

CRITERIA FOR PROPOSED GENERAL EDUCATION COURSES IN THE NATURAL SCIENCES

A course being considered for approval for credit toward the natural sciences requirements of the general education program should explore subjects in the fields of astronomy, biology, chemistry, earth and planetary sciences, or physics; and provide insight into ways that interactions of scientific models or theories with experiments contribute to a greater understanding of our natural world. In addition, to fulfill the laboratory requirements of the general education program, a course must require students to perform experiments in which they directly observe, measure, analyze, and draw conclusions about the properties of biological or physical entities and processes.

Typically, this course will address several of the following general education outcomes:

I. Skills:

Students should be able to:

A. think critically, reason soundly, and argue effectively,

as demonstrated by the ability to:

3. use systematic processes, including the collection and analysis of evidence, to form and support conclusions
4. read and analyze complex texts, including the analysis of rhetorical devices and modes of inference

II. Knowledge:

Students should know:

A. The natural and designed world,

1. demonstrating a general knowledge of current scientific understanding of the history and nature of the universe, the earth, and of life forms
2. demonstrating a general knowledge of the methods and traditions of analysis in the natural sciences

Students should know:

D. Mathematical and Quantitative Reasoning

2. demonstrating proficiency in solving problems using mathematical concepts and quantitative reasoning