CORE COMPETENCY – QUANTITATIVE REASONING
GESLO I.e. Quantitative Reasoning Rubric (based on Value Rubric)
Apply and communicate quantitative arguments using equations and graphical representations of data.

	1 Introductory	2 Developing	3 Mastery
Identifying Appropriate Modeling/Methodology	Not selecting the most appropriate model/relationship	Selecting a model which works but not the most efficient or ideal model	Selecting the most efficient or ideal model
Data Representation *Convert quantitative information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words)*	Converts information but resulting portrayal of data is inappropriate or inaccurate. Attempts to describe assumptions.	Converts information but resulting portrayal of data is only partially appropriate or accurate. Explicitly describes assumptions.	Competently converts relevant information into an appropriate and desired portrayal of data. Explicitly describes assumptions and provides some rationale for why assumptions are appropriate.
Calculation *Perform the analytical processes necessary to complete task*	Calculations are attempted but are unsuccessful and not comprehensive.	Calculations attempted are essentially successful but may represent only part of the calculations required to comprehensively solve the problem.	Calculations attempted are essentially all successful and comprehensive to solve the problem. Calculations are also presented clearly and concisely.
Application / Analysis *Make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis*	Uses quantitative analysis of data as the basis for tentative, basic judgments, but hesitant or uncertain about drawing conclusions from this work.	Uses quantitative analysis of data as the basis for competent judgments, drawing plausible conclusions from this work.	Uses quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work.
Communication *Express quantitative evidence in support of the argument or purpose of the work (in terms of what evidence is used and how it is formatted, presented, and contextualized)*	Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support. (May use quasi-quantitative words such as "many," "few," "increasing," "small," and the like in place of actual quantities.)	Expresses quantitative evidence, but does not effectively connect it to the argument or purpose of the work.	Communicates quantitative evidence in connection with the argument or purpose of the work, presents it in an effective format, and explicates it with consistently high quality.