

### Quantitative Literacy (General Goal 5)

**General Goal (5):** Students will be able to reason and solve quantitative problems from a wide array of contexts and everyday life situations; understand and create logical arguments supported by quantitative evidence; and clearly communicate those arguments in a variety of formats (e.g., words, tables, and mathematical equations) as appropriate.

Reviewers are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark level of performance.

	Capstone	Milestone	Benchmark
<b>General Goal 5</b>	Students reason and solve complex quantitative problems from a wide array of contexts and everyday life situations; understand and create logical arguments supported by quantitative evidence; and clearly communicate those arguments in a variety of formats (e.g., words, tables, and mathematical equations) as appropriate.	Students reason and solve quantitative problems from a wide array of contexts and everyday life situations; understand and create logical arguments supported by quantitative evidence; and clearly communicate those arguments in a variety of formats (e.g., words, tables, and mathematical equations) as appropriate.	Students demonstrate limited ability to solve quantitative problems and to interpret or create information presented in mathematical forms.
<b>SLO 5.1</b>	Students interpret and clearly communicate complex information presented in mathematical forms.	Students interpret and communicate information presented in mathematical forms.	Students demonstrate limited ability to interpret and communicate information presented in mathematical forms.
<b>SLO 5.2</b>	Students readily convert complex information into various mathematical forms.	Students convert information into various mathematical forms (equations, functions, graphs, diagrams, tables, or words).	Students demonstrate limited ability to convert information into mathematical forms.
<b>SLO 5.3</b>	Students can calculate numerically and symbolically to solve complex problems.	Students can calculate numerically and symbolically to solve problems.	Students demonstrate the ability to calculate numerically and symbolically to solve only simple problems.
<b>SLO 5.4</b>	Students analyze and integrate complex data sets quantitatively as the basis for competent, valid, and reliable inferences in order to draw reasonable and appropriate conclusions for a variety of contexts.	Students analyze data quantitatively as the basis for competent, valid, and reliable inferences in order to draw reasonable and appropriate conclusions.	Students demonstrate the ability to quantitatively analyze data and draw conclusions only for simple applications.
<b>SLO 5.5</b>	Students use appropriate mathematical tools to explicitly and clearly describe assumptions, mathematical relationships, and conclusions for complex problems.	Students use appropriate mathematical tools to explicitly describe assumptions, mathematical relationships, and conclusions.	Students demonstrate limited ability to use mathematical tools to explicitly describe assumptions, mathematical relationships, and conclusions.
<b>SLO 5.6</b>	Students creatively express evidence in support of an argument by employing multiple appropriate forms of presentation (e.g., equations, functions, graphs, diagrams, tables, or words).	Students express evidence in support of an argument by employing appropriate forms of presentation (e.g., equations, functions, graphs, diagrams, tables, or words).	Students demonstrate limited ability to express evidence in support of an argument using appropriate forms of presentation (e.g., equations, functions, graphs, diagrams, tables, or words).

### **General Goal 5: Quantitative Literacy (GG5)**

Students will be able to reason and solve quantitative problems from a wide array of contexts and everyday life situations; understand and create logical arguments supported by quantitative evidence; and clearly communicate those arguments in a variety of formats (e.g., words, tables, and mathematical equations) as appropriate.

**SLO 5.1:** Interpret and communicate information presented in mathematical forms (e.g., equations, functions, graphs, diagrams, tables, or words).

**SLO 5.2:** Convert relevant information into various mathematical forms (e.g., equations, functions, graphs, diagrams, tables, or words).

**SLO 5.3:** Calculate numerically and symbolically to solve a problem.

**SLO 5.4:** Analyze data quantitatively as the basis for competent, valid, and reliable inferences in order to draw reasonable and appropriate conclusions.

**SLO 5.5:** Use appropriate mathematical tools to explicitly describe assumptions, mathematical relationships, and conclusions.

**SLO 5.6:** Express evidence in support of an argument by employing appropriate forms of presentation (e.g., equations, functions, graphs, diagrams, tables, or words).