Math 6B
Introduction to College Mathematics for the Sciences II
(aka) Introduction to Functions 2

Textbook:

Precalculus: Pathways to Calculus: A Problem Solving Approach by Carlson, Oehrtman, & Moore.

This is a workbook with an associated ebook, videos, interactive applets, and online homework.

Available for purchase at: https://www.rationalreasoning.net/products.php.

Suggested Schedule: *Based on 50-minute classes*

Class Day	Section	Title
1	5.1	Bottle Problem - Modeling Relationships in a Context
2	5.2	Concavity & Average Rate of Change
3	5.3	Transformations of Polynomial Functions
4	5.4	Quadratic Function
5	5.5	Roots and End Behavior of Polynomial Functions
6	5 ext 2	Vertex Form of a Quadratic Function Graphically (Skip Completing the Square)
7	5 ext 3	Multiplicity of Roots
8	6.1	Vertical Asymptotes of Rational Functions
9	6.2	End Behavior of Rational Functions
10	6.3	Graphing Rational Functions and Understanding Limits
11	*Add-On*	Limits and Continuity
12	6.4	Co-Variation of Numerators and Denominators of Rational Functions + Review
13	7.1	Angle Measure
14		**Midterm - Module 5 & 6**
15	7.2	Angle Measure in Context
16	7.3	Representing Circular Motion
17	7.4	Using the Sine & Cosine Functions to Track Circular Motion
18	7.5	Using the Sine & Cosine Functions in Applied Settings
19	7.6	Transformations of the Sine Function
20	7.7	Period, Amplitude, and Shifts of Periodic Functions
21	7.8	The Tangent Function
22	7.9	Inverse Trigonometric Function
23	8.1 & 8.2	Right Triangle Trigonometry & Applications
24	8.3	Trig Identities
25	8.4	Applying Trigonometry to Non-Right Triangles
26	8.5	The Law of Sines
27	8.6	The Law of Cosines
28	Review	Modules 5-8

Grading: Grading is similar from section-to-section (and often based on points), but may vary slightly.

Worksheets ~23%,	**Participation** ~4%	**Midterm** ~20%
Online Homework ~17%	**Pre & Post PCA** ~3%	**Final exam** ~33%