

Mathematics (M)

Courses in mathematics provide instruction in computational strategies in fundamental mathematics including at least one of the following: solving equations and inequalities, logic, statistics, algebra, trigonometry, inductive and deductive reasoning. These courses include reasoning in abstract mathematical systems, formulating mathematical models and arguments, using mathematical models to solve problems and applying mathematical concepts effectively to real-world situations.

This checklist will be used by auditors in reviewing your course. We provide the checklist here to aid instructors in performing self-audits of General Education courses with the Mathematics designation. General Education courses have three targeted student learning outcomes: content, critical thinking, and communication.

General

Y/N Is the General Education designation “Mathematics (M)” stated in the syllabus?

Y/N Are reading lengths/word counts/page counts provided for each assigned reading?

Y/N Are the time lengths provided for each assigned multimedia/audio-visual item?

Y/N Is there a weekly course schedule that includes sufficient detail to determine the topics or themes, brief summary of the content, assigned material, other assignments, due dates, and assessments?

Content

Employ computational strategies in fundamental mathematics, including at least one of the following: solving equations and inequalities, logic, statistics, algebra, trigonometry, or inductive and deductive reasoning.

Y/N Does the weekly schedule indicate that one or more of these content goals are being met throughout the course e.g. *strategies in fundamental mathematics, including at least one of the following: solving equations and inequalities, logic, statistics, algebra, trigonometry, or inductive and deductive reasoning?*

Y/N Do the assessment methods test students’ ability to demonstrate these content goals?

What assessment methods are used to test students' ability to demonstrate these content goals?

- Quizzes
- Written Papers (posts, reports/research papers, or essays)
- Projects
- Exams
- Presentations
- Other _____

How often are students assessed on their ability to demonstrate these content goals for all assessment methods combined?

- Weekly
- Bi-weekly
- Monthly
- Other _____

Critical Thinking

Reason in abstract mathematical systems and use mathematical models to solve problems. Apply mathematical concepts effectively to real-world situations.

Y/N Does the weekly schedule indicate that one or more of these critical thinking goals are being met throughout the course e.g: *reason in abstract mathematical systems and use mathematical models to solve problems, or apply mathematical concepts effectively to real-world situations?*

Y/N Do the assessment methods test students' ability to demonstrate these critical thinking goals?

What assessment methods are used to test students' ability to demonstrate these critical thinking goals?

- Quizzes
- Written Papers (posts, reports/research papers, or essays)
- Projects
- Exams
- Presentations
- Other _____

How often are students assessed on their ability to demonstrate these critical thinking goals for all assessment methods combined?

- Weekly
- Bi-weekly
- Monthly
- Other _____

Communication

Formulate mathematical models and arguments. Communicate mathematical solutions clearly and effectively.

Y/N Does the weekly schedule indicate that one or more of these communication goals are being met throughout the course e.g: *formulate mathematical models and arguments, or communicate mathematical solutions clearly and effectively?*

Y/N Do the assessment methods test students' ability to demonstrate these communication goals?

What assessment methods are used to test students' ability to demonstrate these communication goals?

- Quizzes
- Written Papers (posts, reports/research papers, or essays)
- Projects
- Exams
- Presentations
- Other _____

How often are students assessed on their ability to demonstrate these communication goals for all assessment methods combined?

- Weekly
- Bi-weekly
- Monthly
- Other _____