

FINAL EXAM INFORMATION

Sections F1 – F4:

TUESDAY 12/8
11:30AM – 2:20PM
CoC 16

Sections L1 – L4:

THURSDAY 12/10
11:30AM – 2:20PM
Howey L2

Early Exam Takers:

SATURDAY 12/5
2:00PM – 4:50PM
Clough Commons 144

DON'T BE LATE!!! If you are late for the exam there will be no extra time awarded.

CRIB SHEET You are allowed to bring exactly this: one piece of paper (letter size, 8 ½in x 11in) with notes of your choosing (yes, you can use both sides). Note that, for the Laplace transform, a formula sheet will be provided (the same one as for Exam 2).

TOPICS TO FOCUS ON

Chapter 2 Topics:	Book Chapter:	Practice Problems:
Separable Equations	2.1	HW 1 (Part I) Quiz 1 & 4
Separable Equations: Losing Solutions	2.1	Worksheet 2
Linear First Order Equations (Integrating Factors)	2.2	HW 1 (Part II) Quiz 2, 3 & 4
Exact Equations	2.6	HW2 Quiz 2 & 4
Homogeneous & Bernoulli Equations	2.7	HW 3 & HW 4 Quiz 3 & 4
Autonomous Equations	2.5	HW 5
Additional Practice Problems:		
<ul style="list-style-type: none"> ▪ Practice Problems for Exam 1 ▪ Exam 1 (Practice Exam 1, Actual Exam 1 – sections F & L) 		

Chapter 4 Topics:	Book Chapter:	Practice Problems:
Higher Order Linear Equations (Preliminary Theory and Definitions)	4.1 4.2	HW 6
Homogeneous Linear Equations with Constant Coefficients	4.3	HW 7
Method of Undetermined Coefficients	4.5	HW 8 Quiz 5
Variation of Parameters & Cauchy-Euler Equations	4.7	HW 10 Quiz 6
Additional Practice Problems:		
<ul style="list-style-type: none"> ▪ Exam 2 (Practice Exam 2, Actual Exam 2 – sections F & L) 		

Chapter 5 Topics:	Book Chapter:	Practice Problems:
Properties of the Laplace Transform	5.1	HW 12
	5.2	Quiz 7
Inverse Laplace Transform	5.3	HW 13 Quiz 8
Solving ODEs with the Laplace Transform	5.4	HW 13
Laplace Transform of Discontinuous (Unit Step Functions) & Periodic Functions	5.5	HW 14 Quiz 9
ODEs with Discontinuous Forcing Functions	5.6	HW 15
Dirac Delta Function & Convolutions	5.7	HW 16
	5.8	Quiz 10
Solving Linear Systems with the Laplace Transform	5.4 (5.9)	HW 17 (A.)
Additional Practice Problems:		
<ul style="list-style-type: none"> Exam 2 (Practice Exam 2, Actual Exam 2 – sections F & L) 		

Chapter 6 Topics:	Book Chapter:	Practice Problems:
Linear Systems of ODEs	6.1	HW 18
Preliminary Theory and Definitions	6.2	Quiz 11
Homogeneous Linear Systems with Constant Coefficients:		
I. Distinct Eigenvalues (All Real)	6.3	HW 19 Quiz 11
II. Distinct Eigenvalues (With Complex)	6.4	HW 20 Quiz 12
III. Repeated Eigenvalues (2x2)	3.5 (6.7)	HW 20 Quiz 12
Exponential of a Matrix	6.5	HW 21 Quiz 13
Nonhomogeneous Linear Systems (Variation of Parameters for Systems)	6.6	HW 21 Quiz 13

Bonus Topic:	Practice Problems:
Non-Standard Differential Equations (Non-Standard Substitutions)	Lecture Notes 11/24/2015 Quiz 13 Worksheet 4