

# MATH 210C : Differential Equations

Topics include methods of solving and applications of ordinary first- and second-order differential equations, Laplace transformations, series solutions, basics of linear algebra, and systems of differential equations. A graphing calculator is required.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisite Courses**

MATH 206C

**Learning Outcomes**

- State, interpret, and apply the definitions, theorems, and properties involving differential equations
- Determine solutions to first-, second-, and higher order differential equations
- Determine solutions to systems of first-order linear differential equations.
- Determine solutions to differential equations using Laplace and Inverse Laplace Transforms
- Determine power series solutions to differential equations about ordinary points
- Construct and solve mathematical models using differential equations