# MTH 103 Course Calendar Spring 2019

Below is an approximate timetable for the course. Your section may be slightly ahead or behind this schedule at any given time. Adjustments will be announced in class as needed.

| Week of | Content | Suggested Problems |
|---|---|---|
| 1/21 | *Classes Begin Wednesday 1/23* | |
| | 1.1 What is a Function? | (1.1): #1,2,3,5,7,9,11,13,15,17,19,21,25,27,31,32,33,37,39 |
| 1/28 | **Algebra Diagnostic Exam – in Class on either Mon. 1/28 or Tues. 1/29** | |
| | 1.2 Functions and Expressions | (1.2): #1,5,9,11,15,17,19,20,21,25,27,29,31,33,35,37,39 |
| | 1.3 Functions and Equations | (1.3): #1,3,5,7,11,17,19,21,27,29,33,35(a),37,39,45,47,49,51,53,63,67 |
| | 1.4 Functions and Change | (1.4): #1,3,5,7,9,11,13,17,19,21,23,24,27,31,34,35,37,39 |
| 2/4 | 2.1 Introduction to Linear Functions | (2.1): #1,5,7,9,11,15,16,17,19,21,25,27,37,41,43,45,47, 49 |
| | 2.2 Linear Expressions | (2.2): #3,5,9,11,12,13,15,17,23,25,26,27,29,31,33,34,37,43,45,47,49,51,53,55,59,61,67 |
| | 2.3 Linear Equations | (2.3): #1,2,3,4,5,7,9,11,13,14,19,23,35,37,39,41,43,45,47,51,61,63,65,67 |
| 2/11 | 2.4 Equations for Lines in the Plane | (2.4): #1,3,5,7,9,13,15,17,19,21,23,25,27,31,33,35,37,38,39,40,41,43,45,46,47,48,49,59, 61,62,63,65,67,71,73 |
| | 3.1 Introduction to Quadratic Functions | (Chapter 2 Review): 77-82 (for these, if a function is linear, find a formula) |
| | 3.2 Quadratic Expressions | (3.1): #1,3,5,6,9,11,13,15,17,18,21,23,25,27,33 |
| | | (3.2): #1,3,4,5,7,9,11,13,15,16,17,19,21,23,25,27,29,31,33,35,37,38,41,42,44,46,57 |
| 2/18 | **Exam 1 Wed. 2/20 6-7:30 P.M in CBLS 100** | |
| | 3.3 Converting to Factored and Vertex Form | (3.3): #3,5,6,7,9,13,15,16,17,19,21,25,27,31,33,35,36,37,39,41,43,45,47 |
| | 3.4 Quadratic Equations | (3.4): #3,5,9,10,11,13,15,17,19,21,23,25,27,29,31,33,35, 37,39,41,43,45,47,49,51,53,55, 57,59,61,63,65,66,67,71 |
| 2/25 | 4.1 Power Functions: Positive Exponents | (4.1): #1,5,13,15,17,21,23,24,25,28,29,30,31 |
| | 4.2 Power Functions: Negative and Fractional Exponents | (4.2): #1,4,5,7,9,11,13,14,15,16,17,18,19,21,23,25,27,29,31 |
| | 4.3 Power Functions and Expressions | (4.3): #1-9,11,13,15,17,19,20,21,23,25,27,29,31,33-40,50,51,53,54,55,57,59,65,70,71,72 |
| 3/4 | 4.4 Power Functions and Equations | (4.4): #1-5,7,13,15,23,25,27,31,33,35,37,38,41,43,45,47,49,55,57,79 |
| | 5.1 Domain and Range | (Chapter 4 Review): 1,2,3,4,5,6,7,8,9,14,15,17,20,21,27; page 175: 1,9,17,19 |
| | 5.2 Composing and Decomposing Functions | (5.1): #1,5,6,7,9,11,13,15,17,19,25,27,29,32,35,37,39,41,43,45,51,55,57,59,60 |
| | | (5.2): #1,2,3,4,7,8,9,10,11,12,13,17,20,22,24,25,30,31,33,35,37,38,41 |
| 3/11 | *Spring Break* | |
| 3/18 | **Exam 2 Wed. 3/20 6-7:30 P.M. in CBLS 100** | |
| | 5.3 Shifting and Scaling | (5.3): #1,2,3,4,7,,9,11,13,15,17,19,21,23,25,29,31,35,37,41,43,45 |
| | 5.4 Inverse Functions | (5.4): #1,3,5,7-11,13,17,19,33,35 |
| 3/25 | 6.1 Exponential Functions | (6.1): #1,3,5,7,8,9,13,14,15,19-23,25,29,31,32,34,43-45,47,49 |
| | 6.2 Exponential Expressions: Growth Rates | (6.2): #1,3,5,7,9,11,21,23,25,33,36,37,40-45,50,51,53,57-59 |
| | 6.3 Exponential Expressions: Half-Life and Doubling Time | (6.3): #1,3,5,7,9,11,13,19,21,23,25,27,39,41,43,48,51,53 |
| 4/1 | 6.6 Exponential Functions and Base e | (6.6): #1,3,5,7,9,11,15,17,19,24,25,27,29,33,37 |
| | 7.1 Introduction to Logarithms | (7.1): #1,2,3,5,6,8,9,11,13,33,35,36,37,39,41,43,45,46,47,49,51,53,54,55,56,57,58,59, 61,63,65,73,74,76,77,79,81 |
| | 7.2 Solving Equations Using Logarithms | (7.2): #9,11,13,15,17,19,25,27,31,33,35,37,39,41,43,45,47,51,53,55,57,58-61,63 |
| 4/8 | 7.3 Application of Logarithms to Modeling | (7.3): #1,3,5,7,9,11,13,15,19,21,26,27,28,29,31,33,37,39,45,49,51,54 |
| | 7.4 Natural Logarithms and Other Bases | (7.4): #1,3,5,6,7,8,9,10,11,13,15,20,24,21,23,25,26,27,29,31,33,36,37,39,41,49,50,51,53 |
| 4/15 | **Exam 3 Wed. 4/17 6-7:30 P.M. in CBLS 100** | |
| | Trig Handout H1: Periodic Functions | (Trig Handout H1): #1-6 |
| | Trig Handout H2: Angles on the Unit Circle & Radian Measure | (Trig Handout H2): #1-21 |
| 4/22 | Trig Handout H3: Sine and Cosine on Unit Circle | (Trig Handout H3): #1-11 |
| | Trig Handout H4: Trigonometric Functions and Modeling | (Trig Handout H4): #1-13 |
| 4/29 | Review | |
| | *Last Day of Classes Tuesday 4/30* | |