SUNY Cortland General Education (GE)
Category 1 – Quantitative Skills
Assessment Rubric [revised/approved 2020-11-19]

GE 1 GOAL: To develop mathematical and quantitative reasoning skills.

Student Learning Outcome (SLO)	Target	Acceptable	Unacceptable
SLO 1: Interpret and draw inferences from mathematical models.	The student demonstrates the ability to interpret and draw inferences that accurately represent the model or answer the question.	The student demonstrates the ability to interpret and draw inferences. but they are incomplete or inaccurate due to a minor conceptual flaw(s).	The student's interpretations and inferences are missing. Incomplete, or inaccurate due to a major conceptual flaw(s) or do not address the question in any meaningful way.
SLO 2: Represent mathematical information symbolically, visually, numerically, and verbally.	The student employs the required representations to display mathematical information (e.g., forma language, labels, scales, terminology, etc.). The response may have minor copying or labeling errors.	The student's representations to display mathematical information are lacking due to a minor conceptual or computational flaw(s).	The student's representations to display mathematical information are missing or incorrect due to a major conceptual or computational flaw(s), or do not address the question in any meaningful way.
SLO 3: Employ quantitative methods such as· arithmetic, algebra, geometry, or statistics to solve problems	The student demonstrates an understanding of the problem by using a clear and logical method to solve the problem. The solution may contain minor copying or labeling errors.	The student demonstrates understanding of the problem and the correct method, but the implementation is partially incorrect. The solution may contain a minor computational flaw(s).	The student's response was missing, incomplete, or incorrect, demonstrating little to no understanding of the problem. The solution contains a major computational flaw(s) or shows little or no correct work.

Student Learning Outcome (SLO)	Target	Acceptable	Unacceptable
SLO 4: Estimate and check mathematical results for reasonableness.	The student can completely and accurately estimate and justify a mathematical result to a problem.	The student can estimate and justify a mathematical result to a problem, but the student's response contains a minor conceptual flaw.	The student can estimate and justify a mathematical result to a problem, but the student's response contains a major conceptual flaw, or the student's response does not address the question in any meaningful way.
SLO 5: Recognize the limits of mathematical and statistical methods.	The student provides a clear and accurate description of the assumptions/ simplifications of a mathematical or statistical method.	The student provides a description of the assumptions/ simplifications of a mathematical or statistical method, but the response contains a minor conceptual flaw.	The student provides a description of the assumptions/ simplifications of a mathematical or statistical method, but the response contains a major conceptual flaw, or the student fails to realize that the results are not contextually appropriate.