Independent Study in Idaho

EnvS 101
Introduction to Environmental Science

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The University of Idaho in statewide cooperation with Boise State University — Idaho State University — Lewis-Clark State College
Course Guide

Environmental Science 101
Introduction to Environmental Science

University of Idaho
3 Semester-Hour Credits

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Welcome!
Whether you are a new or returning student, welcome to the Independent Study in Idaho (ISI) program. Below, you will find information pertinent to your course including the course description, course materials, course objectives, as well as information about lessons, exams, and grading.

Policies and Procedures
Refer to the ISI website at www.uidaho.edu/isi and select Students for the most current policies and procedures, including information on setting up accounts, student confidentiality, exams, proctors, transcripts, course exchanges, refunds, academic integrity, library resources, and disability support and other services.

Course Description
Introduction to basic principles in the biological, physical, and social science areas of environmental science. UI students: may be used with EnvS 102 [Field Activities in Environmental Sciences] as general education credit in J-3-b. Required: Microsoft Word and PowerPoint, computer with audio capabilities
18 graded assignments, no exams

Students may submit up to 3 assignments per week. Students MUST wait for grades and feedback on assignments, which may take up to three weeks after date of receipt by the instructor.

ALL assignments must be submitted to receive a final grade for the course.

Course Materials

Required Course Materials

Independent Study in Idaho course materials are available for purchase at the VandalStore (University of Idaho bookstore). Your Registration Confirmation Letter contains the VandalStore’s contact information.

Independent Study in Idaho courses are updated and revised periodically. Ordering course materials from the VandalStore at the time of registration allows you to purchase the correct edition of the textbook and supplemental materials. Contact the VandalStore directly for questions regarding course materials that you have ordered.

If purchasing the textbook from another source, refer to the ISBN for the textbook listed for this course to ensure that you obtain the correct edition.

Course Delivery
The course is delivered through BbLearn, which is an online course management system that hosts readings, hyperlinks to web materials, lessons, assignments and quizzes. Refer to your Registration Confirmation Letter for instructions on how to access BbLearn.
Course Introduction
This is a web-based course that is arranged into 18 topics. Each of the 18 topics covers an important aspect about environmental science. Each of the topics has at least one (sometimes two or three) slide set that is narrated. Each topic also includes a reading assignment from your text and an assignment.

Course Objectives
This course gives students a basic understanding of environmental science.

- To gain an understanding of the concepts fundamental to environmental science; to understand the complexity of ecosystems and possibly how to sustain them
- To be exposed to current and controversial environmental issues
- To understand how social issues and politics impact the environment

Lessons
Each lesson may include the following components:

- lesson objectives
- reading assignments
- important terms
- lecture
- written assignment, project, or activity

Study Hints:

- Keep a copy of every lesson submitted.
- Complete all reading assignments.
- Set a schedule allowing for course completion one month prior to your personal deadline. An Assignment Submission Log is provided for this purpose.
- Web pages and URL links in the World Wide Web are continuously changing. Contact your instructor if you find a broken Web page or URL.
- Add your own recommendations here.
- Introduce and explain any terms that are essential to understanding the course.

Refer to your Registration Confirmation Letter for further details on your instructor’s lesson guidelines and requirements. Also refer to the ISI Policies and Procedures for essential ISI policies on submitting lessons to your instructor.

Grading
The course grade will be based upon the following considerations:

This is a web-based course that is arranged into 18 topics (units). Each of the 18 topics covers an important aspect about environmental science. Each of the topics has at least one (sometimes two or three) slide set that is narrated. Each topic also includes a reading assignment from your text and an assignment.

The total number of points possible for each assignment is 25. The total number of points possible for the course is 450. Your final grade for the course will be calculated from the course requirements. It will be determined by the total number of points you earn. The basis for letter grades is shown below:
### A = at least 90% of 450 = 405 total pts
### B = at least 80% of 450 = 360 total pts
### C = at least 70% of 450 = 350 total pts
### D = at least 60% of 450 = 315 total pts
### F = less than 60% of 450 = 270 total pts or less

The final course grade is issued after all lessons have been graded.

Acts of academic dishonesty, including cheating or plagiarism are considered a very serious transgression and may result in a grade of F for the course.

Refer to the *ISI Policies and Procedures* for information about confidentiality of student grades, course completion, time considerations, and requesting a transcript.

### About the Course Developer

The course developer is Professor Mahler, a professor at the University of Idaho.

**Education**
- Ph.D., North Carolina State University
- M.S., Washington State University
- B.S., Washington State University

**Research**
Conducts research on soil plant relationships, crop response to fertilizer placement, nutrient use efficiency, environmental losses of nutrients, fertilizer biotechnology, cereal crops—legumes, grass seed, and rapeseed.

**Teaching**

**Advising**
Graduate major professor and graduate committee member.

### Contacting Your Instructor

Instructor contact information is posted in the *Course Rules* document on your BbLearn site.

### Disability Support Services

Refer to the *ISI Policies and Procedures* for information on *Disability Support Services (DSS)*.
### Assignment Submission Log

Send the completed *Proctor Information Form* to the ISI office at least two weeks prior to taking your first exam.

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<th>Projected Date for Completion</th>
<th>Date Submitted</th>
<th>Grade Received</th>
<th>Cumulative Point Totals</th>
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Lesson 1
Introduction to Environmental Science

Lesson Objectives
When you are finished with this unit you should be able to:

1. Describe the world views of cornucopianism and environmentalism.
2. Define environmental science and the concept of sustainability.
3. Name and describe the steps of the scientific method.
4. Describe the science literacy level of the typical American.
5. Describe the importance of science in society’s environmental decisions.
6. Define environmental wisdom and distinguish between public and scientist priorities in environmental issues.
7. Know the impact of major bills passed by Congress in the 1970s.
8. Know and define the four principles of ecosystem sustainability.
9. Describe how people in the Pacific Northwest view the environment.

Reading Assignment
Brennan and Withgott: chapter 1, pages 2 to 24
Brennan and Withgott: chapter 2, pages 26 to 53

- View the Lecture Outline
- View the online PowerPoint with Audio presentation

Important Terms

cornucopian world view hypothesis environmental wisdom
environmentalism controlled experiments ecology
frontier ethic Clean Water Act (CWA) ecologists
natural resources Endangered Species Act (ESA) information overload
sustainability Safe Drinking Water Act (SDWA) theory
scientific method Clean Air Act (CAA) four principles of ecosystem satiability

Introductory Lecture
UNIT 1. INTRODUCTION TO ENVIRONMENTAL SCIENCE

This is a web-based course. The following is an outline that accompanies the online material.

UNIT 1: INTRODUCTION TO ENVIRONMENTAL SCIENCE

MODULE 1.1: Introduction and Public Views
1. Environmental Science – Aims and Challenges
   A. World Views
      i. DEP
      ii. Cornucopianism
iii. Environmentalism

B. Public Views of the Environment in the Pacific Northwest

MODULE 1.2: Sustainability and the Scientific Method

C. Concept of Sustainability
   i. Sustainability
   ii. Sustainable Society

D. The Scientific Method

MODULE 1.3: Wisdom, Science and Laws

E. Environmental Wisdom

F. Science and Society

G. Major U.S. Laws
   i. Clean Air Act (CAA)
   ii. Clean Water Act (CWA)
   iii. Safe Drinking Water Act (SDWA)
   iv. Endangered Species Act (ESA)

Written Assignment

Before beginning the first written assignment, refer to your Registration Confirmation Letter for your instructor's lesson requirements. If emailing lessons to your instructor, please copy the ISI office at indepst@uidaho.edu.

Assignment 1, 25 points possible

Your answers for this assignment must be typed and submitted through the BbLearn system at https://bblearn.uidaho.edu/. I prefer that you paste your assignment into the box provided by BbLearn. However you also may submit your assignment as an .rtf or a Microsoft Word file. NO WORDPERFECT FILES. The answers to the questions below can be found in your class lecture notes or in your textbook.

1. Please provide me with the following information (8 points):
   a. Your hometown
   b. Your home COUNTY (if you live in Alaska, your home borough; if you live outside the USA, your home country)
   c. The following information about your home county – population, major industries and why your county is a good place to live.
   d. What are the THREE major environmental issues in your home county?
   e. Tell me why the issues cited in part d are difficult to solve.

2. We all have a blend of cornucopian and environmental beliefs. Where do you fit on the Cornucopian-environmentalism continuum discussed in the lecture? Defend your answer. List three of your views on the environment that can be considered Cornucopian ideas. List three of your views on the environment that can be considered environmental ideas. (7 points)

3. Describe the philosophical perspectives of anthropocentrism, biocentrism, and ecocentrism. How would you characterize the perspective of the Mirrar clan? (5 points)
4. What is contingent valuation, and what is one of its weaknesses? Describe an alternative method that addresses this weakness. (5 points)