



## MTH 215: Calculus II

This course is a continuation of MTH 214. Topics covered include: applications of the definite integral; techniques of integration; parametric equations; polar coordinates; and infinite sequences and series. Prerequisite(s): a grade of C- or better in MTH 214. Four lecture hours and one computer laboratory hour per week. Instructional Support Fee applies.

### Course Student Learning Outcomes

1. Compute the area between curves, volumes of solids of revolution, the average value of a function and arc length of a function. 2. Compute antiderivatives of functions using several techniques. 3. Use numerical techniques to approximate definite integrals. 4. Determine whether sequences and series converge or diverge. 5. Approximate functions as Taylor polynomials. 6. Analyze, graph and compute the derivatives of parametric equations and functions in polar coordinates.

**Credits:** 4

**Program:** Mathematics