MTH 103 Course Calendar Fall 2018

Below is an approximate timetable for the course. Your class may be slightly ahead or behind at any given time. Any adjustments will be announced in class.

| Week of | Content | Suggested Problems |
|---------|--|---|
| 9/3 | 1.1 - What is a Function?1.2 - Functions and Expressions | $\begin{array}{l} (1.1): \ \#1,2,3,5,7,9,11,13,15,17,19,21,25,27,31,32,33,37,39 \\ (1.2): \ \#1,5,9,11,15,17,19,20,21,25,27,29,31,33,35,37,39 \end{array}$ |
| 9/10 | Algebra Diagnostic Test Monday 9/10 6-7:30 P.M.* 1.3 - Functions and Equations 1.4 - Functions and Change 2.1 - Introduction to Linear Functions | $ \begin{array}{l} (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): \ \#1,3,5,7,9,11,13,17,19,21,23,24,27,31,34,35,37,39 \\ (2.1): \ \#1,5,7,9,11,15,16,17,19,21,25,27,37,41,43,45,47, \ 49 \end{array} $ |
| 9/17 | 2.2 - Linear Expressions2.3 - Linear Equations2.4 - Equations for Lines in the Plane | $\begin{array}{l} (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): \ \#1,2,3,4,5,7,9,11,13,14,19,23,35,37,39,41,43,45,47,51,61,63,65,67\\ (2.4): \ \#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,\\ \ & \ & \ & \ & \ & \ & \ & \ & \ & \ $ |
| 9/24 | 3.1 - Introduction to Quadratic Functions3.2 - Quadratic Expressions3.3 - Converting to Factored and Vertex Form | $\begin{array}{l} (3.1): \ \#1,3,5,6,9,11,13,15,17,18,21,23,25,27,33 \\ (3.2): \ \#1,3,4,5,7,9,11,13,15,16,17,19,21,23,25,27,29,31,33,35,37,38,41,42,44,46,57 \\ (3.3): \ \#3,5,6,7,9,13,15,16,17,19,21,25,27,31,33,35,36,37,39,41,43,45,47 \end{array}$ |
| 10/1 | Exam 1 Wednesday 10/3 from 6-7:45 P.M.* 3.4 - Quadratic Equations 4.1 - Power Functions: Positive Exponents 4.2 - Power Functions: Negative and Fractional Exponents | $ \begin{array}{l} (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\\ (4.1): \ \#1,5,13,15,17,21,23,24,25,28,29,30,31\\ (4.2): \ \#1,4,5,7,9,11,13,14,15,16,17,18,19,21,23,25,27,29,31 \end{array} $ |
| 10/8 | Columbus Day Monday 10/8 - No Classes 4.3 - Power Functions and Expressions 4.4 - Power Functions and Equations | $\begin{array}{l} (4.3): \ \#1-9,11,13,15,17,19,20,21,23,25,27,29,31,33-40,50,51,53,54,55,57,59,65,70,71,72\\ (4.4): \ \#1-5,7,13,15,23,25,27,31,33,35,37,38,41,43,45,47,49,55,57,79;\\ (Chapter 4 Review): \ 1,2,3,4,5,6,7,8,9,14,15,17,20,21,27; page 175: \ 1,9,17,19 \end{array}$ |
| 10/15 | 5.1 - Domain and Range5.2 - Composing and Decomposing Functions5.3 - Shifting and Scaling | $ \begin{array}{l} (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 \\ (5.3): \ \#1,2,3,4,7,9,11,13,15,17,19,21,23,25,29,31,35,37,41,43,45 \end{array} $ |
| 10/22 | 5.4 - Inverse Functions6.1 - Exponential Functions6.2 - Exponential Expressions: Growth Rates | $ \begin{array}{l} (5.4): \ \#1,3,5,7\text{-}11,13,17,19,33,35 \\ (6.1): \ \#1,3,5,7,8,9,13,14,15,19\text{-}23,25,29,31,32,34,43\text{-}45,47,49 \\ (6.2): \ \#1,3,5,7,9,11,21,23,25,33,36,37,40\text{-}45,50,51,53,57\text{-}59 \end{array} $ |
| 10/29 | Exam 2 Wednesday 10/31 from 6-7:45 P.M.* 6.3 - Exponential Expressions: Half-Life and Doubling Time 6.6 - Exponential Functions and Base e 7.1 - Introduction to Logarithms | $ \begin{array}{l} (6.3): \ \# 6.3: \ \# 1, \ 3, \ 5, 7, 9, \ 11, \ 13, \ 19, \ 21, \ 23, \ 25, \ 27, \ 39, \ 41, \ 43, \ 48, \ 51, \ 53 \\ (6.6): \ \# 1, 3, 5, 7, 9, 11, 15, 17, 19, 24, 25, 27, 29, 33, 37 \\ (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, \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $ |
| 11/5 | 7.2 - Solving Equations Using Logarithms7.3 - Application of Logarithms to Modeling | $\begin{array}{l} (7.2): \ \#9,11,13,15,17,19,25,27,31,33,35,37,39,41,43,45,47,51,53,55,57,58-61,63 \\ (7.3): \ \#1,3,5,7,9,11,13,15,19,21,26,27,28,29,31,33,37,39,45,49,51,54 \end{array}$ |
| 11/12 | Veteran's Day Monday 11/12 - No Classes Monday classes meet Tuesday 11/13 7.4 - Natural Logarithms and Other Bases 8.1 - Polynomial Functions | $(7.4): \#1,3,5,6,7,8,9,10,11,13,15,20,24,21,23,25,26,27,29,31,33,36,37,39,41,49,50,51,53\\ (8.1): \#7,9,11,13,15,17,19,21,23,$ |
| 11/19 | 8.2 – Working with Polynomials 8.4 - Long Run Behavior of Polynomial Functions Thanksgiving Recess Starts Wednesday 11/21 | $\begin{array}{l} (8.2): \ \#1,3,5,7,9,11,13,15,17\\ (8.4): \ \#5,6,7,11,12,13,14 \end{array}$ |
| 11/26 | Exam 3 Wednesday 11/28 from 6-7:45 P.M.* 9.1 - Rational Functions Trig Handout H1: Periodic Functions | (9.1): #1-5,11,13,15,17,19,32-34 (Trig Handout H1): #1-6 |
| 12/3 | Trig Handout H2: Angles on the Unit Circle & Radian Measure Trig Handout H3: Sine and Cosine on Unit Circle | (Trig Handout H2): #1-21 (Trig Handout H3): #1-11 |
| 12/10 | Trig Handout H4: Trigonometric Functions and Modeling | (Trig Handout H4): #1-13 |

* Sections 1,2, and 4 will take the exams in Beaupre 100. Sections 3, 5, 6, 7, and 8 will take the exams in Chafee 271.