

# Syllabus

**Week 1 (Oct. 5):** Intervals, Inequalities, Absolute Value

**Week 2 (Oct. 12):** Lines, Parabolas

**Week 3 (Oct. 19):** Functions: Domain and Range, Piecewise Defined Functions

**Week 4 (Oct. 26):** Functions: Exponential Functions, Logarithmic Functions

**Week 5 (Nov. 2):** Limit: Limit Laws, One-sided Limit

**Week 6 (Nov. 9):** Limits at Infinity, Continuity

**Week 7 (Nov. 16):** **Review, Problems, Midterm I**

**Week 8 (Nov. 23):** Derivative: Differentiation Rules

**Week 9 (Nov. 30):** Derivative: The Chain Rule,

**Week 10 (Dec. 7):** Derivative: Implicit Differentiation

**Week 11 (Dec. 14):** Derivative: Optimization Problems,

**Week 12 (Dec. 21):** **Review, Problems, Midterm II**

**Week 13 (Dec. 28):** Matrices: Matrix Operations, Matrix Multiplication

**Week 14 (Jan. 4):** Matrices: Properties of Matrix Operations