# General Education Course Data Entry Worksheet

# *An aid for data submission by participating departments to the GEC*

**QUANTITATIVE REASONING**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Program Goal** | | **Course Prefix and number** | | | | **Course Name** | | | **Academic Semester** |
| **Q: Quantitative** | |  | | | |  | | |  |
|  | | **Is this an**  **HONORS course?** | | | | **Course section number(s)** | | | **Total number of students in the section(s) of the course** |
|  | |  | | | |  | | |  |
| **Types of course assessments:**  Please tell us**the assessment methods** you utilized in this course in order for students to demonstrate their competencies for each Student Learning Objective (SLO). We are not asking you for data for all of these methods, we would just like to know what kinds of assessments you assigned to students in this iteration of the course. (Please check all that apply.)  If an objective was not assessed, choose 'none'. | | | | | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | Exam or Quiz objective questions | Exam or Quiz essay questions | Project | Essay, Report, or Written Reflection | Other (describe below) | None (IF not assessed) | | Interpretation |  |  |  |  |  |  | | Analysis |  |  |  |  |  |  | | Communication |  |  |  |  |  |  | | | | |
| **For the data being reported here:**  Please tell us**the assessment tool method** that was used to collect the data that you are reporting for each Student Learning Objective (SLO) for this course.  If an objective was not assessed, choose 'none'. | | | | | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | Exam or Quiz objective questions | Exam or Quiz essay questions | Project | Essay, Report, or Written Reflection | Other (describe below) | None (IF not assessed) | | Interpretation |  |  |  |  |  |  | | Analysis |  |  |  |  |  |  | | Communication |  |  |  |  |  |  | | | | |
| **Student Learning Objective** | | | | | | Please give a **detailed description of the assessment method** for each **Student Learning Objective**. Please be specific.( e.g. Data were collected from student responses to an essay question as part of the final exam. OR, e.g. Data were collected from written selections that students submitted in response to the following prompt: \_\_\_\_\_\_) | | | |
| **SLO1: Interpretation** *The student is able to explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, and words).* | | | | | |  | | | |
| **SLO2**: **Analysis**  *The student is able to perform calculations and draw appropriate conclusions based on them.* | | | | | |  | | | |
| **SLO3: Communication**  *The student can express quantitative evidence in support of an argument (considering what evidence is used, and how evidence is formatted, presented, and contextualized.* | | | | | |  | | | |
| **YOUR SUMMARY OF DATA COLLECTED** | | | | | | | | | |
| **Student Learning Objective (SLOs)** | **Levels of competency:**  **How many students demonstrated each level of competency on**  **the assessment method used to collect data.**  Levels of competency are not the same thing as the grade earned on the assignment. Please utilize the rubric on the following page to determine what constitutes “**unsatisfactory**,” “**emerging**,” “**developing**,” “**proficient**,” and “**mastery**” levels of student competency. | | | | | | | Please **describe the Use of Results for each Student Learning Objective.** Please be specific. Several sentences are appropriate to give us a detailed look at **how** you plan to use this data to improve student learning in future iterations of the course. ***Please be prepared to submit one student artifact for each level of competency (unsatisfactory, emerging, developing, proficient, mastery) for each of the three SLOs.*** | |
| **Unsatisfactory** | **Emerging** | **Developing** | **Proficient** | **Mastery** | | **None \*\*** |  | |
| **SLO 1: *Interpretation*** |  |  |  |  |  | |  |  | |
| **SLO 2:**  ***Analysis*** |  |  |  |  |  | |  |  | |
| **SLO 3:**  ***Communication*** |  |  |  |  |  | |  |  | |

\*\* students who were registered for the course but, for some reason, did not complete the assessment you are reporting data for, should be included in the “none” column. (*e.g., 4 students did not answer that question on the essay exam, so 4 will go in that column*)

**QUANTITATIVE REASONING CURRICULUM**

**RUBRIC OF LEARNING OBJECTIVES (DESIRED OUTCOMES) & COMPETENCIES**

# Program goal: Guide and prompt students to interpret mathematical forms, analyze

# through calculations, and communicate quantitative reasoning.

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| --- | --- | --- | --- | --- | --- |
| **Learning objectives**  *Desired**outcomes* | **Levels of Competency** | | | | |
| **Unsatisfactory** | **Emerging** | **Developing** | **Proficient** | **Mastery** |
| **Interpretation**  *The**student is able to explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, and words).* | Fails to demonstrate ability to explain information presented in mathematical forms. | Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about the information. | Provides somewhat accurate explanations of information presented in mathematical forms, but occasionally makes minor errors related to computations or units. | Provides accurate explanation of information presented in mathematical forms. | Provides accurate explanation of information presented in mathematical forms and develops appropriate inferences based on that information. |
| **Analysis**  *The student is able to perform calculations and draw appropriate conclusions based on them.* | Fails to demonstrate ability to perform appropriate calculations | Calculations attempted are both unsuccessful and not comprehensive; tentative judgments are drawn from the calculations, but uncertain about drawing conclusions. | Calculations attempted are either unsuccessful or not comprehensive; commonsense judgments or plausible conclusions are drawn from the calculations. | Calculations attempted are essentially correct and comprehensive; competent judgments or reasonable conclusions are drawn from the calculations. | Calculations attempted are correct and comprehensive, and presented elegantly; thoughtful judgements or insightful conclusions are drawn from the calculations. |
| **Communication**  *The student can express quantitative evidence in support of an argument (considering what is used, and how evidence is formatted, presented, and contextualized.* | Fails to demonstrate the ability to present an argument for which quantitative evidence is pertinent. | Presents an argument for which quantitative evidence is pertinent, but does not provide adequate numerical support. | Uses quantitative information, but does not effectively connect it to the argument. | Uses quantitative information in connection with the argument, though evidence may be presented in a less- than-completely effective format or some parts of the explication may be uneven. | Uses quantitative information in connection with the argument and presents it in an effective format; explicates with consistently high quality. |

A **program goal** is a clear statement that expresses what our program will do for students. Each goal is designed to prompt and guide teaching practice and program assessment.

A **student learning objective** is a clear statement about what we expect students to learn or accomplish. Like any type of objective, a student learning objective is a desired outcome.

A **student learning outcome** is the result of a learning process; in other words, it is an actual outcome. To foster assessment of student learning, student learning outcomes must be observable, observed, measurable, and measured. Student learning outcomes can be characterized using an ordinal scale of competency (e.g., unsatisfactory, emerging, developing, proficient, and mastery).

A **competency** is the ability to do something successfully.