## Math 205 Winter 2009 Schedule

| Week Starting | Text Sections | Other Activities |
| :---: | :---: | :---: |
| Jan 12 | 1.1: Systems of Linear Equations <br> 1.2: Row Reduction and Echelon Forms 1.3: Vector Equations |  |
| Jan 19 | 1.4: The Matrix Equation <br> 1.5: Solution Sets of Linear Systems <br> 1.7: Linear Independence | HW 1 due on Fri, Jan 23 |
| Jan 26 | 1.7: (contd) <br> 1.8: Introduction to Linear Transformations <br> 1.9: The Matrix of a Linear Transformation <br> 2.1: Matrix Operations | HW 2 due on Fri, Jan 30 |
| Feb 2 | 2.2: The Inverse of a Matrix <br> 2.3: Characterizations of Invertible Matrices <br> 2.8: Subspaces of $\mathrm{R}^{n}$ | HW 3 due on Fri, Feb 6 |
| Feb 9 | 2.8: (contd) | Exam I on Fri, Feb 13 |
| Feb 16 | Winter Recess |  |
| Feb 23 | 2.9: Dimension and Rank <br> 3.1: Introduction to Determinants <br> 3.2: Properties of Determinants | HW 4 due on Fri, Feb 27 |
| Mar 2 | 5.1: Eigenvectors and Eigenvalues <br> 5.2: The Characteristic Equation <br> 5.3: Diagonalization | HW 5 due on Fri, Mar 6 |
| Mar 9 | 5.4: Eigenvectors and Linear Transformations <br> 6.1: Inner Product, Length, and Orthogonality | HW 6 due on Fri, Mar 13 |
| Mar 16 | 6.2: Orthogonal Sets | Exam II on Fri, Mar 20 |
| Mar 23 | 6.3: Orthogonal Projections <br> 6.5: Least-Squares Problems <br> 7.1: Diagonalization of Symmetric Matrices | HW 7 due on Fri, Mar 27 |
| Mar 30 | 7.2: Quadratic Forms Some topics from chapter 4 | HW 8 due on Fri, Apr 3 |
| Apr 6 | Chapter 4 (contd) |  |
| Apr 13 | Final Exam (Thursday, April 16, 10.30 a.m.-12 | p.m.) |

