

**NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY  
BIO 270 - GENERAL ECOLOGY (4 CR.)**

**Course Description**

Studies interrelationships between organisms and their natural and cultural environments with emphasis on populations, communities, and ecosystems. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

**General Course Purpose**

This is a one semester course designed to introduce the student to the basic principles and concepts of ecology. It serves as a lab science elective. It includes interrelationships between organisms, both flora and fauna, and their physical environment. It also includes interactions between organisms, especially as they form groups such as populations and communities. The course gives special emphasis to the relationship between humans and the environment and their influence on it.

**Course Prerequisites/Co-requisites**

Prerequisites are any two of the following courses: BIO 101, 102, 110, 120 or division approval.

**Course Objectives**

The basic objective of this course is to provide the student with a knowledge of ecological principles and how they affect the environment and quality of life. The student should be able to demonstrate through examinations field work and laboratory experiments, their understanding of environmental issues, and concerns.

**Major Topics to be Included****Lecture Topics**

- Ecosystems
- Physical environment
- Energy in ecological systems
- Biogeochemical cycles
- Population dynamics
- Intra specific and interspecific interactions
- Communities
- Ecological succession
- Biomes and biogeography
- Natural resources
- Current topics

**Laboratory Topics**

- Ecosystems
- Soils
- Chemistry
- Meteorology
- Populations
- Terrestrial ecology
- Marine ecology
- Fresh water ecology