

# Schedule

Table 1: 2210 Class Schedule

| Date  | Sections | Topics  |
|-------|----------|---|
| 8/27  | 1.1-1.2  | Intro to Linear Algebra, systems of equations       |
| 8/29  | 1.3      | Vector equations                                    |
| 9/3   | 1.4-1.5  | Matrix equations; solution sets                     |
| 9/5   | 1.7      | Linear independence                                 |
| 9/10  | 1.8-1.9  | Linear transformations and the associated matrix    |
| 9/12  | 2.1      | Matrix operations                                   |
| 9/17  | 2.2-2.3  | Inverses and invertible matrices                    |
| 9/19  | 3.1-3.2  | Determinants  |
| 9/24  | 3.3-4.1  | Cramer's Rule, Volumes; Vector Spaces and Subspaces |
| 9/26  |          | Exam Review   |
| 10/1  |          | First Exam  |
| 10/3  |          | No class (Rosh Hashanah)                            |
| 10/8  | 4.2      | Null space, column space                            |
| 10/10 | 4.3-4.4  | Bases and linear independence; coordinates          |
| 10/15 | 4.5      | Dimension   |
| 10/17 | 4.6-4.7  | Rank, change of basis                               |
| 10/22 | 5.1      | Eigenvectors, eigenvalues                           |
| 10/24 | 5.2-5.3  | Characteristic polynomials, diagonalization         |
| 10/29 | 5.4      | Eigenvector and linear transformations              |
| 10/31 |          | Review  |
| 11/5  |          | Exam 2  |
| 11/7  | 6.1-6.2  | Inner products, orthogonality                       |
| 11/12 | 6.3      | Orthogonal Projection                               |
| 11/14 | 6.4-6.5  | Gram-Schmidt, least squares                         |
| 11/19 | 7.1      | Diagonalization of symmetric matrices               |
| 11/21 | 7.2-7.3  | Quadratic forms, constrained optimization           |

| Date            | Sections | Topics                       |                   |
|-----------------|----------|------------------------------|-------------------|
| 11/26-<br>11/28 |          | No Class; Thanksgiving break |                   |
| 12/3            |          | Singular Value Decomposition |                   |
| 12/5            |          | Review/Catch-up              |                   |
| 12/9-12/11      |          | Finals Period                | Final Exam<br>TBD |
| 12/12           |          | Reading Day                  |                   |
| 12/13-<br>12/15 |          | Finals Period resumes        | Final Exam<br>TBD |