BIOLOGY 4100 SEMINAR

"CARING FOR THE EARTH"

CLASS READING ASSIGNMENTS

JANUARY, 1997

ROY DARVILLE, PH. D.

BIOLOGY 4 100 SEMINAR: "CARING FOR THE EARTH"
COURSE SYLLABUS
JANUARY TERM, 1997

Instructor

Roy Darville, Ph.D.
Professor & Chair of Biology
East Texas Baptist University

Office: 105 Murphy Science
Phone: 903.935.7963, X318
FAX: 903.9380611

Textbooks and Materials

IUCN/UNEP/WWF, 199 1. Caring ***for*** *the Earth. A* ***Strategy for*** *Sustainable Living. Gland,* Switzerland.
Darville, Roy. 1997. Bio 4100 Class Handouts. East Texas Baptist University: Marshall, Texas.

The Course

Bio 4100 Seminar: Caring for the Earth is a one-hour senior-level course designed for students with either a major or minor in biology or a related field The course is being sponsored in part by the Caddo Lake Institute of Aspen, Colorado and Marshall, Texas. University credit can be earned by proper enrollment through either ETBU or Wiley College. CL1 participants who have signed agreements are required to successfully complete all course requirements. The class meets on six Tuesday and Thursday evenings from 6:00 until 8:30 during January (Jan 7,9,14,16,21,23). Prerequisites for the course include eight hours of biology or consent of the instructor.

The course objectives **are** to:

1) explore local, national and international perspectives on environmental issues, policy, and law;
2) develop an appreciation for what it means to live sustainably by learning key principles which can guide the individual and society to achieve this goal;
3) guide the student in developing a personal environmental ethic;
4) and develop curriculum for teaching environmental topics to students of specific age groups.

Course Requirements

1. The ETBU attendance policy states that in order to receive academic credit in a course, the student must attend at least 75% of the class meetings. This class meets six times, thus the student is allowed to miss only one class meeting. After the second absence, the student will be given a grade of "F" for the course.

2. The student is required to complete all assignments and turn them in on time.

Activities & Grading

1. Each student will complete a series of writing assignments based on readings from the text, handouts, and lectures. Each assignment will be graded on the basis of 100 points and will compose 40% of the course grade.

2. Each student will be graded on class participation based on both the quantity and the quality of the participation. Class discussion will revolve around reading questions; thus, be prepared to discuss your answers. Participation will be based on 100 points and will compose 20% of the course grade.

3. A course project called a Campus Action Plan will be developed during the course and is due the last class meeting. At that time an oral presentation will be given to the class and a typewritten document will be presented to the instructor. The oral presentation and written curriculum will be graded on the basis of 100 points and will compose 40% of the course grade. The Campus Action Plan is designed to deliver the themes of the J-Term curriculum at the participant's campus. The teams will present outlines of teaching plans, specific lesson plans with learning objectives, and sample questions that could be used in a pre- and post-testing program. In addition to the curriculum outline, the group presentation to the class may include brief class activities, computer presentations, or other types of media presentations.

COURSE SCHEDULE

JANUARY 7

Overview of the Course -- Dr. Roy Darville
Introduction to Environmental Science and Sustainable Development —Dr. Roy Darville
Lecture: Building a Sustainable Society and Respecting and Caring for the Community of Life (Caring for the *Earth: Chapters* 1, 2)-- Dr. Roy Darville
Lecture: Ecosystems and Biodiversity (Convention on Biological Diversity; Caring *for the Earth:* Chapter 4) - Dr. Roy Darville
Case Study: Biodiversity at Caddo Lake
Class Discussion
Lecture: Personal, National, and International Approaches to Environmental Conservation Efforts (Caring *for the Earth:* Chapters 2,7,8,9)
Formation of Working Groups
Homework: reading and writing assignments

JANUARY 9

Lecture: Population Statistics —Dr. Ray Darville, SFASU
Lecture: Population Theory and Relevance to Environmental Sustainability and Sustainable Development - Dr. Ray Darville *(Caring for the* Earth: Chapters 3,5,6)
Class Discussion
Lecture: CLI's Testing Strategy and Public Opinion Polling -- Dr. Ray Darville
Case Study: Public Perception Swey for Caddo Lake and Longhorn Army Ammunition Plant
Class Discussion and Working Group Time
Homework: reading and writing assignments

JANUARY 14

Lecture: U.S. Domestic Environmental Law and Regulation -- Mr. Dwight K. Shellman, Jr., CLI *(Caring for the Earth: Chapters* 7, 8, and 9)
Lecture: Principles of Ecological and Human Risk Assessment at Superfund Sites -- Steve Nolen, USACOE
Case Study: Longhorn Army Ammunition Plant
Discussion: Current and Planned Remediation Activities at LHAAP —Steve Nolen, Dwight Shellman, et al.
Lecture: Case Study of Wetland Monitoring: CLI Intensive Random Monitoring of Caddo Lake - Dr. Roy Darville
Class Discussion and Working Group Time
Homework: reading and writing assignments

JANUARY 16

Lecture: Overview of International Environmental Law – Mr. Dwight K. Shellman, Jr.
Class Discussion
Lecture: Ramsar Wetland Ecology – Dr. Roy Darville
Case Study: Ramsar Convention – Dr. Roy Darville
Class Discussion and Working Group Time
Homework: reading and writing assignments

JANUARY21

Lecture: Eco-spirituality and Environmental Stewardship -- Prof. George Damoff, ETBU
Overview of Existing Environmental Curricula and Discovery Days at Caddo Lake – Sara Kneipp, CL1
Demonstrations: Use of Campus Wetlands and Nature Trails to Teach Ecology -- Ken Winn, Karnack High School, Peggy Byassee, Marshall High School, Dr. Alexandrine Randriamahefa, Wiley College, or others
Class Discussion and Working Group Time
Homework: Campus Action Plans

JANUARY 23

Group Work Time
Group Presentations by Curriculum Teams
Course Wrapup -- Dr. Roy Darville