UNIVERSITY OF NEW ORLEANS

QUANTITATIVE REASONING RUBRIC

This rubric is designed to evaluate the extent to which undergraduate students demonstrate the ability to use quantitative analysis to solve problems. Results will be used for program improvement purposes only.

Course: **Instructor:** **Student:** **Date:**

Component	Component Fully Met (Rating = 3)	Component Met (Rating = 2)	Component Partially Met (Rating = 1)	Component Not Met (Rating = 0)	Rating
Apply mathematical concepts and skills to solve problems and communicate solutions	Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information. Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding.	Provides accurate explanations of information presented in mathematical forms. Competently converts relevant information into an appropriate and desired mathematical portrayal.	Provides somewhat accurate explanations of information presented in mathematical forms, but occasionally makes minor errors related to computations or units. Completes conversion of information but resulting mathematical portrayal is only partially appropriate or accurate.	Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means. Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate.	
Articulate and advocate appropriate applications of quantitative reasoning in various settings	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work. Uses quantitative information in connection with the argument or purpose of the	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work. Uses quantitative information in connection with the argument or	Uses the quantitative analysis of data as the basis for workmanlike (without inspiration or nuance, ordinary) judgments, drawing plausible conclusions from this work. Uses quantitative information, but does not	Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work. Presents an argument	

	work, presents it in an effective format, and explicates it with consistently high quality. Regards quantitative reasoning as essential in understanding both multiple academic areas and domains beyond the academic and career related; can articulate and advocate appropriate applications of quantitative reasoning in various settings.	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. Regards quantitative reasoning as very useful and important to domains beyond the academic; demonstrates and articulates an understanding of its uses and can choose appropriate applications.	effectively connect it to the argument or purpose of the work. Regards quantitative reasoning as useful and important although primarily academic; recognizes appropriate applications and understands explanations.	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.) Regards quantitative reasoning as irrelevant beyond academic applications.	
Understand the scientific method	Demonstrates comprehension of the scientific approach; illustrates with examples Integrates and applies basic scientific concepts and principles.	Accurately expresses concepts relating to the scientific approach Shows clear comprehension of basic scientific concepts and principles.	Uses vocabulary related to scientific methods in a rote manner or showing simple conceptualization Able to state basic scientific concepts and principles.	Shows minimal understanding of scientific methods Lacks understanding of basic scientific concepts and principles.	
Notes:					