



## Mathematics Program Assessment Plan

In consideration of our responsibility for delivering a high-quality program in mathematics and computer science that is consistent with the mission and goals of the institution, we have developed the following program-level goals:

1. Students will effectively communicate topics in the mathematical sciences.
2. Students will formulate, analyze, and solve a wide variety of problems in the mathematical sciences.
3. Students will engage in a lifelong learning process via the ability to self-educate.
4. Students will demonstrate proficiency with the topical content and techniques included in the courses in the mathematical sciences.

The following program-level student learning outcomes will be assessed on an annual basis and will serve as the primary means of determining whether the program-level goals are being achieved:

### Goal #1 student learning outcomes:

- A) Students will effectively communicate topics related to the mathematical sciences in written form.
- B) Students will effectively communicate topics related to the mathematical sciences in oral form.

### Goal #2 student learning outcomes:

- A) Students will recognize problem solving techniques appropriate to a given situation, including the development of mathematical models, the identification of assumptions, the understanding of the limitations of models, and the use of both graphical and numerical methods.
- B) Students will use technology in an appropriate manner to help understand, solve, and generalize problems.
- C) Students in computer science will be proficient in writing correct, well-designed, and well-documented object-oriented programs.

### Goal #3 student learning outcomes:

- A) Students will recognize, understand, and analyze material related to the mathematical sciences from written sources.
- B) Students will demonstrate the ability to self-assess their academic growth.

### Goal #4 student learning outcomes:

- A) Students will demonstrate an understanding of commonly used facts, formulas, terminology, and definitions.
- B) Students will write well-constructed and logically sound mathematical proofs.
- C) Students in computer science will be proficient in writing correct, well-designed, and well-documented object-oriented programs.

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