

Proposed Revisions to the Quantitative and Analytical Reasoning GE LO and Certification Criteria

Current Language:

Certification Criteria

Students will be able to

1. make use of mathematical models for physical or social systems
-AND/OR-
compute and interpret numeric data, summative statistics and/or graphical representations.
2. reflect on the strengths and weaknesses of particular quantitative models or methods as tools in the natural and social sciences

Student Learning Outcome (assessed as part of Quantitative Literacy ILO; provisionally approved by the faculty meeting 04/15/2011)

Students will apply relevant scientific, mathematical and logical methods to analyze and solve problems effectively.

Proposed Revisions with additions bolded and italicized:

Certification Criteria

Students will be able to

1. make use of mathematical (***including statistical***) models for physical or social systems
-AND/OR-
compute and interpret numeric data, summative statistics and/or graphical representations.
2. reflect on the strengths and weaknesses of particular quantitative models or methods as tools in the natural and social sciences
3. ***Be able to interpret, reflect on, and use quantitative models and data in public, vocational, and/or private decision making.***

Student Learning Outcome (assessed as part of Quantitative Literacy ILO; provisionally approved by the faculty meeting 04/15/2011)

Students will apply relevant scientific, mathematical and logical methods to analyze and solve problems effectively *and be able to utilize the results appropriately when making decisions.*

Rationale:

The proposed revisions close a loophole in the current criteria which technically allows for what is currently considered to be only a community college level QR exposure in that they do not explicitly require students to reflect on quantitative data or apply it to decision-oriented problem solving applications.