Math 142 Weekly Schedule - Spring

Textbook: *Calculus for Business and Social Sciences* by Allen and Orchard, Texas A&M University Open Education Resource, 2021.

Note: This is a fall or spring schedule. In the summer, this schedule is accelerated by a factor of 3 to accommodate a 5-week session.

- **Week 1** **1.1, 1.2**
  Limits: Graphically and Numerically, Limits: Algebraically

- **Week 2** **1.3, 1.4**
  Limits: At Infinity and Infinite, Continuity from a Calculus Perspective

- **Week 3** **2.1, 2.2**
  Average and Instantaneous Rates of Change, The Limit Definition of the Derivative

- **Week 4** **Review, Exam I (1.1-1.4, 2.1, and 2.2)**

- **Week 5** **2.3, 2.4**
  Introductory Derivative Rules and Marginal Analysis, The Product and Quotient Rules

- **Week 6** **2.5, 2.6**
  The Chain Rule, Implicit Differentiation and Related Rates

- **Week 7** **2.6, 3.1**
  Implicit Differentiation and Related Rates, Analyzing Graphs with the First Derivative

- **Week 8** **3.2, 3.3**
  Analyzing Graphs with the Second Derivative, The Graphing Strategy

  Note: Spring Break falls between weeks 8 and 9.

- **Week 9** **Review, Exam II (2.3-2.6 and 3.1-3.3)**

- **Week 10** **3.4, 3.5**
  Absolute Extrema, Optimization

- **Week 11** **4.1, 4.2**
  Antiderivatives: Introductory Rules, Antiderivatives: Substitution

- **Week 12** **4.3, 4.4**
  The Definite Integral, The Fundamental Theorem of Calculus

- **Week 13** **Review, Exam III (3.4, 3.5, and 4.1-4.4)**

- **Week 14** **4.6, Review for Final Exam**
  Area Between Curves and Producers' and Consumers' Surplus

- **Week 15** **Review for Final Exam, Final Exams**
  Final Exam covers all previous sections as well as Section 4.6

- **Week 16** **Final Exams**
  Final Exam covers all previous sections as well as Section 4.6