| Math 3113-005 - Introduction to Ordinary Differential Equations - Fall 2003 Tentative Class Schedule and Homework Assignments |  |  |  |  |  |
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| Class | Date | Day |  | Topic | Homework |
| 1 | Aug 25 | Mon | 1.1 | Differential equations and solutions | 1.1 \#3,6,13-15,20,22,26,28-29 |
| 2 | Aug 27 | Wed | 1.2 | General and particular solutions | 1.2 \#5,7-8,10-11,15,19-22,25,30,35 |
| 3 | Aug 29 | Fri | 1.3 | Slope fields, existence and uniqueness | 1.3 \# 1,3,11-15,27-29 |
| 4 | Sep 3 | Wed | 1.4 | Separable equations | 1.4 \# 3,5,17,21,24,28,34,42,54,61 |
| 5 | Sep 5 | Fri | 1.5 | First-order linear equations | $1.5 \# 3,7,17,24,29,33,37$ |
| 6 | Sep 8 | Mon | continue |  |  |
| 7 | Sep 10 | Wed | 1.6 | Substitutions | 1.6 \#3,7,9,18-21,29,44,45,49,52,56-60 |
| 8 | Sep 12 | Fri | continue |  |  |
| 9 | Sep 15 | Mon | 3.1 | Second-order linear equations | 3.1 \# 1,4,9,17-19,23-25,29,33,36,38-39,43-48 |
| 10 | Sep 17 | Wed | continue |  |  |
| 11 | Sep 19 | Fri | 3.2 | Linear equations | 3.2 \# 2,3,5-9,14,18,22-24 |
| 12 | Sep 22 | Mon | continue |  |  |
|  | Sep 24 | Wed | Exam I |  |  |
| 13 | Sep 26 | Fri | 3.3 | Homogeneous equations | 3.3 \#6-8,10-11,18-19,23,25,33,35,39-42 |
| 14 | Sep 29 | Mon | continue |  |  |
| 15 | Oct 1 | Wed | 3.4 | Vibrations | 3.4 \# 5-8,13-18 |
| 16 | Oct 3 | Fri | continue |  |  |
| 17 | Oct 6 | Mon | 3.5 | Nonhomogeneous equations | 3.5 \# 5,7,9,17,21-24,32-33,47,51 |
| 18 | Oct 8 | Wed | continue |  |  |
| 19 | Oct 13 | Mon | 3.8 | Boundary-value problems | 3.8 \#2-4,7-9,13 |
| 20 | Oct 15 | Wed | continue |  |  |
| 21 | Oct 17 | Fri | 4.1 | First-order systems | 4.1 \# 1,4,10-13,16-17,21-22 |
| 22 | Oct 20 | Mon | continue |  |  |
| 23 | Oct 22 | Wed | 4.2 | The Method of Elimination | 4.2 \# 1,3,7,13,21-22 |
| 24 | Oct 24 | Fri | continue |  |  |
|  | Oct 27 | Mon | Exam II |  |  |
| 25 | Oct 29 | Wed | 7.1 | Laplace transforms | 7.1 \# 1-4,7-9,11,14-18,20,23,25-29 |
| 26 | Oct 31 | Fri | continue |  |  |
|  | Oct 31 | Fri | Last day to withdraw without permission of Dean (see academic calendar) |  |  |
| 27 | Nov 3 | Mon | 7.2 | Initial value problems | 7.2 \#2-3,5-6,11-13,17,19,21,28-31 |
| 28 | Nov 5 | Wed | continue |  |  |
| 29 | Nov 7 | Fri | 7.3 | Partial fractions | 7.3 \# 2-3,6-7,11,15,27,30-32 |
| 30 | Nov 10 | Mon | 7.4 Calculus of Laplace transforms |  | 7.4 \# 2-3,5-7,9,15-16,19-20,23,25-26,33,36-37 |
| 31 | Nov 12 | Wed | continue |  |  |
| 32 | Nov 14 | Fri | 7.5 | Periodic and piecewise-cont functions | 7.5 \# 1-3,7,11-14,19-20,25-27,31-33 |
| 33 | Nov 17 | Mon | continue |  |  |
| 34 | Nov 19 | Wed | 7.6 | Impulses and delta functions | 7.6 \# 1,4-6,9-11,13,14 |
| 35 | Nov 21 | Fri | continue |  |  |
|  | Nov 24 | Mon | Exam III |  |  |
| 36 | Dec 1 | Mon | 8.1 | Power series methods | 8.1 \# 2-4,9,12-13,15,17,19 |
| 37 | Dec 3 | Wed | 8.2 | Ordinary points | 8.2 \#1,3,12,16,23,25 |
| 38 | Dec 5 | Fri | continue |  |  |
| 39 | Dec 8 | Mon | 8.3 | Regular singular points | 8.3 \# 2-6,9,12,14,17-19,38 |
| 40 | Dec 10 | Wed | continue |  |  |
| 41 | Dec 12 | Fri | review |  |  |
|  | Dec 15 | Mon | Final Exam (8:00-10:00 am) |  |  |

