CALCULUS

Chapter P

 Graphs and Models

 Linear Models and Rates of Change

 Functions and Their Graphs

 Fitting Models to Data

Chapter 1

 Finding Limits Graphically and Numerically

 Evaluating Limits Analytically

 Continuity and One-Sided Limits

 Infinite Limits

Chapter 2

 The Derivative/Tangent Line Problem

 Basic Differentiation Rules

 Product and Quotient Rules

 Chain Rule

 Implicit Differentiation

 Related Rates

Chapter 3

 Extrema on and Interval

 Rolle’s Theorem and The Mean Value Theorem

 Increasing/Decreasing Functions

 First Derivative Test

 Second Derivative Test

 Limits and Infinity

 Summary of Curve Sketching

 Optimization Problems

Chapter 4

 Antiderivatives/Indefinite Integration

 Area Under the Curve

 Fundamental Theorem of Calculus

 Integration by Substitution

Chapter 5

 Natural Log Function and Differentiation

 Natural Log Function and Integration

 Inverse Functions

 Exponential Function

 Bases Other than *e*

# Grading

A grade of 60 % or higher is required to pass this course. Grades will be based on the following:

 Notebooks

 Quizzes

 Tests

 Projects

 Worksheets