

Math 142 - Weekly Schedule

Textbook: *Calculus: Applications and Technology*, 3rd edition, by Tomastik

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** **Review, 3.1**
Brief Precalculus Review, Limits and Continuity
- **Week 2** **3.1**
Limits and Continuity
- **Week 3** **3.2, 3.3**
Rates of Change, The Derivative
- **Week 4** **4.1, 4.2**
Simple Derivative Rules and Marginal Analysis, Product and Quotient Rules
- **Week 5** **Review, Exam I (3.1-3.3, 4.1, and 4.2)**
- **Week 6** **4.3, 4.4, 5.1**
Chain Rule, Derivatives of Exponential and Logarithmic Functions, Analyzing Graphs with the First Derivative
- **Week 7** **5.2, 5.3, 5.4**
Analyzing Graphs with the Second Derivative, Limits at Infinity, Curve Sketching Techniques
- **Week 8** **5.5, 5.6 (excluding Inventory Control)**
Absolute Extrema, Optimization
- **Week 9** **Review, Exam II (4.3, 4.4, and 5.1-5.6)**
- **Week 10** **5.8, 6.1**
Implicit Differentiation and Related Rates, Antiderivatives
- **Week 11** **6.2, 6.3**
Substitution, Estimating Distance Traveled
- **Week 12** **6.4, 6.5**
The Definite Integral, Fundamental Theorem of Calculus Part 2 and Average Value of a Function
- **Week 13** **Review, Exam III (5.8 and 6.1-6.5)**
- **Week 14** **6.6 (excluding Lorentz Curves), 6.7 topic**
Area Between Curves, 6.7 topic: Producers' and Consumers' Surplus
Note: Thanksgiving is during this week.
- **Week 15** **Review for Final Exam and Final Examinations**
Final Exam covers all previous sections as well as sections 6.6 and 6.7 topic.
- **Week 16** **Final Examinations**