

## C2 Analytical Rubric

SLO 2: Apply scientific and quantitative reasoning to solve problems and increase knowledge.

	<b>C2 Performance Levels</b>			
<b>Skills</b>	<b>4 Excellent</b>	<b>3 Good</b>	<b>2 Fair</b>	<b>1 Poor</b>
Quantitative Information	Correctly identifies and uses all quantitative information in a given problem and justifies the use of the representations of the information.	Correctly identifies and uses most quantitative information in a given problem.	Correctly identifies and uses some of the quantitative information in a given problem.	Provides little or no quantitative information from the stated problem.
Calculation Process	Calculations are entirely successful and sufficiently comprehensive to solve the problem. They are clearly and concisely displayed.	Calculations attempted are mostly successful and sufficiently comprehensive to solve the problem. They are clearly and concisely displayed.	Calculations attempted are partially successful, but represent only a portion of the calculations required to solve the problem.	Calculations attempted are both unsuccessful and not comprehensive.
Solution	Provides a correct solution or decision with a well-reasoned explanation.	Provides a correct solution or decision, with a partial explanation.	Provides a correct solution or decision, with minimal explanation.	Provides no solution or an incorrect solution not based on the stated problem.
Logical Reasoning	Reasons logically and interprets logical relationships among all problem elements and	Reasons logically and interprets logical relationships among most problem elements and	Reasons logically and interprets logical relationships among some problem	Presents no logical reasoning for a presented solution.

	solutions or decisions.	solutions or decisions.	elements and solutions or decisions.	
Explanations	Provides well-reasoned, accurate explanations of all information presented in mathematical forms.	Provides well-reasoned, accurate explanations of most information presented in mathematical forms.	Provide somewhat reasonable, accurate explanations of some information presented in mathematical forms.	Provides poorly-reasoned, inaccurate explanations of the information presented in mathematical forms.
Inferences	Makes all appropriate inferences based on the result. The solution is presented in an effective format.	Makes most appropriate inferences based on the result, though data may be presented in an incomplete format.	Makes some appropriate inferences based on the result, though data may be presented in an incomplete format.	Makes incorrect inferences based on the result or does not provide adequate numerical support.