

Mathematics General Education Curricular Changes

Students who take General Education Mathematics at PLNU have three course options:

- MTH144 Calculus with Applications – this course is taken primarily by students majoring in the biological sciences
- MTH164 Calculus I – this course is taken primarily by students majoring in mathematics, computer science, physics, engineering and chemistry.
- MTH330 Problem Solving – this course is taken by all other students to meet their mathematics requirement and looks at a wide range of mathematical topics using a problem solving paradigm (graph theory, apportionment, saving money, borrowing, money, etc).

The MICS department has worked to craft a set of GE mathematics learning outcomes that can be used for these three different classes. The department has data from embedded assignments in these classes from as far back as 2007.

The MICS department considered two sources of data:

- Student answers to questions asked as part of the GE assessment (in some classes we were asking questions about loans)
- The growing national concern about the fact that college students are entering into credit card, consumer and student debt without understanding the implications of their borrowing.

This data was discussed in light of experiences with students in class (the department teaches 15 GE mathematics classes each year).

As the result of the analysis the department expanded the financial literacy component of all of General Education mathematics courses. The expansion began in the 2010-11 academic year. Students in all mathematics classes (in the appropriate context for their course) will learn about: savings, loans and credit cards. They also work on a fundamental budget for post-college expenses that includes the computation of debt repayment.

These changes did not require Academic Policy Committee approval.