

MATHEMATICS 146A

ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS

Text: *Elementary Differential Equations and Boundary Value Problems, Seventh Edition*, by W. E. Boyce and R. C. DiPrima

This is the first quarter course in a three quarter sequence covering the theory of linear differential equations, orthogonal expansions, boundary value problems for ordinary and partial differential equations, separation of variables and transform methods.

TOPICS SUGGESTED NO. OF
50 MIN. CLASSES

Selected topics on first order equations	4
(§§ 1.1, 2.3, 2.7, 2.8, 8.1)	
Second and higher order linear equations	7
(§§ 3.1-3.4, 3.6-3.7 briefly, 4.1-4.4)	
Series solutions	6
(§§ 5.1-5.5, 5.8 through p. 284)	
Laplace transforms	6
(§§ 6.1-6.6)	