

| Math 342 Spring 2015 | | | | | | |
|-------------------------------------------------------------------------------|----|---|---------|-----------------------------------------|-----------------------------------------|---------|
| This is a tentative schedule. The sections, topics, and test days may change. | | | | | | |
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| | | | Section | Topic | Homework problems | Due |
| Jan | 21 | w | 1.1 | Systems of linear equations | 1, 7, 13, 15, 19-22, 27 | |
| Jan | 23 | f | 1.2 | Row reduction and echelon forms | 1, 3, 7-11, 15, 19,23, 27, 29 | |
| Jan | 26 | m | 1.3 | Vector equations | 1, 5, 7, 9, 11-13, 17, 21, 25, 26 | |
| Jan | 28 | w | 1.4 | Matrix equations | 1, 7, 11, 13-15, 19, 25, 27, 31 | |
| Jan | 30 | f | 1.5 | Solution sets for linear equations | 1, 5, 7, 11, 13, 17, 19, 27, 29-31 | 1.1-1.3 |
| Feb | 2 | m | 1.6 | Applications | 6, 9, 13 | |
| Feb | 4 | w | 1.7 | Linearly independence | 1, 7, 19, 23, 27-29, 31, 35 | |
| Feb | 6 | f | 1.8 | Linear transformations | 1, 3, 7, 9, 15, 17, 19, 25, 31 | |
| Feb | 9 | m | | Review | | |
| Feb | 11 | w | | Test | | 1.4-1.8 |
| Feb | 13 | f | 2.1 | Matrix operations | 1, 5, 9, 13, 19, 21, 23, 25, 27 | |
| Feb | 16 | m | | President's Day No Class | | |
| Feb | 18 | w | 2.2 | Inverses | 1, 7, 11, 13, 17-19, 21, 23, 25, 35 | |
| Feb | 20 | f | 2.3 | Characterization of invertible matrices | 1, 3, 5, 7, 13, 15-17, 19 | |
| Feb | 23 | m | 2.4 | Partitioned matrices | 1, 5, 7, 11, 13, 14, 21 | |
| Feb | 25 | w | 2.5 | Matrix factorization | 1, 5, 7, 11 | |
| Feb | 27 | f | 3.1 | Determinants | 1, 3, 9, 13, 15, 19, 23, 25-31, 41 | 2.1-2.4 |
| Mar | 2 | m | 3.2 | Properties of determinants | 1, 9, 13, 15, 21, 25, 29, 31, 33 | |
| Mar | 4 | w | | catch up if needed | | |
| Mar | 6 | f | 4.1 | Vector spaces/subspaces | 1, 3, 5, 9, 11, 21, 23, 27 | |
| Mar | 9 | m | 4.2 | Null/column spaces | 1, 3-5, 9, 11, 17-19, 23, 29, 31 | |
| Mar | 11 | w | 4.3 | Linearly independent sets and Basis | 1, 5, 7, 9, 11, 15, 22, 23, 25, 31 | |
| Mar | 13 | f | 4.4 | Coordinate systems | 1, 3, 7, 9, 13, 17, 19, 21, 25, 27 | 2.5-4.2 |
| Mar | 16 | m | 4.5 | Dimensions of vector spaces | 1,5, 7, 9, 11, 13, 21, 23 | |
| Mar | 18 | w | 4.6 | Rank | 1, 5, 7, 11, 13, 19, 21, 25 | |
| Mar | 20 | f | 4.7 | Change of basis | 1, 5, 7, 9, 13 | |
| Mar | 23 | m | | Review | | |
| Mar | 25 | w | | Test | | 4.3-4.7 |
| Mar | 27 | f | 5.1 | Eigenvalues/vectors | 1, 3, 7, 9, 13, 15, 17, 23 , 25, 27, 31 | |
| Mar | 30 | m | | Spring Break | | |
| Apr | 1 | w | | Spring Break | | |

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| Apr | 3 | f | | Easter | | |
| Apr | 6 | m | | Easter | | |
| Apr | 8 | w | 5.2 | Characteristic equations | 1, 5, 15, 19 | |
| Apr | 10 | f | 5.3 | Diagonalization | 1, 3, 7, 11, 17, 23, 27 | |
| Apr | 13 | m | 5.4 | Linear Transformations | 1, 5, 7, 11, 13, 21 | |
| Apr | 15 | w | 5.5 | Complex Eigenvalues | 1, 5, 9, 13 | |
| Apr | 17 | f | 6.1 | Inner products/orthogonality | 1, 3, 7, 11, 13, 15, 23, 25, 27 | 5.1-5.4 |
| Apr | 20 | m | 6.2 | Orthogonal sets | 1, 5, 9, 11, 13, 14, 17, 27 | |
| Apr | 22 | w | 6.3 | Orthogonal projections | 1, 3, 7, 9, 11, 13, 19, 20 | |
| Apr | 24 | f | 6.5 | Least Squares | 1, 3, 5, 9, 13, 15, 19 | |
| Apr | 27 | m | | Review | | |
| Apr | 29 | w | | Test | | 5.5-6.5 |
| May | 1 | f | 7.1 | Diagonalization of symmetric matrices | 1, 5, 7, 11, 13, 17, 23, 27, 29 | |
| May | 4 | m | 7.2 | Quadratic forms | 1, 3, 5, 9, 13, 23, 24, 27 | |
| May | 6 | w | | Review | | |
| May | 8 | f | | Review | | |
| May | 11 | | | Final: 10:30 – 12:30 | | 7.1-7.2 |
| May | 12 | | | | | |
| May | 13 | | | | | |
| May | 14 | | | | | |