

Course Outcome Summary

Standard Course

MATH 172 Calculus II

Course Information

Division Science/Mathematics

Contact Hours 6
Total Credits 4

Prerequisites

C or better in MATH 171

Course Description

This course is a continuation in the study of calculus with an emphasis on integration. Topics included are algebraic and transcendental functions, techniques of integration, improper integrals, infinite series, plane analytic geometry, parametric equations and polar equations. The purpose of the course is to continue the study of calculus of single variable functions with a more in-depth study of integration and various infinite series.

Course Outcomes

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

- 1. Identify the rules of integration and differentiation.
- 2. Integrate algebraic and transcendental functions.
- 3. Apply proper methods of integration including algebraic substitution, integration by parts, trigonometric identity substitution, trigonometric substitution and partial fractions.
- 4. Evaluate improper integrals.
- 5. Identify the differences between sequences and series.
- 6. Apply infinite series and test them for convergence.

Date Updated: 09/10/2018

By: JV