Proposed Course Schedule (subject to change):

| Monday | Wednesday | Friday |
| :---: | :---: | :---: |
| $8 / 30$ <br> Sect. 1.1 <br> Overview of Vectors Vector Addition | $9 / 1$ <br> Sect. 1.1/1.2 <br> Overview of Vectors <br> Parallel Vectors, Span, Basis in R ${ }^{\text {n }}$ | $9 / 3$ <br> Sect. 1.2 <br> Dot Product, Norm, Angle, Perpendicular Vectors |
| 9/6 Labor Day - no class | 9/8 <br> Sect. 1.3 <br> Linear Systems, Matrix Notation Matrix Addition, Scalar Multiplication | 9/10 <br> Sect. 1.3 <br> Matrix Multiplication Properties HW \#1 assigned (due 9/15) |
| $9 / 13$ <br> Sect. 1.4 <br> Linear Systems <br> Solution Set, Augmented System | Sect. 1.4 <br> Gaussian Elimination <br> HW \#1 due | Sect. 1.4 <br> Gauss-Jordan Elimination Elementary Matrices HW \#2 assigned (due 9/22) |
| $9 / 20$ <br> Sect. 1.5 <br> Inverses | 9/22 <br> Sect. 1.5 <br> Inverses \& Systems, Elementary Matrices <br> HW \#2 due | 9/24 <br> Sect. 4.2 <br> Calculating Determinants using Cofactor Expansion \& Permutation |
| Sect. 4.2 <br> Calculating Determinants using Row Reduction/ Properties | 9/29 <br> Sect. 4.3 <br> Adjoint of A Cramer's Rule HW \#3 assigned (due 10/4) | $10 / 1$ <br> Sect. 4.1 <br> Applications of Determinants |
| $10 / 4$ <br> Review <br> HW \#3 due | $10 / 6$ Test \#1 <br>  $(1.1-1.5,4.1-4.3)$ <br>   | 10/8 <br> Sect. 5.1 <br> Finding Eigenvalues/Eigenvectors |
| $10 / 11$ <br> Sect. 5.1/5.2 <br> Eigenvalues/Eigenvectors cont. Diagonalizable Matrices | $10 / 13$ <br> Sect. 5.2 <br> Diagonalizable Matrices <br> HW \#4 assigned (due 10/20) | $10 / 15$ <br> Sect. 3.1 <br> Vector Spaces <br> Topics for Extra Credit Due!! |
| $\begin{gathered} \text { 10/18 } \\ \\ \text { Fall Break - no class } \end{gathered}$ | 10/20Sect. 1.6/3.2/2.1 <br> Subspaces <br> HW \#4 due | 10/22Sect. 1.6/3.2/2.1 <br> Subspaces (cont). <br> HW \#5 assigned (due 10/27) |
| $\begin{array}{cc} \hline 10 / 25 & \\ \text { Sect. 1.6/3.2/2.1 } \\ \text { Linear Independence, Span } \end{array}$ | $\begin{array}{cc} \hline 10 / 27 & \\ & \text { Sect. 1.6/3.2/2.1 } \\ \text { Basis } \\ & \text { HW \#5 due } \\ \hline \end{array}$ | $10 / 29$ <br> Review |
| $\begin{aligned} & \hline 11 / 1 \\ & \text { Test \#2 } \\ & (5.1-5.2,(1.6,2.1,3.1-3.2) \text { (portion)) } \end{aligned}$ | ```11/3 Sect. 1.6/3.2/2.1/2.2 Row Space, Column Space, Rank``` | $\begin{array}{cc} \hline 11 / 5 & \\ \quad \text { Sect. 1.6/3.2/2.1/2.2 } \\ \text { Row Space, Column Space cont., Rank } \end{array}$ |
| $\begin{gathered} 11 / 8 \\ \text { Sect. 1.6/3.2/2.1/2.2 } \\ \text { Nullspace, Nullity, Rank Equation } \\ \text { HW \#6 assigned (due 11/15) } \\ \hline \end{gathered}$ | 11/10 <br> Sect. 3.3 <br> Coordinate Vectors Relative to a Basis | 11/12 <br> Sect. 3.3 <br> Change of Basis |
| 11/15 <br> Sect. 2.3/3.4 <br> Definition of Linear Transformation Is a Mapping a Linear Transformation <br> HW \#6 due | 11/17 <br> Sect. 2.3/3.4 <br> Standard Matrices for Linear <br> Transformations in $\mathrm{R}^{\mathrm{n}}$, Composite Transformations <br> HW \#7 assigned (due 11/22) | 11/19 <br> Sect. 2.3/3.4 <br> Kernel, Range, Inverse Linear Transformations |
| 11/22 <br> Sect. 2.3/3.4 <br> Standard Matrices of General Linear <br> Transformations HW \#7 due | 11/24 <br> Sect. 2.3/3.4 Isomorphism <br> HW \#8 assigned (due 12/1) | 11/26 Thanksgiving - No class |


| 11/29 | 12/1 | 12/3 |
| :---: | :---: | :---: |
| Sect. 2.4 <br> Projections, Rotations, etc. in $\mathrm{R}^{\mathrm{n}}$ | Review <br> HW \#8 due | Test \#3 <br> ((1.6, 2.1, 3.2)(portions), 2.2, 3.3-3.4) |
| 12/6 | 12/8 | 12/10 |
| Extra Credit Presentations | Extra Credit Presentations | Review for Final Exam |
| 12/13 |  |  |
| $\begin{gathered} \text { Final Exam } \\ 3: 50-5: 50 \end{gathered}$ |  |  |

