

January 26, 2011 Faculty Senate Meeting

MOTION TITLE: A Resolution affirming the student learning outcomes for the General Education category of Quantitative Literacy

MOTION BY: General Education Committee

MOTION: General Education represents a cross-college set of requirements for successful completion of any undergraduate major at the University of Maine. As such, oversight of the general Education curriculum, by designated categories, falls within the purview of the Faculty Senate.

The NEASC action letter of November 2009 mandates assessment results for General Education, with two interim reports, in 2012 and 2014, showing movement toward this goal. In order to accomplish this, the establishment of assessment criteria for each General Education category, based upon Student Learning Outcomes for each category, is an essential first step. Since the faculty has not reviewed the Student Learning Outcomes for each category since the inception of General Education in 1994 and 1996, the Faculty Senate, through the General Education Committee has commenced this first step.

A group of faculty have reviewed and made recommendations for the Student Learning Outcomes for Quantitative Literacy, which has been expanded to more clearly address the integration of the use of computers and computational mathematics in many areas, which was nascent when the general education category of mathematics was first configured. This process is in keeping with the iterative policy used to assure faculty ownership of General Education.

Resolution: The Faculty Senate, in keeping with its responsibility for oversight of General Education, hereby accepts the following Student Learning Outcomes for the General Education category, Quantitative Literacy (Mathematics).

General Education Student Learning Outcomes – Quantitative Literacy
Preamble

Quantitative literacy is the ability to formulate, evaluate, and communicate conclusions and inferences from quantitative information. Students will develop their quantitative literacy during their undergraduate experience through courses targeted at quantitative literacy and through frequent

exposure to quantitative problems and analyses both inside and outside their major.

Student Learning Outcomes Upon completion of general education study in quantitative literacy, students will understand the role that mathematics and quantitative thinking plays in solving and communicating information about real world problems and relationships. Students will be able to:

1. Translate problems from everyday spoken and written language to appropriate quantitative questions.
2. Interpret quantitative information from formulas, graphs, tables, schematics, simulations, and visualizations, and draw inferences from that information.
3. Solve problems using arithmetical, algebraic, geometrical, statistical, or computational methods.
4. Analyze answers to quantitative problems in order to determine reasonableness. Suggest alternative approaches if necessary.
5. Represent quantitative information symbolically, visually, and numerically.
6. Present quantitative results in context using everyday spoken and written language as well as using formulas, graphs, tables, schematics, simulations, and visualizations.

Instructors of courses offering General Education credit in the area of Quantitative Literacy will indicate how the Student Learning Outcomes will be achieved on their syllabi. Assessment practices are, for the most part, embedded within the courses awarding general education credit and are appropriate to the content and goals of each course and program.

VOTING RESULTS: The motion passed 34 in favor, none against, no abstentions.