

The table below shows the schedule of topics (including WeBWorK assignments) for the semester. It may be updated as the semester progresses.

Session	Date	Section and Topic	Pages	WeBWorK Assignment	Suggested Textbook Problems (not collected)
1	Tuesday, 2/2	1.2 First Order Equations [OPTIONAL: 1.3 Direction Fields for First Order Equations]	7-13 16-17	1-Review	p.14: 1, 2(a-c,e-h), 4(a-f), 5, 6, [optional: p. 14: 9 and p. 21: 1-11]
2	Thursday, 2/4	2.1 Linear First Order Equations	30-41	2-NonHomogeneousLinear	p.41: 1-9 odd, 17-23 odd, 31-37 odd, 38, 40, 42
3	Tuesday, 2/9	2.2 Separable Equations	45-52	3-Separable	p.52: 2, 3, 6, 12, 17-27 odd, 28, 35, 37
4	Thursday, 2/11	2.4 Transformation of Nonlinear Equations into Separable Equations	62-68	4-Bernoulli-nosub 4b-Homogeneous-YoverX	p.68: 1-4, 7-11 odd, 15-18, 23-27 odd
5	Tuesday, 2/16	2.5 Exact Equations	73-79	5-Exact	p.79: 1-21 odd, 29, 30, 33, 34
6	Thursday, 2/18	Exact Equations cont'd Intro to Population Modeling			

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7	Tuesday, 2/23	4.1 Growth and Decay 4.2 Cooling and Mixing 4.3 Elementary Mechanics	130-137 140-147 151-160	6-Modeling1-PopulationAndCooling	p.138: 1-7 odd, 11, 13, 17 p.148: 1-11 odd, 15 p.160: 3, 5, 7, 10
8	Thursday, 2/25	4.1/4.2/4.3 cont'd		6b-Modeling2-FallingObjects	
9	Tuesday, 3/2	First Examination			
10	Thursday, 3/4	Finish Cooling, Intro to Euler's Method			
11	Tuesday, 3/9	3.1 Euler's Method	96-106	7-Trench-EulersMethod	p.106: 1-7 odd, 11-13, 15-19 odd, 20-22
12	Thursday, 3/11	3.2 The Improved Euler Method and Related Methods	109-116	7b-Trench-ImprovedEulersMethod	p.116: 1-7 odd, 11-13, 15-19 odd, 20-22
13	Tuesday, 3/16	3.3 The Runge-Kutta Method	119-124	TBD	p.124: 1-7 odd, 11-13, 15-19 odd, 20-22
14	Thursday, 3/18	5.1 Homogeneous Linear Equations	194-203	6-BasicSecondOrder	p.203: 1-5
15	Tuesday, 3/23	5.2 Constant Coefficient Homogeneous Equations	210-217	7-SecondOrderRepeated 8-SecondOrderComplex	p.217: 1-17 odd, 18-21

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16	Thursday, 3/25	5.3 Nonhomogeneous Linear Equations	221-227	9-Nonhomogeneous	p.227: 1-5 odd, 9-13 odd, 16-20 even, 25-29 odd, 33-37 odd
	Tuesday, 3/30	Spring Break			
	Thursday, 4/1	Spring Break			
17	Tuesday, 4/6	5.4 The Method of Undetermined Coefficients I	229-235	9-Nonhomogeneous	p.235: 1-29 odd
18	Thursday, 4/8	Second Examination			
		Numerical Methods Project			
19	Tuesday, 4/13	DUE TODAY	248-252	10-Trench-ReductionOfOrder	p.253: 1-3, 5, 9, 13, 17, 19, 25, 31
		5.6 Reduction of Order			
20	Thursday, 4/15	5.7 Variation of Parameters	255-262		p.262: 1-5, 7, 11, 13, 31, 33, 34
21	Tuesday, 4/20	6.1 Spring Problems I 6.2 Spring Problems II	268-277 279-284	TBD	p.277: 1, 3, 7-13 odd, 19, 21 p.288: 3, 4, 7-11 odd, 14-16
22	Thursday, 4/22	6.2 Spring Problems II (continued) 6.3 The RLC Circuit	284-287 290-295	TBD	p.288: 13, 17-20 p.295: 1-10

Session	Date	Section and Topic	Pages	WeBWorK Assignment	Suggested Textbook Problems (not collected)
23	Tuesday, 4/27	7.1 Review of Power Series 7.2 Series Solutions Near an Ordinary Point I	307-316 320-328	11-Trench-SeriesSolutions	p.317: 1, 11, 13, 15-17 p.329: 1, 3, 8, 11-13, 19-25 odd p.338: 1-5 odd, 19-23 odd, 33-37 odd, 41-45 odd
24	Thursday, 4/29	7.3 Series Solutions Near an Ordinary Point II	335-338	TBD	
25	Tuesday, 5/4	Third Examination			
26	Thursday, 5/6	7.4 Regular Singular Points Euler Equations	344-346	12-Trench-EulerEquations	p.347: 1-12
27	Tuesday, 5/11	8.1 Introduction to the Laplace Transform	394-402	13-LaplaceTransforms-NoPiecewise	p.403: 1(a,b,d,e), 2(b,c,f,g,h,i), 4, 5, 18
28	Thursday, 5/13	8.2 The Inverse Laplace Transform [NOTE: use the table on p.463 of the textbook to do the homework]	405-412	14-InverseLaplaceTransforms	p.412: 1(a,b,d,e), 2(a-e), 3(a-d), 4(a,d,e), 6(a), 7(a), 8(a,d)
		8.3 Solution of Initial Value Problems [NOTE: use the table on p.463 of the textbook to do the homework]	414-419	16-LaplaceIVP	p.419: 1-31 odd
	Tuesday, 5/18	Reading Day			

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29	Thursday, 5/20	8.6 Convolutions [NOTE: use the table on p.463 of the textbook to do the homework]	441-445 TBD		p.450: 2(a,b,c,i,j,l,n), 3(a-c,e-g)
30	Tuesday, 5/25	Final Examination			

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