**GE SLO 2.2**Use graphs, tables, etc. to represent and explain mathematical models and/or quantitative data.

**GE SLO 5.2** Use graphs, tables, etc. to represent and explain scientific models and/or data.

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|  | Initial 1 | Emerging 2 | Developing 3 | Highly Developed 4 |
| **Represent** – “Ability to construct a quantitative object that appropriately conveys information” | Converts mathematical or scientific data into an incomplete or inaccurate representation. | Converts data into a complete representation that is minimally accurate or appropriate. | Competently converts data into an appropriate and accurate representation that focuses on important or key aspects. | Skillfully converts relevant data into an accurate, insightful, and creative representation. |
| **Assumptions** – "Ability to understand the scope and limitations of a quantitative representation of information" | Attempts to describe assumptions. | Explicitly describes assumptions. | Explicitly describes assumptions and provides compelling rationale for why assumptions are appropriate. | Explicitly describes assumptions and provides compelling rationale for why each assumption is appropriate. Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions |
| **Interpretation** – “Ability to explain information presented in a graph, table, etc.” | Attempts to explain information presented in quantitative forms, but does so inaccurately or incompletely. | Provides somewhat accurate explanations of information presented in quantitative forms, but occasionally makes minor errors related to computations or units. | Provides accurate explanations of information presented in quantitative forms. | Provides accurate explanations of information presented in quantitative forms. Makes appropriate inferences based on that information. |
| **Analysis** – “Draw appropriate conclusions or judgments from quantitative objects” | Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions. | Uses the quantitative analysis of data as the basis for workmanlike (without inspiration or nuance, ordinary) judgments, drawing plausible conclusions. | Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions. | Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions. |
| **Communicate** – “Select and express quantitative evidence to appropriately support an argument or purpose of work” | Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support. | Uses quantitative information, but does not effectively connect it to the argument or purpose of the work. | Uses quantitative information in connection with the argument or purpose of the work, though data 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 or purpose of the work, presents it in an effective format, and explicates it with consistently high quality. |

(Updated September 2025)