GE Course Self-Review

Area 5B Biological Science

Please use this form to evaluate whether your course follows all GE course requirements, and modify your course to incorporate missing elements.

**GE course:** Click or tap here to enter text.

# GE Syllabus Requirements

Please check that your syllabus meets each of these requirements:

Your syllabus states that the course satisfies GE Area 5B.

Your syllabus lists prerequisites and corequisites, if any.

Your syllabus states that the writing in the course meets the GE writing requirement.

Your syllabus clearly explains how the GE writing requirement will be met.

Your syllabus clearly explains how the GE writing requirement will be assessed.

Your syllabus includes the following required grading statement: “A grade of D (1.0) or higher is required to meet this General Education requirement. A grade of D- (0.7) or below will not satisfy this General Education Requirement.”

Your syllabus includes the following link to the student information for course syllabi website: <https://fdc.fullerton.edu/teaching/student-info-syllabi.html>.

# Writing Requirements

Please check that your course meets each of these requirements. Writing in a corequisite laboratory course may be used to satisfy the General Education writing requirement.

Your course includes student writing appropriate to the course.

The writing in your course involves the organization and expression of complex data or ideas.

The instructor provides careful and timely evaluations of writing so that deficiencies are identified and suggestions are offered for improvement on subsequent writing in the course.

Evaluation of the students’ writing competence is used in determining the final course grade.

# Student Learning Objectives Requirements

Your GE course is required to meet a preponderance of the GE student learning objectives for Area 5B from UPS 411.201. Please rate how well and explain how each of the objectives below is addressed and assessed in your course. For the rating, use the following scale:

0 - no indication that the course meets the objective

1 - weak indication that the course meets the objective

2 - satisfactory evidence that the objective is met (mostly or entirely)

3 - strong evidence that the objective is met (mostly or entirely)

## Shared Learning Objectives

Students taking courses in Areas 5A, 5B, and 5C shall

◻ a. Understand the nature of scientific inquiry and the unique way that the natural sciences and mathematics describe the universe.  
Click or tap here to enter text.

◻ b. Evaluate the validity and limitations of theories and scientific claims in interpreting experimental results.  
Click or tap here to enter text.

◻ c. Understand the dynamic and evolving nature of the sciences.  
Click or tap here to enter text.

◻ d. Recognize the importance of scientific paradigms and methods in understanding scientific concepts.  
Click or tap here to enter text.

◻ e. Use quantitative techniques and scientific reasoning to investigate problems and phenomena in the natural universe.  
Click or tap here to enter text.

◻ f. Understand the potential limits of scientific endeavors and the value systems and ethics associated with human inquiry.  
Click or tap here to enter text.

◻ g. Understand different types of uncertainty and its impact on scientific methodology and reasoning.  
Click or tap here to enter text.

◻ h. Analyze and manipulate graphical representations of data.  
Click or tap here to enter text.

◻ i. Formulate and evaluate hypotheses using quantitative techniques.  
Click or tap here to enter text.

◻ j. Use statistical techniques to evaluate uncertainty in experimental data.  
Click or tap here to enter text.

## Area 5B Learning Objectives

Students taking courses in Area 5B shall explore the foundations of the Biological Sciences through in-depth exploration of living systems. Students taking courses in Area 5B shall

◻ a. Understand that living things are made of smaller structures whose functions enable organisms to survive.  
Click or tap here to enter text.

◻ b. Understand that living things depend on each other and the physical environment as they interact to obtain, change, and exchange matter and energy.  
Click or tap here to enter text.

◻ c. Understand that the great diversity of living things, ranging from single-celled organisms to complex, multi-celled organisms including microbes, plants, and animals, is the result of billions of years of evolution through the mechanisms of heredity, mutation, and natural selection.  
Click or tap here to enter text.