 701-228-5472

Email: Janelle.a.green@dakotacollege.edu

Lecture/Lab Schedule: MWF 9:00-9:50AM TUES 10:00-11:50AM NSC 126

Textbook(s): McKinney, M., R.M. Schoch, and L. Yonavak. 2013 Environmental Science; Systems and Solutions. Jones and Bartlett Publishers 5th Edition

Course Requirements:

Materials: Colored Pencils, Pencils, Notebook, Access to Blackboard and E-mail

All notification will come to your e-mail or via Blackboard. Check often! There will be reminders and notifications of any cancellations.

Lecture - Lecture outlines are available from the course shell. The outlines can be used to guide you in the understanding of the material and assist in note taking. Be prepared and have

outlines ready for class. If you are printing them please have them printed prior to the start of class.

Assessment methods- measurement of the expected general education outcomes will be achieved through exams, quizzes, laboratory exercises, field trips, and other activities as assigned.

Exams- There will be 5 (including the final) exams during the course of the semester. All exams will be worth 100 points. If you are going to miss an exam, you are expected to make it up **ahead** of time. If you are going to be absent for an exam you must provide at least 36 hr notice in order to be eligible for a makeup exam. If a 36 hr notice is not given you must provide documentation as to why you were absent (physician's note, police report, obituary, repair bills, or any other instructor approved documentation. Tardiness on exam will not be tolerated and the door will be locked after the last on-time student receives their exam.

Quizzes- Each quiz consists of 10 questions to test your understanding of the material presented that week. You will be given unlimited time to complete each quiz, but only one attempt. Quizzes will be completed immediately following the end of the chapter. It may happen that you will be assigned two quizzes at the same time should two chapters be completed in the same lecture.

Laboratory- The laboratory portion of the course provides an opportunity to integrate lecture concepts with observable activities. As part of a lab science course the lab is a requirement. You will receive participation points within lab. These points are not simply given. You must be an active participant in your group and arrive to lab on time. Points will be deducted accordingly for lack of participation and tardiness. Your lab handouts must be turned in **prior** to the following week's lab. The start of the following lab means the previous is no longer accepted.

Field Trips- A field trip may/may not be required for this course. You may be required to schedule the trip by yourself or with the class as a whole. Knowledge gained from the trip may be assessed in one of the quizzes or exams following the trip or the student could be asked to present information about the trip. Tentative field scheduled for Apr. 28th to attend the Devils Lake Water Treatment Facility. Plan to attend all day. A notice will be sent out to your other instructors. Your behavior on this trip is representative to DCB and should be displayed in a positive manner.

*No late work is accepted in this course. If you are going to be absent you must complete and submit work prior to your absence.

Grading:	4- one hour exams	100 pts X 4	400 pts
	1- Final Exam	100 pts X 1	100 pts
	2- 12 labs	20 pts X 12	240 pts
	12 lab participation	5 pts X 12	60 pts
	16 lecture quizzes	10 pts X 16	160 pts
	Lecture Activity/Quizzes/Dis	c.10 pts X 4	40 pts
	Land Use Project	50 pts X 1	50 pts
	Total points possible		1050 pts

Grading Scale:	90%-100%	А
-	80%-89.5%	В
	70%-79.5%	С
	60%-69.5%	D
	Below 59.5%	F

Tentative Course Outline:

Topic

Reading Assignment
Introduction & Chapter #1

Topic	Reading Assignment
Week 1- Introduction and Overview	Introduction & Chapter #1
Week 2- Human Population Growth	Chapter #2
Week 3- The Biosphere	Chapter #3
Week 4- Distribution of Life, Earth Dynamics	Chapter #4,5
Exam Chapters 1-5	
Week 5- People and Natural Resources	Chapter #6,7
Week 6- Fundamentals of energy, Renewable/Alternative Energy	Chapter #8
Week 7- Renewable/ Alternate Energy	Chapter #9
Week 8- Water Resources, Mineral Resources	Chapter #9
Week 9: Mineral Resources	Chapter #10
Exam Chapters 6-10	
Week 10: Conserving Biological Resources	Chapter #11
Week 11: Land Resources and Management	Chapter #12
Week 12:Food and Soil Resources	Chapter #13
Exam Chapters #11-13	
Week 13: Principles of Pollution	Chapter #14
Week 14: Water Pollution	Chapter #15
Week 15: Global Air Pollution	Chapter #16-17
Week 16: Waste Management, Environmental Economy	Chapter #18-19
Exam Chapters #14-19	
Cumulative Final Exam (All Chapters Covered)	
Important dates to note:	
1. There is no lab the first week of classes.	
2 No class Ian 18 th	

- 2. No class Jan. 18th 3. No class Feb. 15th
- 4. Spring Break Mar. 15-19
- 5. No class Apr. 3/5

General Education Competency/Learning Outcome(s) <u>OR</u> CTE Competency/Department Learning Outcome(s): This course meets General Education Learning Outcomes:

- 1. Applies the Scientific method of Inquiry
- 2. Demonstrates an understanding of the natural environment
- 3. Apply scientific information and principles to everyday life.

Relationship to Campus Theme: A greater understanding of the Earth, Earth's resources and its companions in the solar system will lead to a greater respect for the environment. components of technology will lead to this understanding. Students will explore career options for their future.

Classroom Policies:

Absences:

Excused absences will be for only the following reasons and still need to be discussed with me via email, text, or phone call: sickness with a doctor's note must be emailed to me, passing of a close family member, if you're an athlete and need to miss class for a game. If you know you are going to be gone, notify me ASAP. Knowing of an absence requires you to make up work prior to being gone unless a special arrangement has been made with myself.

All requests for absences need to be reported to me immediately and directly from you, not a third party. If you do not let me know why you have missed a class or discuss with me in advanced your participation for that day will result in a ZERO. You need to make advanced arrangements with me—the SOONER THE BETTER. You need to speak with me if you know you will be gone so we can schedule make up assignments.

Being absent for any reason requires communication. If you are absent due to quarantining and/or being ill during quarantine you need to communicate as if, or better than, if you were not in quarantine. If you do not communicate I assume that you will be attending and you are capable of completing all work.

Missing an Exam:

If you know you will be gone during an exam day you need to let me know THREE days in advanced. If you miss an exam and I am not aware that you were going to miss it then your grade for that exam will result in a ZERO. There will be no make-up exams for those who do not inform me of their absences on exam days.

Lab Absence:

Labs are hard to organize and setup. If you are going to absent it is easier to makeup the lab up ahead of time instead of after. Simply not showing up for lab, or being greater than 5 min late, will result in forfeiting all participation points and points for the handout if you did not notify the instructor at least 12hrs in advance that you were going to be absent. If you are ill and it is last minute you will need to provide a doctor's note or an e-mail from the school nurse in order to make up the lab.

Lab Participation Points:

The points are awarded to students that participate equally within their group and arrive on time. Simply showing up to lab does not award you these points. They are awarded at the discretion of the instructor.

Late Policy:

If you are planning on being late to class please be respectful of other students in the class and sit towards the back of the room (lecture). Be discrete when opening your belongings and getting prepared. During an exam date the door will be locked after the last student receives their test that was in class on time. If tardiness becomes an issue the door will be locked on all class dates 5 minutes after the start. This will be a regular occurrence for lab. If you are locked out, you will miss/lose that days materials and all points associated with it.

Electronic Device Policy:

Electronic devices will only be used in class for answering in-class questions and review participation. You will be instructed to use them at those times. If you are on your phone/unauthorized computer/smart watch/headphones or any other unauthorized device while not instructed by myself then, I will ask you to leave my class for that day. You should not be texting or on social media while in lecture/lab. You cannot be wearing any smart technology during ANY exam. You will be asked to remove it. If you choose to not remove it then you will be asked to leave and you will not be able to complete the exam which will result in a ZERO. All devices should be powered down during an exam. If your device is vibrating or causing a disturbance you may be asked to leave the classroom.

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 important 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.

Disabilities or Special Needs:

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services within the first two weeks of the semester to line up accommodations. Please reach out to Jacalyn Migler at 701-228-5672 jacalyn.migler@dakotacollege.edu

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.