

Date: March 2006

- I. Course Name: Principles of Aquatic and Terrestrial Ecology
Course Prefix and Number: CON 202 / BIO 221
Credit Hours and Contact Hours: 3 credits, 3 contact hours
Catalog Description:
A study of climatic, edaphic and biotic factors as they relate to species distribution and population dynamics in selected biomes of the world. Students will develop deeper understanding of the ecological principles concerning the interaction between organisms and their environment. Prerequisites: BIO 121, BIO 122, ENG 101 or permission of instructor. (Also listed as BIO 221.)

- II. Course Outcomes and Objectives
Learning Outcomes:

- To provide students with a broad awareness of environmental issues.
- To provide students with an appreciation of our natural world.
- To prepare students for employment in the environmental conservation fields.
- To improve student writing competency.

Relationship to Academic Programs and Curriculum:

This course a requirement for students in the A.A.S. Natural Resources Conservation, A.A.S. Natural Resources Conservation: Law Enforcement, the A.S. Environmental Studies and the A.A.S. Ornamental Horticulture Degree Programs. It may also be taken as a general or science elective.

College Competencies Addressed by the Course:

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|---|---|
| <input checked="" type="checkbox"/> writing | <input checked="" type="checkbox"/> ethics / values |
| <input checked="" type="checkbox"/> oral communications | <input checked="" type="checkbox"/> citizenship |
| <input checked="" type="checkbox"/> reading | <input checked="" type="checkbox"/> global concerns |
| <input type="checkbox"/> mathematics | <input checked="" type="checkbox"/> information resources |
| <input checked="" type="checkbox"/> problem solving | <input checked="" type="checkbox"/> professional competency |
| <input checked="" type="checkbox"/> computer literacy | |

- III. Methods of Instruction

Types of course materials:

Students will purchase a textbook for this course.

Methods of Instruction:

Discussion - Lecture	Article Review
Reading assignment	Project prospectus
Audio-visual materials	Individual Field Project
Field Exercise	Technical Paper
Computer usage: Word Processing	Quizzes
Focused autobiography	Field Notes
Student Presentation	Revision of written
Final Examination	Assignments

Assessment Measures:

Each student's understanding of the course material will be assessed by their participation in class discussions, their performance on and completion of a two part course project, written assignments, an oral presentation, quizzes and a final exam.

Methods of Evaluation:

The student's final grade in the course will be determined by their performance on the following:

Quizzes @ 100 point each	400 points
Article Review	50 points
Essay - Focused Autobiography	100 points
Project prospectus	50 points
Project Part I	225 points
Project Part II (First Draft)	200 points
Project Part II (Final Draft)	100 points
Niche Presentation - Oral Report	100 points
Final Examination	200 points
Attendance	100 points

Proportion of grade dependent upon writing	750
Proportion of grade dependent upon other than writing	775

Possible Total 1525 (A 1525-1403, A- 1402-1372, B+ 1371-1342, Etc.)

IV. General Outlines of Topics Covered

- I. Introduction to Ecology**
- II. Living Things and Their Environment**
- III. Population Ecology**
- IV. Community Ecology**
- V. Human Interactions with Natural Populations**
- VI. Nature Preserve Design**
- VII. Introduction to the Major Biomes (will be covered throughout the course)**