

Rec'd
2-12-03

GE CRITERIA APPROVAL FORM

Course Number and Title: Biol. 433 Ecology and the Environment (4 units)

Faculty Member(s) Proposing Course: Ching-Hua Wang

Indicate which of the following categories would be satisfied by this course by marking an "X" on the appropriate lines. Courses may be placed in up to two GE categories as appropriate. Upper Division Interdisciplinary GE courses may be placed in two categories plus the UDIGE category.

GE approved
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	A1: Oral Communication
	A2: English Writing
	A3: Critical Thinking
OK	X B1: Physical Sciences
OK	X B2: Life Sciences
	B3: Mathematics
	B4: Computers and Technology
	C1: Fine Arts
	C2: Literature
	C3: Languages & Cultures
	D: Social Perspectives
	E: Human Psychological & Physiological Perspectives
OK	X Upper Division Interdisciplinary GE

Lab Included? Yes X No _____

Please provide a brief explanation of how the proposed course meets each of the criteria for the selected General Education categories.

BIOL 433 This course will present the principles and concepts that form the foundation of living systems. It is designed to meet the needs of Biology, Environmental Science and Resource Management, and Liberal Studies majors. The course will provide biology students with the knowledge, skills and abilities to analyze the relationships between organisms and their environment. It will present scientific knowledge in a historical perspective and demonstrate the importance of science to the development of civilizations. The course uses the scientific method to study ecological characteristics of natural ecosystems and builds skills in critical thinking.

Students who successfully complete this course will be able to:

- understand plant and animal distribution patterns in relation to abiotic and biotic factors
- describe the essential characteristics underlying natural ecosystems
- model population and community-level dynamics
- interpret distribution patterns in relation to past and present physical and biotic factors.
- identify global environmental problems
- demonstrate critical thinking skills
- present information both orally and in written form, including revised prose.

The requirement that students understand distribution patterns in relation to abiotic factors such as temperature, chemistry of water and air cycling, geological structures, soil

components and water allocation and use as well as being required to perform computational analysis of populations using GIS satisfies GE category B1.
The inclusion of the biological material listed above satisfies GE Category B2.