| | Math 20580 schedule | Spring 2019 |
|---|---|---|
| January 16 | Lay 1.1–1.2 System, row reduction | |
| 18 | 1.3 Vector equations | |
| 21 | No math 20580 class. | |
| 23 | 1.4 The matrix equation | |
| 25 | 1.5 Solution sets | |
| 28 | 1.7 Linear independence | |
| 30 | All Math 20580 classes cancelled | |
| February 1 | 1.8–1.9 Linear transformations | |
| 4 | 2.1–2.2 Matrix operations and inverses | |
| 6 | 2.3 Characterizations of invertible matrices | |
| 8 | 2.8 Subspaces | |
| 11 | 2.9 Dimension and rank | |
| 13 | 3.1 Determinants | |
| **February 14** | **Exam I: 8:00–9:15 a.m., covers material from Lay 1.1–2.9 inclusive** | |
| 15 | 3.2 More on Determinants | |
| 18 | 3.3 Cramers Rule | |
| 20 | 4.1–4.2 Vector spaces and subspaces, null spaces and column spaces | |
| 22 | 4.3 Linear independence and bases | |
| 25 | 4.4 Coordinates | |
| 27 | 4.5 Dimension of vector space | |
| March 1 | 4.6–4.7 Rank and changes of bases | |
| 4 | 5.1–2 Eigenvalues and characteristic equations | |
| 6 | 5.3 Diagonalization | |
| **March 7** | **Exam II: 8:00–9:15 a.m., covers material from Lay 3.1–5.2 inclusive** | |
| 8 | 5.4 Eigenvectors | |
| **March 9–17** | **Spring Break** | |
| 18 | 5.5 Complex eigenvalues | |
| 20 | 6.1-6.2: Inner product and orthogonality | |
| 22 | 6.3 Orthogonal projections | |
| 25 | 6.4 The Gram-Schmidt process | |
| 27 | 6.5 The least squares method | |
| 29 | Boyce & DiPrima 1.1-1.2 Solutions to Diff Equations, direction fields. | |
| April 1 | 1.3 Classifications of equations | |
| 3 | 2.1-2.2 Integrating factors, separable equations. | |
| 5 | 2.3 Modeling | |
| 8 | 2.4 Linear and non-linear equations | |
| 10 | 2.5 Autonomous equations | |
| 12 | 2.6 Exact equations and integrating factors | |
| 15 | 3.1 Homogeneous equations with constant coefficients | |
| 17 | 3.2 Linear homogeneous equations; Wronskian | |
| **April 18** | **Exam III: 8:00–9:15 a.m., covers material Lay 5.3–B&D 3.1 inclusive** | |
| **April 19–April 22** | **Easter holiday** | |
| 24 | 3.3 Complex roots | |
| 26 | 3.4 Repeated roots | |
| 29 | 3.5 Undetermined coefficients | |
| May 1 | 3.6 Variation of parameters | |
| | Final Reading: 3.7-3.8 Vibrations | |
| **May 8** | **Final Exam 1:45–3:45 p.m., covers all material except B&D 3.7–3.8** | |