Math 20580 schedule

| January 15 | Lay 1.1-1.2: Systems, row reduction |
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| 17 | 1.3 Vector equations |
| 20 | No math 20580 class |
| 22 | 1.4 The matrix equation |
| 24 | 1.5 Solution sets |
| 27 | 1.7 Linear independence |
| 29 | 1.8-1.9: Linear transformations |
| 31 | 2.1-2.2: Matrix operations and inverses |
| February 3 | 2.3 Characterizations of invertible matrices |
| 5 | 2.8 Subspaces |
| 7 | 2.9 Dimension and rank |
| 10 | 3.1: Determinants |
| 12 | 3.2: More on Determinants |
| February 13 | Exam I: 8:00-9:15 a.m., covers material from Lay 1.1-2.9 inclusive |
| 14 | 3.3 Cramer's Rule |
| 17 | 4.1-4.2: Vector spaces and subspaces, null spaces and column spaces |
| 19 | 4.3 Linear independence and bases |
| 21 | 4.4 Coordinates |
| 24 | 4.5 Dimension of vector space |
| 26 | 4.6-4.7: Rank and changes of bases |
| 28 | 5.1-2: Eigenvalues and characteristic equations |
| March 2 | 5.3 Diagonalization |
| 4 | 5.4 Eigenvectors |
| March 5 | Exam II: 8:00-9:15 a.m., covers material Lay 3.1-5.2 inclusive |
| 6 | 5.5 Complex eigenvalues |
| March 7-15 | Spring Break |
| 16 | Classes cancelled |
| 18 | Classes cancelled |
| 20 | Classes cancelled |
| 23 | 6.1-6.2: Inner product and orthogonality |
| 25 | 6.3 Orthogonal projections |
| 27 | 6.4 The Gram-Schmidt process |
| 30 | 6.5 The least squares method |
| April 1 | Boyce \& DiPrima 1.1-1.2: Solutions to Diff Equations, direction fields |
| 3 | 1.3 Classification of differential equations |
| 6 | 2.1-2.2: Integrating factors, separable equations |
| 8 | 2.3 Modeling |
| April 10-13 | Easter holiday |
| 15 | Review and leeway |
| April 16 | Exam III, covers material Lay 5.3-B\&D 2.2 inclusive |
| 17 | 2.4 Linear and non-linear equations |
| 20 | 2.5 Autonomous equations |
| 22 | 2.6 Exact equations and integrating factors |
| 24 | 3.1 Homogeneous equations with constant coefficients |
| 27 | 3.2 Linear homogeneous equations; Wronskian |
| 29 | 3.3 Complex roots |
|  | Final Reading: 3.4-3.6 |
| May 7 | Final Exam, covers material Lay 1.1-B\&D 3.3 inclusive |

