

## Math 142 - Weekly Schedule

**Textbook:** *Calculus: Applications and Technology*, 3<sup>rd</sup> 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, 3.2**  
Limits and Continuity, Rates of Change
- **Week 3**    **3.3, 4.1**  
The Derivative, Simple Derivative Rules and Marginal Analysis
- **Week 4**    **4.2, 4.3, 4.4**  
Product and Quotient Rules, Chain Rule, Derivatives of Exponential and Logarithmic Functions
- **Week 5**    **Review, Exam I (3.1-3.3 and 4.1-4.4)**
- **Week 6**    **5.1, 5.2**  
Analyzing Graphs with the First Derivative, Analyzing Graphs with the Second Derivative
- **Week 7**    **5.3, 5.4**  
Limits at Infinity, Curve Sketching Techniques
- **Week 8**    **5.5, 5.6 (excluding Inventory Control)**  
Absolute Extrema, Optimization
- **Week 9**    **Review, Exam II (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)**  
*Note: In the fall, Thanksgiving is during this week so Exam III should be moved to Week 14.*
- **Week 14**   **6.6 (excluding Lorentz Curves), 6.7 topic**  
Area Between Curves, 6.7 topic: Producers' and Consumers' Surplus
- **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**