<table>
<thead>
<tr>
<th>Week 1: (January 6-10)</th>
<th>Week 9: (March 2-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction/Syllabus</td>
<td>4.5 The dimension of a vector space</td>
</tr>
<tr>
<td>1.1 Systems of Linear Equations</td>
<td>4.6 Rank</td>
</tr>
<tr>
<td>1.2 Row reduction and Echelon forms</td>
<td>4.7 Change of basis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 2: (January 13-17)</th>
<th>Week 10: (March 16-20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3 Vector equations</td>
<td>5.1 Eigenvectors and eigenvalues</td>
</tr>
<tr>
<td>1.4 Matrix equations</td>
<td>5.2 The characteristic equation</td>
</tr>
<tr>
<td>1.5 Solution sets of linear systems</td>
<td>Midterm 2 (Friday)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 3: (January 20-24)</th>
<th>Week 11: (March 23-27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6 Applications of linear systems</td>
<td>5.3 Diagonalization</td>
</tr>
<tr>
<td>1.7 Linear independence</td>
<td>5.4 Eigenvectors and linear transformations</td>
</tr>
<tr>
<td>1.8 Introduction to linear transformations</td>
<td>5.5 Complex eigenvalues</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 4: (January 27-31)</th>
<th>Week 12: (March 30-April 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.9 The matrix of a linear transformation</td>
<td>5.6 Discrete dynamical systems</td>
</tr>
<tr>
<td>2.1 Matrix operations</td>
<td>6.1 Inner product, length and orthogonality</td>
</tr>
<tr>
<td>2.2 The inverse of a matrix</td>
<td>6.2 Orthogonal sets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 5: (February 3-7)</th>
<th>Week 13: (April 6-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3 Characterizations of invertible matrices</td>
<td>6.3 Orthogonal projections</td>
</tr>
<tr>
<td>2.4 Partitioned matrices</td>
<td>6.4 Gram-Schmidt process</td>
</tr>
<tr>
<td>Midterm 1 (Friday)</td>
<td>6.5 Least squares problems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 6: (February 10-14)</th>
<th>Week 14: (April 13-17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 Matrix factorizations</td>
<td>7.1 Diagonalization of symmetric matrices</td>
</tr>
<tr>
<td>3.1 Introduction to determinants</td>
<td>7.2 Quadratic Forms</td>
</tr>
<tr>
<td>3.2 Properties of determinants</td>
<td>7.3 Constrained optimization</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 7: (February 17-21)</th>
<th>Week 15: (April 20-24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3 Cramer's rule, volume and linear transformations</td>
<td>Project 2 Poster Presentations</td>
</tr>
<tr>
<td>4.1 Vector spaces and subspaces</td>
<td>7.4 The singular value decomposition</td>
</tr>
<tr>
<td>4.2 Null spaces, column spaces and linear transformations</td>
<td>Final Review</td>
</tr>
<tr>
<td>4.3 Linearly independent sets and bases</td>
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</tr>
<tr>
<td>4.4 Coordinate systems</td>
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</tbody>
</table>

| Spring Break Week: (March 9-13) |  |
|----------------------------------|  |
| Spring Break |  |

| Week 8: (February 24-28) |  |
|-----------------------|  |
| 4.2 Null spaces, column spaces and linear transformations |  |
| 4.3 Linearly independent sets and bases |  |
| 4.4 Coordinate systems |  |

Last Day to Drop: Friday, January 17
Last Day to Withdraw: Friday, March 6

**Extra Final Review:**
Tuesday, April 28, 10:00 to 11:30 am

**Final Exam:**
Wednesday, April 29, 8:00 to 10:00 am