**Calculus Curriculum Sequence**

Chapter 1 – Prerequisites for Calculus

Section 1.1 Lines

Section 1.2 Functions and Lines

Section 1.3 Exponential Functions

Section 1.5 Functions and Logarithms

Section 1.6 Trigonometric Functions

Chapter 2 - Limits and Continuity

Section 2.1 Rates of Change and Limits

Section 2.2 Limits Involving Infinity

Section 2.3 Continuity

Section 2.4 Rates of Change and Tangent Lines

Chapter 3 - Derivatives

Section 3.1 Derivative of a Function

Section 3.2 Differentiability

Section 3.3 Rules for Differentiation

Section 3.4 Velocity and Other Rates of Change

Section 3.5 Derivatives of Trigonometric Functions

Section 3.6 Chain Rule

Section 3.7 Implicit Differentiation

Section 3.8 Derivatives of Inverse Trig Functions

Section 3.9 Derivatives of Exponential and Log Functions

Chapter 4 – Applications of Derivatives

Section 4.1 Extreme Values of Functions

Section 4.2 Mean Value Theorem

Section 4.3 Connecting f' and f'' with the Graph of f

Section 4.4 Modeling and Optimizing

Section 4.6 Related Rates

Chapter 5 – The Definite Integral

Section 5.1 Estimating with Finite Sums

Section 5.2 Definite Integrals

Section 5.3 Definite Integrals and Antiderivatives

Section 5.4 Fundamental Theorem of Calculus

Section 5.5 Trapezoidal Rule

Chapter 6 – Differential Equations and Math Modeling

Section 6.1 Slope Fields and Euler's Method

Section 6.2 Antidifferentiation by Substitution

Section 6.4 Exponential Growth and Decay