

Core Goal 4 Quantitative Literacy Rubric
 (Modified From AAC&U Quantitative Literacy Rubric)

	4 Exceeds Expectations	3 Meets	2 Meets	1 Does Not Meet Expectations	Not Attempted
Interpretation <i>Ability to explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)</i>	<ul style="list-style-type: none"> Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information. <p><i>For example, accurately explains the trend data shown in a graph and makes reasonable interpolations/extrapolations in context</i></p>	<ul style="list-style-type: none"> Provides accurate explanations of information presented in mathematical forms. <p><i>For instance, accurately explains the trend data shown in a graph.</i></p>	<ul style="list-style-type: none"> Provides somewhat accurate explanations of information presented in mathematical forms, but makes minor errors related to computations or units. <p><i>For instance, accurately explains trend data shown in a graph, but may miscalculate the slope of the trend line</i></p>	<ul style="list-style-type: none"> Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means. <p><i>For example, attempts to explain the trend data shown in a graph, but misinterprets the nature of that trend, perhaps by confusing positive and negative trends.</i></p>	
Representation and Assumptions <i>Ability to convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words)</i> <i>Ability to make and evaluate important assumptions in estimation, modeling, and data analysis</i>	<ul style="list-style-type: none"> Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding <ul style="list-style-type: none"> Demonstrates awareness of appropriate assumptions. Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions. 	<ul style="list-style-type: none"> Competently converts relevant information into an appropriate and desired mathematical portrayal Demonstrates awareness of appropriate assumptions. 	<ul style="list-style-type: none"> Completes conversion of information but resulting mathematical portrayal is only partially appropriate or accurate. Demonstrates awareness of assumptions. 	<ul style="list-style-type: none"> Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate. Demonstrates incomplete awareness of assumptions. 	

Calculation	<ul style="list-style-type: none"> All Calculations attempted are successful and sufficiently comprehensive to solve the problem. Calculations are presented clearly and concisely. 	<ul style="list-style-type: none"> Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. 	<ul style="list-style-type: none"> Most calculations are successful but there are significant errors, or represent only a portion of the calculations required to comprehensively solve the problem. 	<ul style="list-style-type: none"> Calculations are attempted but most are either unsuccessful or are not comprehensive. 	
Application / Analysis <i>Ability to make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis</i>	<ul style="list-style-type: none"> Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful and appropriately qualified conclusions from this work. 	<ul style="list-style-type: none"> Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work. 	<ul style="list-style-type: none"> Uses the quantitative analysis of data as the basis for workmanlike (without inspiration or nuance, ordinary) judgments, drawing plausible conclusions from this work. 	<ul style="list-style-type: none"> Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work. 	
Communication <i>Expressing quantitative evidence in support of the argument or purpose of the work</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Uses quantitative information, but the connection to the argument/purpose is significantly flawed. 	<ul style="list-style-type: none"> 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.) 	

Notes on changes: