Math 6A

Introduction to College Mathematics for the Sciences I
(aka) Introduction to Functions 1

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	1.1	Representational Equivalence
2	1.2	Evaluating Formulas
3	1.3	Relating Quantities and Solving Equations
4	2.1	Quantities and Co-variation of Quantities
5	2.2	Changes in Quantities and Constant Rate of Change
6	2.3	Constant Rate of Change and Linear Functions
7	2.4	Constant Rate of Change and Linearity
8	2.5	Exploring Average Speed
9	*Add-On*	Solving Systems of Linear Equations
10	2.6	The Distance Formula and the Equation of a Circle
11	2.7	Absolute Value
12	3.1	Box Problem and Modeling Function Relationships
13	3.2	Function Relations and Domain of Functions
14	*Review*	Review / catch-up
15		**Midterm**
16	*3.3*	**Using and Interpreting Function Notation**
17	*Add-On*	Transformations: Stretch, shift, flip
18	3.4	Function Compositon in context
19	3.4b	Function Composition (Reversal)
20	3.5	Inverse Functions
21	3.6	Exploring the Difference Quotient
22	4.1	The Meaning of Exponents
23	4.2	Comparing linear and exponential functions
24	4.3	Review 1-unit Growth Factors and Partial Growth Factors
25	*4.4*	Partial and n-unit Growth Factors
26	*Add-On*	Graphs of exponential functions & their inverses plus motivate e
27	4.8	The Inverse of an Exponential Function
28	4.9	Solving Logarithmic Equations
29	*Review*	Review Modules 1-4

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%