Quantitative Literacy Competency Expectation and Definition

Expectation: The General Education Competencies develop through multiple and sustained experiences across the General Education Program (GEP). The GEP provides a foundation for Quantitative Literacy and other General Education Competencies. It is expected that each degree program provide additional support to build upon that foundation.

Definition: Quantitative Literacy (QL) – also known as Numeracy or Quantitative Reasoning (QR) – is a "habit of mind," competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).

Outcomes:

1. A generally educated NC State student will perform basic calculations using mathematical reasoning and problem solving in core areas including arithmetic, numbers and operations, algebra, geometry, and statistics. (AAC&U Calculation)

2. A generally educated NC State student will convert relevant information into various quantitative forms (e.g., equations, graphs, diagrams, tables, maps, words) (AAC&U- Representation)

3. A generally educated NC State student will explain information generated or presented in quantitative or mathematical forms (e.g., equations, expressions, graphs, diagrams, tables, and words) (AAC&U- Interpretation)

4. A generally educated NC State student will make judgments and draw appropriate conclusions based on the quantitative, logical and statistical analysis of data, while recognizing the limits of this analysis (AAC&U- Application/Analysis)

5. A generally educated NC State student will express quantitative, logical, and statistical evidence in support of the argument or purpose of the work (in terms of what evidence is used and how it is formatted, presented, and contextualized). (AAC&U-Communication)