In Quantitative Reasoning courses, students examine the principles, practices, instruments, and systems of mathematics and logic used to measure, quantify, analyze, and represent social, scientific, technological, and other phenomena as a basis for decision-making. Problems and examples in the course are drawn from a variety of disciplines to represent a rich diversity of applications. Mathematics and logic will provide a basis for addressing the quantitative dimensions of problems confronting individuals, societies, and humanity.

Courses generally assess basic mathematical skills, understanding of elementary mathematical concepts, and ability to reason quantitatively and to model and solve problems with quantitative methods.

***Courses in the Quantitative Reasoning category of General Education address the following learning outcomes:***

**I. knowledge of diverse human cultures and the physical and natural world, allowing students to**

a. use theories and principal concepts, both contemporary and enduring, to understand technologies, diverse cultures, and the physical and natural world

*b. explain how the combination of the humanities, fine arts, natural and social sciences, and technology contribute to the quality of life for individuals and communities*

**II. intellectual and practical skills, allowing students to**

a. make informed judgments

b. analyze data to examine research questions and test hypotheses

*c. report information effectively and responsibly*

**III. personal and social responsibility, allowing students to**

c. demonstrate ethical decision making

d. demonstrate the ability to think reflectively

**IV. integrative and applied learning, allowing students to**

a. identify and solve problems

b. transfer learning to novel situations

*c. work effectively in teams*

Primary learning outcomes are indicated in plain text and secondary learning outcomes are indicated in italics.

Any student needing to arrange a reasonable accommodation for a documented disability should contact Student Access and Accommodation Services at 350 Fell Hall, (309) 438-5853, or visit the website at <https://studentaccess.illinoisstate.edu/>