Math 1502 C and J
Spring 2004

## A. D. Andrew

SHE refers to Calculus, one and several variables, ninth edition, by Salas, Hille, and Etgen. CC refers to Beginning with Linear Algebra, Fall 2003 edition, by Carlen and Carvalho

| Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: |
| 5 January Intro. SHE 8.7 Numerical Integration | 6 | $7$ <br> SHE 8.8 Differential Equations | 8 | 9 <br> SHE 8.9 Differential Equations |
| 12 <br> SHE 10.5-6. <br> L'Hospital's Rule | 13 | 14 <br> SHE 10.7 Improper Integrals | 15 <br> Tell TA you Computer Project Team members | 16 SHE 11.5 Taylor Polynomials Polynomials |
| $\begin{array}{\|l} \hline 19 \\ \text { HOLIDAY } \end{array}$ | 20 | $\begin{aligned} & \hline \mathbf{2 1} \\ & \text { SHE 11.6 Taylor } \\ & \text { Polynomials } \end{aligned}$ | 22 | 23 <br> SHE 11.1 Infinite Series |
| 26 <br> SHE 11.2-11.3 Convergence Tests | 27 | 28 <br> SHE 11.4 Absolute and Conditional Convergence | 29 | $\begin{array}{\|l\|} \hline \text { 30 } \\ \text { SHE 11.7 Power } \\ \text { Series } \end{array}$ |
| 2 February SHE 11.6-7 Power Series | 3 | $\begin{array}{\|l} \hline 4 \\ \text { SHE } 11.8 \text { Power } \\ \text { Series } \end{array}$ | $\begin{array}{\|l} \hline \mathbf{5} \\ \text { HOUR TEST } 1 \end{array}$ | 6 <br> CC Chap 1: Vector operations and linear transformations |
| 9 <br> CC Chap 1: Vector operations and linear transformations | 10 | 11 <br> CC Chap 1:: Matrix product | 12 | 13 <br> DROP DAY <br> CC Chap 1, SHE 12.4 <br> Dot product, geometry <br> of $\mathbf{R}^{n}$ |
| 16 <br> SHE 12.512 .7 <br> Geometry of $\mathbf{R}^{n}$ | 17 | 18 CC Chap 1: Matrix multiplication revisited | 19 COMPUTER PROJECT 1 Due | 20 CC Chap 1: Linear transformations on $\mathbf{R}^{n}$ |
| 23 <br> CC Chap 2: Linear equations | 24 | 25 <br> CC Chap 2: Systems of linear equations | 10 | $\begin{array}{\|l\|} \hline \mathbf{1 1} \\ \text { CC Chap 2: Row } \\ \text { reduction } \end{array}$ |
| 1 March Inverse matrices | 2 | $3$ <br> CC Chap 2: The LU factorization | 4 | $5$ <br> CC Chap 3: <br> Subspaces and normal equations |
| $\sqrt{8}$ <br> SPRING BREAK | $\begin{array}{\|l\|} \hline \mathbf{9} \\ \text { SPRING BREAK } \end{array}$ | 10 SPRING BREAK | 11 SPRING BREAK | 12 SPRING BREAK |
| 15 CC Chap 3: Linear independence, bases | 16 | 17 CC Chap 3: Dimension | $\begin{array}{\|l} \hline 18 \\ \text { HOUR TEST } 2 \end{array}$ | 25 <br> CC Chap 3: Bases for images of transformations |


| $\mathbf{2 2}$ <br> CC Chap 3: Bases for <br> images of <br> transformations | $\mathbf{2 3}$ | $\mathbf{2 4}$ <br> CC Chap 3: <br> Orthogonal Projections | $\mathbf{2 5}$ | $\mathbf{2 6}$ <br> CC Chap 3: Gram- <br> Schmidt process |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 9}$ <br> CC Chap 3: QR, <br> Least squares | $\mathbf{3 0}$ | $\mathbf{3 1}$ <br> CC Chap 3 Least <br> squares | $\mathbf{1}$ | $\mathbf{2}$ <br> CC Chap 4: <br> Determinants and cross <br> product <br> $\mathbf{5}$ <br> CC Chap 4: <br> Determinants and cross <br> product |
| $\mathbf{1 2}$ <br> CC Chap 5: <br> Difference and <br> differential equations | $\mathbf{6}$ | $\mathbf{7}$ <br> CC Chap 5: <br> Eigenvalues and <br> Eigenvectors | $\mathbf{8}$ <br> COMPUTER <br> PROJECT 2 Due | CC Chap 5: <br> Eigenvalues and <br> Eigenvectors |
| $\mathbf{1 9}$ <br> CC 5.5 Quadratic <br> forms | $\mathbf{2 0}$ | $\mathbf{1 4}$ <br> CC Chap 5: <br> Difference and <br> differential equations | $\mathbf{2 1}$ <br> HOUR TEST 3 | $\mathbf{2 2}$ <br> CC Chap 5: <br> Diagonalizing <br> symmetric matrices |
| $\mathbf{2 6}$ |  |  |  |  |
| EXAM WEEK |  |  |  |  |

