

Template for Review of Tier 2: Natural Sciences GER Courses

GER STUDENT OUTCOMES (All GER courses should address one or more of these)

After completing the General Education Requirement, UAA students shall be able to:

1. Communicate effectively in a variety of contexts and formats.
2. Reason mathematically, and analyze quantitative and qualitative data competently to reach sound conclusions.
3. Relate knowledge to the historical context in which it developed and the human problems it addresses.
4. Interpret different systems of aesthetic representation and understand their historical and cultural contexts.
5. Investigate the complexity of human institutions and behavior to better understand interpersonal, group, and cultural dynamics.
- 6. Identify ways in which science has advanced the understanding of important natural processes.**
7. Locate and use relevant information to make appropriate personal and professional decisions.
8. Adopt critical perspectives for understanding the forces of globalization and diversity; and
9. Integrate knowledge and employ skills gained to synthesize creative thinking, critical judgment, and personal experience in a meaningful and coherent manner.

Tier 2: Natural Sciences Courses: (All Natural Sciences GER courses should address one or more of these category descriptor outcomes in their Course Content Guides.)

Natural Sciences (must include a laboratory course) 7 credits

The natural sciences focus on gaining an understanding of the matter, events and processes that form and sustain our universe. Methods of scientific inquiry are diverse, but all aim to formulate general principles that explain observations and predict future events or behaviors within their disciplines.

Laboratory courses illustrate how scientists develop, test, and challenge scientific theories, providing an appreciation for the process and problems involved in the advancement of scientific knowledge.

Students completing their natural sciences requirement will be able to **(1) apply the scientific method by formulating questions or problems, proposing hypothetical answers or solutions, testing those hypotheses, and reaching supportable conclusions.** They will also **(2) demonstrate an understanding of the fundamentals of one or more scientific disciplines, (3) a knowledge of the discoveries and advances made within that discipline and the impact of scientific information in sculpting thought and in providing the foundations for the technology in use at various times in history.**

Students completing the laboratory class will **(1) demonstrate the ability to work with the tools and in the settings encountered by professionals in the discipline, (2) will critically observe materials, events or processes, and will accurately record and analyze their observations.**

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Course:	Crs. #	Date of Review:						
For each of the boxes below, check those components that have been reviewed and found to be acceptable on the submitted CAR/CCG.								
CAR	CCG date within 10 years	Course Description	Course Outline	Text & Bibliography Current				
CCG has Instructional goals and assessable student outcomes consistent with GER category descriptor and appropriate preamble student outcomes								
Student Outcomes	At the completion of the course the student will be able to:	Outcome included In course		Outcome Assessed with Appropriate Tools		Evidence for Achievement of Outcome*		
Category Descriptor Outcomes for Lecture courses		Yes	No	Yes	No	Yes	In Development	No
1. Apply the scientific method through formulating hypotheses, proposing testable predictions, and then testing to reach supportable conclusions.								
2. Demonstrate an understanding of the fundamentals of the courses' scientific discipline.								
3. Demonstrate a knowledge of the discipline's discoveries and advances that have impacted thought and technology throughout history.								
Category Descriptor Outcomes for Lab courses								
1. Demonstrate the ability to work with the tools and in settings of the discipline.								
2. Critically observe events or processes and accurately record and analyze observations.								
Appropriate numbered GER preamble Student Outcomes								
Must Include: 6. Identify ways in which science has advanced the understanding of important natural processes.								
May include:								
7. Locate and use relevant information to make appropriate personal and professional decisions.								
2. Reason mathematically, and analyze quantitative and qualitative data competently to reach sound conclusions.								

*For institutional GER review