

The General Education Program prepares students for informed citizenship, leading to responsible participation in local, national, and global communities.

MTH 201 Calculus I

Foundations - Mathematical Sciences

Knowledge Student Learning Outcomes

- 1. Explain principles and questions that define computer science, logic, mathematics, or statistics.
- 2. Apply techniques for problem solving including recognition of key elements, the choice of suitable methods for solving a problem, and the appropriate application of these methods.

Skills Student Learning Outcomes

- 1. Quantitative Literacy: Work effectively with numerical data.
 - Calculations are correct, solve the problem, and are presented clearly and concisely.
 - Skillfully converts data into an insightful mathematical portrayal in a way that contributes to a deeper understanding.
 - Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions.
 - Uses quantitative information in connection with the purpose of the work, presents it in an effective format, and explains it with consistently high quality.
- 2. Problem Solving: Design and evaluate an approach to answer an open-ended question or achieve a desired goal.
 - Constructs a clear and insightful problem statement that includes all relevant contextual factors.
 - Identifies multiple approaches for solving the problem that applies to a specific context.
 - Proposes one or more solutions/hypotheses that are sensitive to contextual factors and the ethical, logical, and cultural dimensions of the problem.
 - Evaluates solution(s) thoroughly and insightfully and does all of the following: considers the history of the problem, reviews logic/reasoning, examines feasibility of the solution, and weighs impacts of the solution.