

# Math 122 - Spring 2026

## Syllabus

| Date     | Section         | Topic                       | #  | Homework                    |
|----------|-----------------|-----------------------------|----|-----------------------------|
| January  |                 |                             |    |                             |
| 12       |                 | Review                      | 1  | 352/21,25,45,53,57,61,69,73 |
| 13       |                 | <b>Quiz 1</b>               |    |                             |
| 14       | 7.1             | Parts                       | 2  | 405/5,9,13,23,45,51         |
| 16       | 7.2             | Trig. Integrals             | 3  | 413/3,9,13,35,37,47         |
| 19       | <b>No Class</b> | <b>MLK Day</b>              |    |                             |
| 20       |                 | <b>Quiz 2</b>               |    |                             |
| 21       | 7.3             | Trig. Substitution          | 4  | 420/7,15,19,23,27,37        |
| 23       | 7.4             | Hyperbolic Functions        | 5  | 425/3,7,11,17,25,29         |
| 26       | 7.5             | Partial Fractions           | 6  | 434/5,9,15,21,31,37         |
| 27       |                 | <b>Quiz 3</b>               |    |                             |
| 28       | 7.7             | Improper Integrals          | 7  | 450/5,17,23,27,33,39        |
| 30       | 7.9             | Numerical Integration       | 8  | 461/1,3,7,13,17,19          |
| February |                 |                             |    |                             |
| 2        |                 | Review                      |    |                             |
| 3        |                 | <b>Test 1</b>               |    |                             |
| 4        | 8.1             | Probability                 | 9  | 471/5,7,9,11                |
| 6        | 8.2             | Arc Length                  |    |                             |
| 9        | 8.2             | Arc Length                  | 10 | 478/5,7,9,37,39,43          |
| 10       |                 | <b>Quiz 4</b>               |    |                             |
| 11       | 8.3             | Fluid Pressure              | 11 | 484/1,3,5,7,13              |
| 13       | 8.4             | Center of Mass              | 12 | 494/13,15,21,23             |
| 16       | 9.1             | Differential Equations      | 13 | 506/13,17,21,33,35,39       |
| 17       |                 | <b>Quiz 5</b>               |    |                             |
| 18       | 9.2             | $y' = k(y - b)$             | 14 | 514/5,7,9,17,19,21          |
| 20       | 9.3             | Euler's Method              | 15 | 522/11,15,17,19             |
| 23       | 9.4             | The Logistic Equation       | 16 | 527/3,5,7,11,13,15          |
| 24       |                 | <b>Quiz 6</b>               |    |                             |
| 25       | 9.5             | First Order Linear          | 17 | 532/5,13,19,23,25           |
| 27       | 9.5             | Applications of First Order | 18 | 533/33,35,37,39             |

## March

|      |                 |                                |    |                          |
|------|-----------------|--------------------------------|----|--------------------------|
| 2    |                 | Review                         |    |                          |
| 3    |                 | <b>Test 2</b>                  |    |                          |
| 4    | 10.1            | Sequences                      | 19 | 546/15,19,27,35,45,49,61 |
| 6    |                 | Return Test 2                  |    |                          |
| 9-13 | <b>No Class</b> | <b>Spring Break</b>            |    |                          |
| 16   | 10.2            | Series                         | 20 | 557/3,11,17,25,33,37     |
| 17   |                 | <b>Quiz 7</b>                  |    |                          |
| 18   | 10.3            | Integral Test                  | 21 | 566/1,3,5,7,9,11         |
| 20   | 10.3            | Comparison Test                | 22 | 567/17,19,21,23,27,39,41 |
| 23   | 10.5            | Ratio and Root Test            | 23 | 579/1,5,9,11,13,37,39    |
| 24   |                 | <b>Quiz 8</b>                  |    |                          |
| 25   | 10.4            | Absolute and Cond. Convergence | 24 | 574/3,5,7,27,29,33       |
| 26   | 10.6            | Power Series                   | 25 | 589/9,13,17,25,29,33     |
| 30   | 10.7            | Taylor Polynomials             | 26 | 600/1,5,9,19,31,41       |
| 31   |                 | <b>Quiz 9</b>                  |    |                          |

## April

|    |           |                         |    |                             |
|----|-----------|-------------------------|----|-----------------------------|
| 1  | 10.8      | Taylor Series           | 27 | 613/7,9,15,21,29,49         |
| 3  | 11.1-11.2 | Parametric Equations    | 28 | 626/7,11,15,23,51,69        |
|    |           | Arc Length              |    | 636/1,3,7,15,17             |
| 6  |           | Arc Length              | 29 | 636/1,3,7,15,17             |
| 7  |           | <b>Quiz 10</b>          |    |                             |
| 8  | 11.3      | Polar Coordinates       | 30 | 643/1,3,5,13,15,21,39       |
| 10 | 11.4      | Area in Polar           | 31 | 649/5,7,11,21,25            |
| 13 |           | Review                  |    |                             |
| 14 |           | <b>Test 3</b>           |    |                             |
| 15 | 12.1-12.2 | Vectors                 | 32 | 677/9,19,29,47; 687/5,11,15 |
| 17 | 12.2      | Lines                   | 33 | 688/43,45,47,49,51,53       |
| 20 | 12.3      | Dot Product             | 33 | 696/3,5,13,19,27,29,57,59   |
| 21 |           | <b>Quiz 11</b>          |    |                             |
| 22 | 12.4      | Cross Product           | 34 | 708/9,11,17,41,43           |
| 24 | 12.5      | Planes                  | 35 | 716/13,17,21,23,33,35       |
| 27 |           | Review and class party  |    |                             |
| 28 |           | Reading Day / Math Gala |    |                             |
| 29 |           | <b>Math Final</b>       |    |                             |