B1. Math Higher Order Learning Goals (HOLGS)

Students will:

1. Design and implement mathematical solutions to algebraic, algorithmic, statistical, numerical, or computational problems.
2. Evaluate the validity of a solution and its relevance to the original problem using quantitative reasoning as the norm for decision making.

B1 (Math) HOLG Rubric				
Criteria	**Performance Standards**			
	Exceeds Expectations (4)	**Meets Expectations (3)**	**Needs Improvement (2)**	**Below Expectations (1)**
Design a mathematical solution.	Designs solution and related elements with exceptional specificity and accuracy.	Designs solution and related elements with appropriate specificity and accuracy.	Designs a solution and related elements with limited specificity or accuracy.	Did not design a solution, or designs solution with excessive errors.
Implement the design or identify and correct problems with the design.	Implements design or identifies and corrects problems with design with exceptional specificity and accuracy.	Implements design or identifies and corrects problems with design with appropriate specificity and accuracy.	Implements design or identifies and corrects problems with design with limited specificity or accuracy.	Did not implement design or identify and correct problems with design or did so with excessive errors.
Critically evaluate a solution and its relevance to the original problem.	Critically evaluates a solution and its relevance using exceptional reasoned discourse.	Critically evaluates solution and its relevance using appropriate reasoned discourse.	Critically evaluates solution and its relevance using limited reasoned discourse.	Did not critically evaluate solution and its relevance or did not use appropriate reasoned discourse.

Developed by CAWG Committee - March 2017

B1. Math (CLOs)

Students will be able to determine whether a problem lends itself to a mathematical solution and if so:

1. Design a mathematical solution. (**Criteria 1)**
2. Implement the design or identify and correct problems with the design. (**Criteria 2)**
3. Evaluate the validity of a solution and its relevance to the original problem using reasoned discourse as the norm for decision making. (**Criteria 3)**

In the outcomes "mathematical" can mean one or more of "algebraic," "algorithmic," "statistical," "numerical," or "computational."