GENERAL EDUCATION COURSES IN THE NATURAL SCIENCES

DESCRIPTION AND LEARNING OUTCOMES

Title of Course:

Course Number: **Credit Hours:** **Estimated Enrollment:**

How many courses in your department already fulfill a natural sciences area requirement?_____

Instructions: Please review the below description of the natural sciences area at UCCS. Then describe how the proposed course meets the learning outcomes outlined below.

DESCRIPTION OF NATURAL SCIENCES

The natural sciences include the broad disciplines of biology, chemistry, geology, environmental science, and physics, as well as the areas where the aforementioned disciplines interface. The natural sciences use a methodical approach that involves observation, testing, and interpretation to study the natural world. Further, the natural sciences employ critical thinking to reach conclusions based on empirical evidence. Experimental results in the field should be reproducible, and explanations should be modifiable based upon new evidence and predictive of future results or events. The goal of coursework in the natural sciences is to provide students with a foundation for applying the scientific method, analyzing data and forming a conclusion, applying knowledge, and communicating scientific information clearly and effectively.

Curriculum and Requirement Committee Considerations
Please provide a short description of how the course meets some of the following objectives. Be prepared to address them during the meeting with the committee:

1. *Apply the scientific method.* Apply the scientific method and understand the relationship among observation, experimentation, evidence, conclusions, and theory in the natural and physical sciences. Understand the value and need for experimental reproducibility and peer review.
2. *Analyze data and form a conclusion.* Analyze and interpret data using scientific and mathematical methods and models to understand how the universe works. Understand sources of error, confounding factors, and outliers in the natural and physical sciences.
3. *Apply knowledge.* Organize and integrate knowledge and apply the fundamental concepts, theories, or laws of the discipline, thereby demonstrating a deeper comprehension of the topic.
4. C*ommunicate science.* Communicate effectively about science using the language and the tools of the discipline.

Submitted by:
