MTH 214: Calculus I

This course is an introduction to calculus and provides students with initial exposure to limits and continuity, the derivative, and differentiation and integration of algebraic, trigonometric, logarithmic, and exponential functions, as well as applications of differentiation. Prerequisite(s): A grade of C- or higher in MTH 172 or a score of 250 or higher on the Advanced Algebra Functions (AAF) Accuplacer test. Four lecture hours and one laboratory hour per week. Instructional Support Fee applies. Gen. Ed. Competencies Met: Quantitative and Symbolic Reasoning.

Course Student Learning Outcomes

1. Define the limit of a function and determine its value graphically, numerically and analytically.
2. Determine if a function is continuous at a given point.
3. Compute the derivative of a function.
4. Apply the concept of differentiation to various applications such as extrema, curve sketching and approximation.
5. Define an antiderivative.
6. Develop methods to find both approximate and exact areas under a curve.

Credits: 4
Program: Mathematics