

**MATH 2076 (004) Linear Algebra - Tentative Course Schedule Spring 2026**

| Week | Date    | Quizzes/Tests/Holidays | In Class   |
|------|---------|------------------------|--|
| 1    | 1/13 T  |                        | 1.1 Systems of Linear Equations                      |
|      |         |                        | 1.2 Row Reduction and Echelon Forms                  |
|      | 1/15 Th |                        | 1.3 Vector Equations                                 |
| 2    | 1/20 T  |                        | 1.4 The Matrix Equation $Ax=b$                       |
|      |         |                        | 1.5 Solution Sets of Linear Systems                  |
|      | 1/22 Th |                        | 1.6 Applications of Linear Systems                   |
| 3    | 1/27 T  |                        | 1.7 Linear Independence                              |
|      |         |                        | 1.8 Intro to Linear Transformations                  |
|      | 1/29 Th |                        | 1.9 The Matrix of a Linear Transformation            |
| 4    | 2/3 T   |                        | 2.1 Matrix Operations                                |
|      |         |                        | 2.2 The Inverse of a Matrix                          |
|      | 2/5 Th  |                        | 2.3 Characterizations of Invertible Matrices         |
| 5    | 2/10 T  |                        | 2.8 Subspaces of $\mathbb{R}^n$                      |
|      |         |                        |  |
|      | 2/12 Th | TEST 1: 1.1-2.3        |  |
| 6    | 2/17 T  |                        | 2.9 Dimension and Rank                               |
|      |         |                        | 3.1 Intro to Determinants                            |
|      | 2/19 Th |                        | 3.2 Properties of Determinants                       |
| 7    | 2/24 T  |                        | 4.1 Vector Spaces and Subspaces                      |
|      |         |                        | 4.2 Null/Col/Row Spaces and Linear Transformations   |
|      | 2/26 Th |                        | 4.3 Linearly Independent Sets; Bases                 |
| 8    | 3/3 T   |                        | 4.4 Coordinate Systems                               |
|      |         |                        | 4.5 The Dimension of a Vector Space                  |
|      | 3/5 Th  |                        | 4.6 Change of Basis                                  |
| 9    | 3/10 T  |                        | 5.1 Eigenvectors and Eigenvalues                     |
|      |         |                        |  |
|      | 3/12 Th | Test 2: 2.8-4.6        |  |
| 10   | 3/17 T  |                        | 5.2 The Characteristic Equation                      |
|      |         |                        | 5.3 Diagonalization                                  |
|      | 3/19 Th |                        | 5.4 Eigenvectors and Linear Transformations          |
| 11   | 3/24 T  |                        | 6.1 Inner Product, Length, and Orthogonality         |
|      |         |                        | 6.2 Orthogonal Sets                                  |
|      | 3/26 Th |                        | 6.3 Orthogonal Projections                           |
| 12   | 3/31 T  |                        | 6.4 The Gram-Schmidt Process                         |
|      |         |                        | 6.5 Least Squares Problems                           |
|      | 4/2 Th  |                        | 7.1 Diagonalization of Symmetric Matrices            |
|      | 4/7 T   | Spring Break           |  |
|      |         |                        |  |
|      | 4/9 Th  |                        |  |
| 13   | 4/14 T  |                        | 7.2 Quadratic Forms                                  |
|      |         |                        |  |
|      | 4/16 Th | Test 3: 5.1-7.1        |  |
| 14   | 4/21 T  |                        | Review for Final                                     |
|      |         |                        |  |
|      | 4/23 Th |                        |  |
| 15   |         | Final Exam Week        | Final exam date, time, and location to be determined |
|      |         |                        |  |
|      |         |                        |  |