This chart compares the equivalent sections of the UC Davis MAT 22A and (enter your college name here + course name and number).

**Linear Algebra Course Comparison**

Equivalency of UC Davis (MAT 22A) and (enter your college here + course name and number)

Textbook used for (college name) course:

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**ISBN:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **UC Davis MAT 22A Linear Algebra Sections** | **(enter your college + course name and number) Sections** |
| 1.1 Vectors and linear combinations |  |
| 1.2 Lengths and dot products |  |
| 1.3 Matrices |  |
| 2.1 Vectors and linear equations |  |
| 2.2 The idea of elimination |  |
| 2.3 Elimination using matrices |  |
| 2.4 Rules for matrix operations |  |
| 2.5 Inverse matrices |  |
| 2.6 Elimination = Factorization: A = LU |  |
| 2.7 Transposes and permutations |  |
| 3.1 Spaces and vectors |  |
| 3.2 Nullspace of A: Solving Ax = 0 |  |
| 3.3 The Rank and the Row Reduced Form |  |
| 3.4 The complete solution to Ax = b |  |
| 3.5 Independence, basis, and dimension |  |
| 3.6 Dimensions of the Four Subspaces |  |
| 4.1 Orthogonality of the Four Subspaces |  |
| 4.2 Projections |  |
| 4.3 Least squares approximations |  |
| 4.4 Orthogonal bases and Gram-Schmidt |  |
| 5.1 The properties of determinants |  |
| 5.2 Permutations and cofactors |  |
| 6.1 Introduction to eigenvalues |  |
| 6.2 Diagonalizing a matrix |  |
| 6.4 Symmetric matrices |  |
| 6.5 Positive definite matrices (time permitting) |  |