

Course Guide Differential Equations: Spring 2017:

	Topic	My notes	Comments
T: 1-17	First order ODEs	15-24	
TH: 1-19	First order ODEs	25-31	
T: 1-24	Theory / Direction Fields	47-52	
TH: 1-26	Applications	32-46	
T: 1-31	Complex-Valued Functions	54-66	
TH: 2-2	Smooth Operators	54-66	
T: 2-7	Solution of the n-th order problem	67-69	
TH: 2-9	Method of Annihilators & Variation of Parameters	70-84	
T: 2-14	Applications	93-102	
TH: 2-15	Questions ? (turn-in Quiz 1)		
T: 2-21	Test 1 (no notes or note cards permitted)		
TH: 2-23	Systems of ODEs matrices	123-141	
T: 2-28	e-vector technique	142-150	
TH: 3-2	Complex e-vectors	142-150	
T: 3-7	Matrix exp., nonhomogeneous systems	151-164	
TH: 3-9	Laplace Transform technique	165-180	
	Spring Break 3-13 to 3-17		
T: 3-21	Laplace Transform technique	165-180	
TH: 3-23	Discontinuity, Dirac Delta technique	181-194	
T: 3-28	Applications	181-194	
W:	Assessment Day		
TH: 3-30	Questions ? (turn-in Quiz 2)		
T: 4-4	Test 2 (allowed one page of notes)		
TH: 4-6	Series solutions	103-111	
T: 4-11	Cauchy Euler problem & Singular points	87-92, 112-113	
TH: 4-13	Frobenius Method	114-120	
M: 4-17	Easter Monday		
T: 4-18	Heat Equation	201-212	
TH: 4-20	Wave Equation	201-212	
T: 4-25	Laplace's Equation	201-212	
TH: 4-27	Energy Analysis	195-196	
T: 5-2	Discussion of Take-Home Test 3 (turn-in at start of class)		
W: 5-3	Reading Day,		
F: 5-5	Final Exam		Comprehensive: Monday, Friday 5 th , 6:00-8:00pm.

- ❖ **Grades:** Tests 1,2,3 = 3(200pts)=600pts, Final = 300pts, Quiz 1,2 = 2(40pts), Participation 20pts,
- ❖ **Homework is recommended, but, not collected. Proceed wisely.**