Course Outcome Summary
Standard Course

MATH 171 Calculus I

Course Information
Division	**Science-Mathematics**
Contact Hours	**60**
Total Credits	**4**

Prerequisites
C or better in MATH 159 or MATH 164 or qualifying scores on accepted placement tests

Course Description
An introductory course in the study of single variable calculus covering both differentiation and integration. The types of functions covered include both algebraic and transcendental. The purpose of the course is to study analysis of single variable functions primarily through differentiation and integration.

Course Outcomes
In order to evidence success in this course, students will be able to:

1. Identify the definition of a limit.
2. Determine the limits of algebraic and transcendental functions.
3. Analyze the continuity of functions.
4. Identify the rules of differentiation and integration.
5. Recognize applications of the derivative as they apply to graphing.
6. Identify formulas for differentiating and integrating algebraic and transcendental functions.
7. Differentiate algebraic and transcendental functions.
8. Apply the operation of differentiation to problems involving slopes of tangents to a curve, extrema, concavity and differentials.
9. Integrate algebraic and transcendental functions.
10. Apply the integral to find geometric quantities such as volumes, arc lengths, and surfaces.
11. Identify methods for finding the area under a curve.
12. Integrate both definite and indefinite integrals by applying a change in variable.

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By: JV