# Integrated Science Courses UCGE Proposal Criteria & Suggestions

The University of Idaho Faculty is invited to submit proposals for, or revisions to, the Integrated Science requirement of the general education curriculum.

#### SBOE Guidelines for General Education Science Courses:

### Definition:

A person who is competent in scientific reasoning adheres to a self-correcting system of inquiry (the scientific method) and relies on empirical evidence to describe, understand, and predict natural phenomena.

#### Competency and Knowledge Objectives:

- (1) Apply foundational knowledge and models of a natural or physical science to analyze and/or predict phenomena.
- (2) Understand the scientific method and apply scientific reasoning to critically evaluate assertions.
- (3) Interpret and communicate scientific information via written, spoken, and/or visual representations.
- (4) Describe the relevance of specific scientific principles to the human experience.
- (5) Form and test a hypothesis in a laboratory, classroom, and/or in the field, using discipline-specific tools and techniques for data collection and/or analysis.

## Additional Institutional Integrated Science Course Objectives:

- Strengthen student understanding of the methodology of science so as to foster logical thinking about and the ability to make complex scientific and social decisions.
- Increase awareness of the nature and limitations of scientific knowledge.
- Emphasize the impact of science on society and the impact of society on science.
- Consider the ethical dilemmas and moral consequences of research that may confront the scientist.
- Create an understanding of the differences between belief and scientifically testable or validated results.
- Place scientific advances and issues in a historical context.
- Stress collaborative work and problem-solving techniques in providing the student with the opportunity to become actively engaged in conducting science.

## Proposals should consist of the following:

- **Instructor**: Name and title of instructor.
- **Course Outline and Description**: In one to two pages, describe the course and its objectives and provide a course outline/syllabus. Please include a list of likely materials and activities included in the course and discuss how the course emphasizes and measures five SBOE competencies (above). Identify a specific signature learning activity or assignment (e.g., test, exam, written paper, oral presentation, collaborative project, poster, etc.) of the course that directly emphasizes and is integrated with more than one of the SBOE competencies that will be used to gauge student achievement. The course syllabus should also be included in the course proposal packet to supplement this information.
- Department Support: A signature line indicating department support for the course.

For assistance with the course proposal, contact:

Dean Panttaja, Director of General Education and Assessment at panttaja@uidaho.edu

Revised 15 July 2022