

Math 275			Proposed Timeline			Spring 2010
Day	Date		Topic	Assignment	Important Dates	
1	M	8-Feb	1.1 1.2 1.3	Examples of Differential Equations Definitions Families of Solutions	# 1 - 11 all # 1 - 21 all # 1 - 14 all	
2	W	10-Feb	1.4 1.5 1.6	Geometric Interpretation The Isoclines of an Equation An Existence Theorem	# 3, 5, 7 # 1, 5	
	M	15-Feb	<i>No classes</i>	<i>President's Day Holiday</i>		
3	W	17-Feb	2.1 2.2 2.3	Separation of Variable Homogeneous Functions Equations with Homogeneous Coefficients	# 1 - 37 ODD # 1 - 20 all # 1 - 35 ODD	LDTP add permits is 2/19
4	M	22-Feb	2.4 2.5 2.6	Exact Equations The Linear Equation of Order One The General Solution of a Linear Equation	# 1 - 27 ODD # 1 - 33 ODD	FD w/out incurring fees is 2/23
				Miscellaneous Exercises	p. 40 - 43, # 1 - 55 ODD	
5	W	24-Feb	5.1 5.2 5.3	Integrating Factors Found by Inspection The Determination of Integrating Factors Substitution Suggested by the Equation	# 1 - 29 ODD # 1 - 19 ODD	
6	M	1-Mar	5.4 5.5 5.6	Bernoulli's Equation Coefficients Linear in Two Variables Solutions Involving Nonelementary Integrals	# 1 - 27 ODD # 1 - 33 ODD # 1 - 7 ODD	
				Miscellaneous Exercises	p. 97 - 98, # 1 - 39 ODD	
7	W	3-Mar	FIRST EXAM	Chapters 1, 2 and 5		LDTD w/out a "W" is 3/5
8	M	8-Mar	6.1 6.2 6.3	The General Linear Equation An Existence and Uniqueness Theorem Linear Independence	# 1 - 9 all	
9	W	10-Mar	6.4 6.5 6.6	The Wronskian General Solution of a Homogeneous Equation General Solution of a nonhomogeneous Equation	# 1 - 14 all	line for Cr/NCr Petition is 3/12
10	M	15-Mar	6.7 6.8 6.9	Differential Operators The Fundamental Laws of Operation Some Properties of Differential Operators	# 1 - 22 all # 1 - 6 all	
11	W	17-Mar	7.1 and 7.2 7.3	Introduction; Auxiliary Equation: Distinct Roots Auxiliary Equation: Repeated Roots	# 1 - 29 ODD # 1 - 29 ODD	
12	M	22-Mar	7.4 7.5 7.6	A Definition of $\exp z$ for Imaginary z The Auxiliary Equation: Imaginary Roots A Note on Hyperbolic Functions	# 1 - 21 all	
				Miscellaneous Exercises	p. 131- 132, # 1 - 51 ODD	
13	W	24-Mar	8.1 8.2	Construction of a Homogeneous Equation Solution of a Nonhomogeneous Equation	# 1 - 33 ODD	
	M	29-Mar	<i>No classes</i>	<i>Spring Break</i>		
	W	31-Mar	<i>No classes</i>	<i>Spring Break</i>		
14	M	5-Apr	8.3 8.4	The Method of Undetermined Coefficients Solution by Inspection	# 1 - 53 ODD # 1 - 49 ODD	
15	W	7-Apr	ECOND EXAM	Chapters 6, 7 and 8		
16	M	12-Apr	9.1 and 9.2 9.3 9.4	Introduction and Reduction of Order Variation of Parameters Solution of $y'' + y = f(x)$	# 1 - 15 all # 1 - 25 ODD	
				Miscellaneous Exercises	p. 163- 164, # 1 - 17 ODD	
17	W	14-Apr	11.1 and 11.2 11.3	Introduction and First-Order Systems with Constant Solution of a First-Order System	# 1 - 9 all	
18	M	19-Apr	11.4 11.5 11.6	Some Matrix Algebra First-Order Systems Revisited Complex Eigenvalues	# 1 - 27 ODD # 1 - 8 all # 1 - 15 all	
19	W	21-Apr	11.7 11.8	Repeated Eigenvalues The Phase Plane	# 1 - 12 all # 1 - 15 ODD	
20	M	26-Apr	14.1 14.2 14.3	The Transform Concept Definition of a Laplace Transform Transforms of Elementary Functions	# 1 - 27 ODD	
21	W	28-Apr	14.4 14.5 14.6 14.7	Sectionally Continuous Functions Functions of Exponential Order Functions of Class A Transforms of Derivatives	# 1 - 19 all	
22	M	3-May	14.8 14.9 14.10	Derivatives of Transforms The Gamma Function Periodic Functions	# 1 - 17 all	
23	W	5-May	THIRD EXAM	Chapters 9, 11 and 14		LDTD with a "W" is 5/7
24	M	10-May	15.1 15.2 15.3	Definition of an Inverse Transform Partial Fractions Initial Value Problems	# 1 - 16 all # 1 - 10 all # 1 - 43 ODD	
25	W	12-May	15.4 15.5 15.6	A Step Function A Convolution Theorem Special Integral Equations	# 1 - 27 ODD # 1 - 11 all # 1 - 15 ODD	
26	M	17-May	15.7 15.8 15.9	Transform Methods and the Vibration of Springs The Deflection of Beams Systems of Equations	# 1 - 4 all # 1 - 15 ODD	
27	W	19-May	17.1 17.2 17.3	Linear Equations and Power Series Convergence of Power Series Ordinary Points and Singular Points	# 1 - 20 all	
28	M	24-May	17.4 17.5	Validity of the Solutions Near an Ordinary Point Solutions Near an Ordinary Point	# 1 - 27 ODD	
29	W	26-May		Review for Finals		Last Day of Instruction
	M	31-May	<i>No classes</i>	<i>Memorial Day Holiday</i>		
	W	2-Jun	FINAL EXAM	Chapters 8:00 - 10:00		