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