



ELEMENTARY DIFFERENTIAL EQUATIONS

21:640:314 (3 credits)

COURSE DESCRIPTION:

Ordinary differential equations, including solution by series and their applications; emphasis on linear equations.

PREREQUISITE:

21:640:136 (Calculus II), or 21:640:156 (Honors Calculus II.)

TEXTBOOK:

"Elementary Differential Equations & Boundary Values Problems," 11th edition, by William Boyce, and Richard Di Prima, published by Wiley.

DEPARTMENT WEB SITE: <http://www.ncas.rutgers.edu/>

THIS COURSE COVERS THE FOLLOWING CHAPTERS AND SECTIONS:

Chapter 2:

2.1-8 First order ODE.

Chapter 3:

3.1-7 Second order linear equations.

Chapter 4:

4.1-4 Higher order linear equations.

Chapter 5:

5.1-8 Series Solutions.

Chapter 6:

6.1-4 Laplace Transform.

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