This list is not in final form. Like, stuff may yet be added to it.

The final exam is Monday, 5/8/06, 1 PM - 3 PM, in our regular classroom.

The course has these main topics:

(A) Solution of Linear Systems
   (a) augmented matrix
   (b) solutions: none, some, and many
   (c) RREF
   (d) no-solutions indicator
   (e) vector-parametric solution-formula
   (f) (eigenvectors)
   (g)
   (h)

(B) Matrices and Inverses
   (a) computation of inverses
   (b)
   (c)

(C) Determinants
   (a) computation of determinants (Laplace’s Rule)
   (b) effect of an elementary row operation on the value of a determinant.
   (c) why our determinant-based eigenvalue-finding method works.

(D) Vector Spaces
   (a) linear independence
   (b) linear transformations
   (c) subspaces
   (d) spanning sets
   (e) bases
(f) dimension
(g) the standard matrix of a linear transformation
(h) coordinates relative to a basis
(i) the matrix of a linear transformation relative to a non-standard basis
(j)

(E) Eigenstuff
(F) most naive, basic, definition of an eigenpair (of help in “eyeballing”)
(G) characteristic polynomial of a square matrix
(H)
(I)
(J) Symmetric-Matrix Eigenstuff
(K)
(L)