

MATH 2214 Syllabus

Fall 2020

TEXTBOOK: Elementary Differential Equations, by W. Kohler and L. Johnson-2nd Edition

Week	Lecture #	Sections	Suggested Homework Problems	PathwaysQuizzes
1(8/24)	1	1.1-1.2	1.2: #1-4, 9, 10, 15, 16, 17, 21, 22, 23	PQ1
	2	1.3	1.3: #1,2,4,6,14-19	
2(8/31)	3	2.10	2.10: #1-3,8	
	4	4.9	4.9: #1,3	
3(9/7)	5	2.6,2.9	2.6: 2, 4, 10, 11, 15; 2.9: #1,4	
	6	2.1,2.2,2.4	2.1: #5-10, 16(a)(No EU Thm); 2.2: #3,4,12,25; 2.4: #1,2,8	
4(9/14)	7	2.2,2.3	2.2: #6,8,15,19,22(Variation of Parameters); 2.3: #1,6	
	8	4.1, 2.1&2.5	4.1: #29; 2.1:#5-10,13,14; 2.5: #5,6,8,11(EU Thms)	
5(9/21)		Review/Project		
		Exam 1		
6(9/28)	9	4.1-4.2, 6.1	4.1: #6,8,14,19; 4.2: #5,7,9,11,12,15 6.1: # 3(a),5(a),9(a),14(a)	
	10	6.1	6.1: (b)(c) for# 3,5,9(EU Thm for Non-LS-Jacobian Matrix)	
7(10/5)	11	4.2	4.2: #3,4,18(EU Thm for Linear System)	
	12	6.2, 4.5	6.2: #4,7,30(Phase planes for (Non)linear system), for #24-27, calculate e-values/e-vectors	
8(10/12)	13	4.3	4.3: #3,6,8,14,16,18	
	14	4.4-4.5	4.4: #1,8,11,16,18,24,25; 4.5: #3,8	
9(10/19)		Review/Project		
		Exam 2		
10(10/26)	15	4.5, 4.6	4.5: #2,8,17(a)(c),19,20; 4.6: #1,11,12,15,17,22(Stability)	
	16	4.5, 4.7	4.7: #2,10,13,17,23	
11(11/2)	17	4.8	4.8: #2,3,7,14,19	
	18	6.2,6.4,6.5	6.2: #4,7; 6.4: #9.10,21,22; 6.5: #1,3,6	
12(11/9)	19	3.1-3.3	3.1: #4,10; 3.2: #2,4,10,15,16,19; 3.3: #2,8,13,16	
	20	3.4-3.5	3.4: #2,6; 3.5: #4,8,12,24,26	
13(11/16)	21	3.9, 3.11-3.12/Review	3.9: #1,2,4,10; 3.11: #4,7; 3.12: #2,5,8,16	
		Exam 3		
14(11/23)		Thanksgiving Break		
15(11/30)	22	3.8	3.8: #1,3,4,8,10,12,15	
	23	3.6, 3.10	3.6: #2,4,8; 3.10: #2	
16(12/7)		(Optional)1st order ODEs in disguise.		
Final Exam: 7pm-9pm, Friday, December 11				PQ3