

GER 5 Natural Sciences

Outcomes to be Assessed

Students will demonstrate:

1. an understanding of the methods scientists use to explore natural phenomena, including observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of data analysis or mathematical modeling; and
2. application of scientific data, concepts, and models in one of the natural sciences.

Method:

Assessment of Outcome #1 will be accomplished using a course-embedded 10-question instrument to be written by the instructors and submitted for initial approval to the GER 5 coordinator for review by the GER subcommittee of the Academic Assessment Committee.

Assessment of Outcome #2 will be course-embedded and will be based on either exam questions or laboratory assignments written by the instructor which require students to apply scientific data, concepts and models in one of the natural sciences.

The Office of Institutional Effectiveness selects a random 50% sample of GER 5 designated courses to undergo assessment for the fall semester during which GER 5 is up for review (once every three years). Faculty are notified of their course selection during the previous spring semester to allow time for planning assessment activities.

Instructors are responsible for entering their measures into Taskstream by the 4th week of fall semester and entering the findings for these measures into Taskstream by the end of the week following final grade submission. **In addition, instructors must supply at least 3 student artifacts (1 from each level of proficiency: exceeded, met, not met) as samples and attach them in Taskstream. Three artifacts must be provided for both objectives.**

Instructors are responsible for submitting the Data Collection Report (below) to the GER 5 coordinator by the end of the week following final grade submission.

Once all assessment is completed by the GER 5 Coordinator, they must prepare a summary of the results to be given to the General Education Assessment Committee Chair who will forward them to the GER committee for review.

Learning Objectives:	Assessment tools:	Results/Findings:						Reflection/Use of Findings:
								Based on these results, briefly address what changes you plan for improving student learning.
<i>Students will demonstrate:</i>	# of students participating in assessment:	Exceeded		Met		Did not meet		<u>Please include planned changes to curriculum, teaching and assessment methods, and/or support services</u>
	Assignment Exam question(s) Oral presentation Project (group or individual) Quiz Research paper Student Artifact Student Portfolio Other (Please specify):	N	%	N	%	N	%	Description of tool(s):
<i>Students will demonstrate:</i>	# of students participating in assessment:	Exceeded		Met		Did not meet		<u>Please include planned changes to curriculum, teaching and assessment methods, and/or support services</u>
2. application of scientific data, concepts, and models in one of the natural sciences	Assignment Exam question(s) Oral presentation Project (group or individual) Quiz Research Paper Student Artifact	N	%	N	%	N	%	Description of tool(s):

Learning Objectives:	Assessment tools:	Results/Findings:						Reflection/Use of Findings:
<p>Below are the two objectives for GER 5: Natural Sciences. Faculty members are expected to record student proficiency in all areas</p>	<p>This list represents a variety of tools commonly used to assess this SLO. Please select the tool(s) you will be using for the GER assessment. Please highlight the tool(s) you are using, and add a brief description of the tool used (e.g., final exam essay #2) in the space to the right.</p>	<p>Record the number and percentage of students achieving at the different levels for <u>each objective</u> (not each measure.) Percentages will be based on the number of students who participated in the assessment only (e.g., if your course has 10 students enroll, but only 8 take the assessment, those 8 represent the denominator.)</p>						<p>Based on these results, briefly address what changes you plan for improving student learning.</p>
<p><i>Students will demonstrate:</i></p>	<p># of students participating in assessment:</p>	Exceeded		Met		Did not meet		<p><u>Please include planned changes to curriculum, teaching and assessment methods, and/or support services</u></p>
	<p>Student portfolio</p>	N	%	N	%	N	%	
	<p>Other (Please specify):</p>							

GER Assessment Policies

Faculty and students will periodically be required to engage in assessment activities to ensure that the General Education learning outcomes are being met.

- GER student learning outcomes are assessed on a three year cycle through the courses designated as meeting that GER.
 - Any instructor (full-time or adjunct) teaching any course with a GER designator (online or face-to-face) may be called to participate in GER assessment activities.
 - A random sample of GER designated courses are selected by the Office of Institutional Effectiveness during the spring semester preceding the GER assessment year. If a faculty member is teaching two of the same course they have the option of choosing either section for assessment.
- **Protocol for creating a new course for GER approval:**
 - For a course to be accepted as a GER course, the GER assessment methodology must be attached to the course proposal as it moves forward to curriculum committee. GER mapping to course SLOs must be present in course proposal.
 - Course SLO's need to include the GER SLO's.
- **Protocol for Methodology Revision**
 - Faculty who wish to revise their GER methodology must submit proposed methodology to the GER committee by the fifth week of the semester before their assessment cycle begins.
 - The GER committee will review and provide feedback for revision, and if necessary request a meeting with the GER coordinator. They will provide feedback within six weeks.
 - Resubmission of the revised methodology must occur by the last day of the semester prior to the assessment cycle the methodology will be used in.
 - If the methodology does not comply with the needs of the campus and SUNY standards, the previous methodology will be employed for the assessment cycle.