

University of Montana

ScholarWorks at University of Montana

University of Montana Course Syllabi

Open Educational Resources (OER)

9-2002

SCI 350.01: Environmental Perspectives

Fletcher Brown

University of Montana - Missoula

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

Let us know how access to this document benefits you.

Recommended Citation

Brown, Fletcher, "SCI 350.01: Environmental Perspectives" (2002). *University of Montana Course Syllabi*. 1737.

<https://scholarworks.umt.edu/syllabi/1737>

This Syllabus is brought to you for free and open access by the Open Educational Resources (OER) at ScholarWorks at University of Montana. It has been accepted for inclusion in University of Montana Course Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

Science 350
Environmental Perspectives

Fall 2002
The University of Montana

<u>Instructors</u>	<u>Office</u>	<u>Phone</u>	<u>Office Hours</u>
Fletcher Brown, Ph.D.	106 School of Ed	243-5287	TBA

Textbook: Sustaining the Earth: by G. Tyler Miller

Course Description: The goal of Science 350, Environmental Perspectives is to give students a conceptual understanding of the complexity of environmental science and gain experience in solving environmental issues. The course meets for two hours a week and includes discussions, lectures and activities involving the central themes in environmental science. One of the primary aims of the discussions and lectures is to provide students with an understanding of major ecological concepts and environmental issues necessary for responsible citizenship regarding the environment. In addition to discussions and lectures students will be involved in educational activities that model the content being discussed. Following these exploration activities groups become active participants in solving a local environmental issue. These action group projects give students hands-on experiences in the complexities of solving environmental problems involving the social/political components of environmental issues.

Objectives: Lecture/Discussion Meetings

1. To give the students experience with the basic concepts underlying introductory environmental science in an accurate, balanced, and interesting way.
2. To show how environmental and resource issues are fun, interesting, and important in our lives.
3. To show how population, pollution, and resource problems are interrelated and must be understood in an integrated manner on local, national, and global scales.
4. To give a realistic but hopeful view of how much has been done and what remains to be done in sustaining the Earth for humans and other species.
5. To develop skills in environmental problem solving; gathering, analyzing, synthesizing and interpreting information, and joint critical decision-making.

Objectives: Field Experiences

1. To place education content in a meaningful context.
2. To provide opportunities to apply acquired knowledge regarding environmental problems in an educational setting.
3. To substitute feelings of apathy and powerlessness with the feeling that one individual or group can make a difference.

Lecture Syllabus

WEEK TOPIC

READING

How the Biosphere Works: Ecological Principles and Applications

- 9/3 Introduction to Envir. Sci & Course Overview
- 9/10 Ecological Principals and Application

Understanding Human Populations Impact on the Environment

- 9/17 Human Population
- 9/24 Human Population
- 10/1 Energy Resources
- Quiz #1

Environmental Resources: Protecting Biospheric Components

- 10/8 Biological Resources
- 10/15 Water Resources
- 10/22 Air Resources
- 10/29 Mineral/Soil Resources
- Quiz #2/Portfolio Lesson Check

Managing & Preserving The Materials and Products of Human Society

- 11/12 Human Health
- 11/19 Waste: Toxic/Hazardous/Nuclear Resources

Shaping Human Impacts on the Biosphere

- 11/26 Public Lands
- 12/3 Politics & Law
- 12/10 Environmental Education
- Quiz #3
- 5/19 Final Presentations

Student Evaluation

Quizzes: You will be given three quizzes involving the discussion/lecture and text material. The quizzes will be short answer in nature. All quizzes are worth 50 points each totaling 150 pts. Quizzes will be given following each major unit studied in class and are commonly take-home tests.

Portfolio: You will be asked to develop a portfolio for class that involves the creation of lessons plans that you could use as an elementary teacher involving the content in the course. Each entry in the portfolio will include a description of the lesson plan and a reflection on why you chose the lesson plan and how it fits into a theme you have chosen for all entries. The portfolio will be worth 100 pts. Further details on the requirements for the portfolio will be given in class.

Community Service Project: During the last third of class you will be involved in a environmentally focused community service project. This is a group project and you will be responsible to share our work with the rest of the class during the class final time in December. This project is worth 50 pts.

Your final grade is based on 300 points and graded using the following scale.

300-270 = A

269-240 = B

239-210 = C

209-180 = D

****** You are responsible to turn in assignments on the assigned dates. Late work will be reduced by 50% and no work will be given credit beyond one week after the due date.