



Birzeit University-Mathematics Department
Math331-Ordinary Differential Equations

Course Outline

Summer Semester 2018-2019

Textbook: Boyce , W.E. and R.C. Diprima , *Elementary Differential Equations & Boundary Value Problems*. 10th edition, John Wiley & Sons, Inc. 1997.

Course Material:

- Chapter 1: Introduction
 - Chapter 2: First Order Differential Equations
 - Chapter 3: Second Order Linear Differential Equations.
 - Chapter 4: Higher Order Linear Differential Equations.
 - Chapter 5: Series Solution of 2nd Order Linear Differ. Equations.
 - Chapter 6: The Laplace Transform.
 - Chapter 7: Systems of First Order Linear Differential Equations.
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Grading Policy:

Two Hour Exams	55%
Final Exam	45%

Homework Problems

No Make-Up Exams

Section	Problem Number
Chapter One	
1.1	2,6,7,11,22,23,24
1.2	3,9,11,15,16,17
1.3	2,5,6,9,12,22,24
Chapter Two	
2.1	4,8,10,15,19,25,27,31
2.2	2,6,11,14,15,20,21,23,29,30,31
2.3	1,2,4,9,18,20
2.4	3,6,11,14,16,27,28
2.6	3,7,10,14,15,21,23
2.8	1,3,6
Misc.	1-32,36,40,42,46
Chapter Three	
3.1	4,6,10,12,16,20,22
3.2	9,12,15,18,21,22,29,33,38
3.3	12,15,19,22,34,35,36
3.4	4,10,12,14,26,28,32,33,35,40
3.5	2,8,10,13,16,19,22,25
3.6	5,8,10,13,15,17
Chapter Four	
4.1	5,8,14
4.2	14,18,22,31,34
4.3	5,7,9,11,15
Chapter Five	
5.1	5,14,17,21,24,27
5.2	2,3,8,9,12
5.3	3,6,7,12,14
5.4	4,5,6,11,12,14,19,22,26,36,37
5.5	3,4
Chapter Six	
6.1	4,15,22,30,31
6.2	3,4,10,14,18,22,29,30,36,38
6.3	5,10,11,14,17,22,23,25,34,35
6.4	2,3,5,9,12
6.5	1,3,7,10
6.6	4,7,9,12,16,22,24,26
Chapter Seven	
7.5	2,4
7.6	2,3
7.8	1,2