

FLCC Course Syllabus

General Information

Date

03/26/2017

Department

Mathematics

Course Prefix:

MAT

Course Number:

274

Course Title:

Differential Equations

Course Information

Credit Hours

4

Lecture Contact Hours

4

Catalog Description

This course is an introductory survey of ordinary differential equations. First order differential equations and methods for obtaining solutions are investigated. Methods include integration, variation of parameters, and integrating factors. These methods are generalized for second order differential equations. Additional methods include numerical approximation, Laplace Transforms, and power series.

Prerequisites

MAT 272 with a C- or better

Grading Scheme

Letter Grade

FLCC Values

College Learning Outcomes Addressed by the Course

Inquiry
Interconnectedness
Perseverance

Course Learning Outcomes

Course Learning Outcomes

- 1 : Use the language and notation of ordinary differential equations.
- 2 : Recognize and/or classify various types of ordinary differential equations.
- 3 : Observe an application situation and apply the appropriate differential model.
- 4 : Explain the concepts behind various transformations used in differential equations.
- 5 : Interpret graphically the behavior of solutions to differential equations.
- 6 : Evaluate results for reasonableness.

Program Affiliation

This course is required as a core program course in the following program(s)

AS Engineering Science

Outline of Topics Covered

Outline of Topics Covered in Course

[MAT274TopicOutlineNEW.pdf](#)