

## Dakota College at Bottineau Course Syllabus

Course Prefix/Number/Title: BIOL 124 Environmental Science (4CR)

Prerequisites: none

Course Description: An introductory course for the non-science major. A study of the effects of humans and their technology on the environment.

Human population growth, fundamentals of ecology, principles of resource management, water resources, mineral resources, biological resources, land management, feeding the world, water pollution, air pollution, municipal waste, local, regional, and global issues.

Course Objectives: Demonstrate an understanding and proficiency with:

1. Knowledge and understanding of scientific principles of environmental issues
2. Identifying and explaining the major environmental issues of today
3. How environmental factors influence societies and vica versa
4. How/why society addresses environmental issues

Instructor: Lura

Office: NSC 114

Office Hours: MWF 9:00-10:00 & 2:00-3:00

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Lecture/Lab Schedule: Spring semester

Textbook(s): McKinney, M.L., and R.M. Schoch.2007. Environmental Science: systems and solutions. Jones and Bartlett Publ. Co., 4<sup>th</sup> ed.

Course Requirements:	4 Hour Exams @ 100 pts. ea.	400 pts.	A = 100-90%
	Lab evaluations	130 pts.	B = 89-80%
	Lecture quizzes, assignments, etc.	170 pts.	C = 79-70%
	Projects/Reports	<u>100 pts.</u>	D = 69-60%
	<b>TOTAL POINTS</b>	<b>800</b>	F = below 60%

**Tentative Course Outline:**

**Tentative Syllabus Spring 2015**

<b>Date</b>	<b>Topic</b>	<b>Chapter</b>
Jan 14-16	Introduction and Overview	“Intro” & Ch 1
Jan 19-23	Human population Growth <b>Lab:</b> County Soil Survey <b>Quiz:</b> History and Regions of North America	2
Jan 26-30	Biosphere, Distribution of Life on Earth <b>Lab:</b> Physical Geography of Planet Earth <b>Quiz:</b> Chapters 2 & 3	3
Feb 2-6	Distribution of Life, Dynamic Earth <b>1st HOUR EXAM, FRI-SUN FEBRUARY 6-8 (Intro and Ch 1-5)</b> <b>Lab:</b> Community/Ecosystem video <b>Quiz:</b> Chapters 4 & 5	4,5
Feb 9-13	Principles of Resource Management Energy Fundamentals <b>Lab:</b> Alaska National Wildlife Refuge <b>Quiz:</b> Chapters 6 & 7	6,7
Feb 16-20	Energy Fundamentals, Renewable/Alt. Energy <b>Lab:</b> My electricity <b>Quiz:</b> Chapter 8	7,8
Feb 23-27	Water Resources, Mineral Resources <b>Lab:</b> Water Issues <b>Quiz:</b> Chapter 9	9,10
Mar 2-6	Mineral Resources <b>2nd HOUR EXAM, FRI-SUN MARCH 6-8 (Ch 6-10)</b> <b>Lab:</b> Life of a Natural Resource Manager <b>Quiz:</b> Chapter 10	10
Mar 9-13	Conserving Biological Resources <b>Lab:</b> Who are the Environmentalists? <b>Quiz:</b> Chapter 11	11
Mar 16-20	“SPRING BREAK”	

Mar 23-27	Land Resources and Management <b>Lab:</b> Snowmobiles in Yellowstone Nat. Prk. <b>Quiz:</b> Chapter 12	12
Mar 30-Apr 3	Land Resources and Management <b>Lab: No Lab This Week</b> <b>Quiz:</b> Case Study 12-2 & 12-3	12
Apr 6-10	Feeding the World <b>Lab:</b> The World Outside the U.S. <b>Quiz:</b> Case Study 13-2	13
Apr 13-17	Feeding the World <b>3rd HOUR EXAM, FRI-SUN APRIL 17-19 (Ch 11-13)</b> <b>Lab:</b> Seafood: To Eat or Not To Eat? <b>Quiz:</b> Chapter 13	13
Apr 20-24	Principles of Pollution, Control, Water Pollution <b>Lab:</b> An Environmental Issue – “Student’s Choice” <b>Quiz:</b> Chapter 14	14,15
Apr 27-May 1	Water pollution, local/regional /global air pollution <b>Lab:</b> Global Warming <b>Quiz:</b> Chapters 15 & 16	15-17
May 4-8	Global air pollution, municipal waste, env. econ. <b>Lab:</b> My Water, Wastewater, and Garbage <b>Quiz:</b> Chapters 17 & 18	17-19
<b>FINAL EXAM (Ch 14-18) FRI-SUN MAY 8-10</b>		

General Education Goals/Objectives:

Goal 1: Explains the interrelationships between humans and their environment and the role of science in their lives

Goal 2: Demonstrates knowledge and application of technology

Relationship to Campus Theme:

Technological/science developments are discussed in relationship to Global Warming, and air and water pollution and other environmental issues.

Green Revolution and humanity discussed with future considerations

Genetic engineering, technological developments in environmental monitoring

**Classroom Policies:** Regular attendance and participation in lab and lecture is expected.  
All make-up exams will include a significant essay/short answer component and must be made up within one week of the students return to class unless prior arrangements have been made.

**Academic Integrity:** Cheating on a test, quiz, or other assessment results in zero points for the assessment.

**Disabilities and Special Needs:** Any accommodations due to a learning disability must come through the Dakota College Learning Center. If you have a diagnosed learning disability, you need to contact the Learning Center in Thatcher 1104 or phone (701) 228-5477.