Math 3113-005 - Introduction to Ordinary Differential Equations - Spring 2002 Class Schedule and Homework Assignments ${\it Class}$ Date Day Homework Topic 1.1 #3,6,13-15,20,22,26,28-29 1.1 Differential equations and solutions 1 Jan 15 Tue 1.2 General and particular solutions 1.2 #5,7-8,10-11,15,21,26,31 2 Jan 17 Thu 1.3 Slope fields, existence and uniqueness 1.3 # 1,3,21-25,31-343 Jan 22 Tue 1.4 Separable equations 1.4 #3,5,17,21,24,28,30,38,48,554 Jan 24 Thu 1.5 First-order linear equations $1.5 \# \overline{3,7,17,24,29,33,37}$ Jan 29 5 Tue 1.6 Substitutions 1.6 # 3,7,9,18-21,29,44-486 Jan 31 Thu 3.1 Second-order linear equations 3.1 # 1,4,9,17-19,23-25,29,33,36,38-39,43-487 Feb 5 Tue 3.2 Linear equations 3.2 # 2,3,5-9,14,18,22-24Feb 7 Thu 8 continue Feb 12* Tue Exam I 9 Feb 14 Thu 3.3 Homogeneous equations 3.3 # 6-8,10-11,18-19,23,25,33,35,39-4210 Feb 19 Tue Vibrations 3.4 # 5 - 8,13 - 18Feb 21 Thu 11 3.5Nonhomogeneous equations 3.5 # 5,7,9,17,21-24,32-33,47,5112 Feb 26 Tue Boundary-value problems 3.8 3.8 # 2-4,7-9,1313 Feb 28 Thu continue First-order systems 4.1 # 1,4,10-13,16-17,21-2214 Mar 5 Tue 15 Mar 7 4.2 The Method of Elimination 4.2 #1,3,7,13,21-22 Thu 16 Mar 12 Tue continue Mar 14* Thu Exam II Mar 16-Spring Break Mar 24 Mar 26 Laplace transforms 7.1 # 1-4,7-9,11,14-18,20,23,25-2917 Tue 7.118 Mar 28 Thu 7.2 Initial value problems 7.2 # 2 - 3,5 - 6,11 - 13,17,19,21,28 - 31Mar 29 Fri Last day to withdraw without permission of Dean 7.3 # 2 - 3,6 - 7,11,15,27,30 - 32Apr 2 Tue 19 7.3 Partial fractions 20 Apr 4 Thu 7.4 Calculus of Laplace transforms 7.4 #2-3.5-7.9.15-16.19-20.23.25-26.33.36-3721 Apr 9 Tue 7.5 Periodic and piecewise-cont functions 7.5 # 1-3,7,11-14,19-20,25-27,31-3322 Apr 11 Thu Impulses and delta functions 7.6 # 1,4-6,9-11,13,1423 Apr 16 Tue continue Apr 18* Thu Exam III 24 Apr 23 Tue Power series methods 8.1 # 2 - 4.9, 12 - 13, 15, 17, 1925 Apr 25 Thu Ordinary points 8.2 # 1.3.12.16.23.258.2 8.3 Regular singular points 26 Apr 30 Tue 8.3 #2-6,9,12,14,17-19,38

May 2

May 8

Thu

Wed

continue

Final Exam (1:30-3:30 p. m.)

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^{*} Homework notebooks due.