

## 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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Email: chuck.lura@dakotacollege.edu

Lecture/Lab Schedule: Fall 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  
Fall 2012**

<b>Date</b>	<b>Topic</b>	<b>Chapter</b>
Aug. 22-24	Introduction and Overview	“Intro” & Ch 1
Aug 27- 31	Human population <b>Lab:</b> County Soil Survey <b>Quiz:</b> History and Regions of North America	2
Sep 3-7	Biosphere, Distribution of Life <b>Lab:</b> Physical Geography of Planet Earth <b>Quiz:</b> Chapters 2 & 3	3
Sep 10-14	Distribution of Life, Earth Dynamics <b>1st HOUR EXAM, SAT-SUN SEPTEMBER 15-16 (Intro and Ch 1-5)</b> <b>Lab:</b> Community/Ecosystem video <b>Quiz:</b> Chapters 4 & 5	4,5
Sep 17-21	Principles of Resource Management Energy Fundamentals <b>Lab:</b> Alaska National Wildlife Refuge <b>Quiz:</b> Chapters 6 & 7	6,7
Sep 24-28	Energy Fundamentals, Renewable/Alt. Energy <b>Lab:</b> My electricity <b>Quiz:</b> Chapter 8	7,8
Oct 1-5	Water Resources, Mineral Resources <b>Lab:</b> Water Issues <b>Quiz:</b> Chapter 9	9,10
Oct 8-12	Mineral Resources <b>2nd HOUR EXAM, SAT-SUN OCTOBER 13-14 (Ch 6-10)</b> <b>Lab:</b> Life of a Natural Resource Manager <b>Quiz:</b> Chapter 10	10
Oct 15-19	Conserving Biological Resources <b>Lab:</b> Who are the Environmentalists? <b>Quiz:</b> Chapter 11	11
Oct 22-26	Land Resources and Management <b>Lab:</b> Snowmobiles in Yellowstone Nat. Prk. <b>Quiz:</b> Chapter 12	12

Oct 29-Nov 2	Land Resources and Management <b>Lab:</b> The World Outside the U.S. <b>Quiz:</b> Case Study 12-2 & 12-3	12
Nov 5-9	Feeding the World <b>Lab:</b> Seafood: To Eat or Not To Eat? <b>Quiz:</b> Case Study 13-2	13
Nov 12-16	Feeding the World <b>3rd HOUR EXAM, SAT-SUN NOVEMBER 17-18 (Ch 11-13)</b> <b>Lab:</b> An Environmental Issue – “Student’s Choice” <b>Quiz:</b> Chapter 13	13
Nov 19-23	Principles of Pollution, Control, Water Pollution <b>Lab: No Lab This Week</b> <b>Quiz:</b> Chapter 14	14,15
Nov 26-30	Water pollution, local/regional /global air pollution <b>Lab:</b> Global Warming <b>Quiz:</b> Chapters 15 & 16	15-17
Dec 3-7	Global air pollution, municipal waste, env. econ. <b>Lab:</b> My Water, Wastewater, and Garbage <b>Quiz:</b> Chapters 17 & 18	17-19

### **FINAL EXAM (Ch 14-18) SAT-SUN DECEMBER 8-9**

#### 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.