Math 171 – Suggested Weekly Schedule

Refer to your instructor's syllabus for Exam dates.

- **Week 1**
  - Vectors (Supplement I)
  - The Dot Product (Supplement I)
  - Vector Functions and Parametric Curves (Supplement I)
- **Week 2**
  - Sec 1.5: Inverse Trigonometric Functions
  - Sec 2.2: The Limit of a Function
  - Sec 2.3: Calculating Limits Using the Limit Laws
- **Week 3**
  - Sec 2.4: The Precise Definition of a Limit
  - Sec 2.5: Continuity
- **Week 4**
  - Sec 2.6: Limits at Infinity, Horizontal Asymptotes
  - Sec 2.7: Derivatives and Rates of Change
  - Sec 2.8: The Derivative as a Function
- **Week 5**
  - Sec 3.1: Derivatives of Polynomial and Exponential Functions
  - Sec 3.2: The Product and Quotient Rules
  - Sec 3.3: Derivatives of Trigonometric Functions (includes higher order derivatives)
- **Week 6**
  - Sec 3.4: Chain Rule
  - Sec 3.5: Implicit Differentiation (includes derivatives of inverse trig functions)
  - Sec 3.6: Derivatives of Logarithmic Functions
- **Week 7**
  - Derivatives of Vector Functions (Supplement II)
  - Slopes and Tangents to Parametric Curves (Supplement II)
- **Week 8**
  - Sec 3.9: Related Rates
  - Sec 3.10: Linear Approximations and Differentials
- **Week 9**
  - Sec 4.1: Maximum and Minimum Values
  - Sec 4.2: Mean Value Theorem
  - Sec 4.3: How Derivatives Affect the Shape of a Graph
- **Week 10**
  - Sec 4.4: Indeterminate Forms and L'Hospital's Rule
  - Sec 4.5: Summary of Curve Sketching

- **Week 11**
  - Sec 4.7: Optimization Problems
  - Sec 4.9: Antiderivatives
- **Week 12**
  - Sec 5.1: Areas and Distances
  - Sec 5.2: The Definite Integral (includes Sigma notation and Riemann sums)
  - Sec 5.3: The Fundamental Theorem of Calculus
- **Week 13**
  - Sec 5.4: Indefinite Integrals and the Net Change Theorem
  - Thanksgiving break (in Fall semester)
- **Week 14**
  - Sec 5.5: The Substitution Rule
  - Sec 6.1: Areas Between Curves
- **Week 15**
  - Review
  - **Final Exams**