## Schedule Math10560 Spring 2024

01/16 Tue. Course Information.
01/17 Wed. 6.1. Inverse Functions
01/19 Fri. 6.2*. The Natural Logarithmic Function
01/22 Mon. 6.3*. The Natural Exponential Function
01/23 Tue. Quiz 1, Topics 6.1, 6.2*
01/24 Wed. 6.4*. General Logarithmic and Exponential Function.
01/26 Fri. 6.5. Exponential Growth and Decay
01/29 Mon. 6.6. Inverse Trigonometric Functions
01/30 Tue. Quiz 2, Topics 6.3*, 6.4*, 6.5
01/31 Wed. 6.8. Indeterminate Forms and L'Hospital's Rule
02/02 Fri. 7.1. Integration by Parts
02/05 Mon. 7.2. Trigonometric Integrals
02/06 Tue. Quiz 3, Topics 6.6, 6.8, 7.1
02/07 Wed. 7.3. Trigonometric Substitution
02/09 Fri. 7.4. Integration of Rational Functions by Partial Fractions
02/12 Mon. 7.4. Integration of Rational Functions by Partial Fractions
02/13 Tue. Quiz 4, 7.2, 7.3, 7.4(1st half)
02/14 Wed. 7.5. Strategy for Integration
02/16 Fri. 7.7. Approximate Integrals
02/19 Mon. Review for Exam 1
02/20 Tue. Exam 1 (No Tutorial)
02/21 Wed. Return and discussion of Exam 1/Catch Up
02/23 Fri. 7.8. Improper Integrals

02/26 Mon. 8.1. Arc Length
02/27 Tue. Quiz 5, 7.7, $7.8+$ Topics from Exam 1
02/28 Wed. 9.2. Direction Fields and Euler's Method
03/01 Fri. 9.3. Separable Equations
03/04 Mon. 9.5. Linear Equations
03/05 Tue. Quiz 6, Topics 8.1, 9.2, 9.3
03/06 Wed. 11.1. Sequences
03/08 Fri. 11.2. Series

03/11 Mon. Spring Break
03/12 Tue. Spring Break
03/13 Wed. Spring Break
03/15 Fri. Spring Break

03/18 Mon. 11.3/11.4. p-series (using integral test) and comparison test.
03/19 Tue. Quiz 7, 9.5, 11.1, 11.2
03/20 Wed. Review for Exam 2
03/21 Thur. Exam 2
03/22 Fri. Return and discussion of Exam 2/Catch Up
03/25 Mon. 11.4. The Comparison Tests
03/26 Tue. Quiz 8, 11.3/11.4(part 1) + Topics from Exam 2
03/27 Wed. 11.5. Alternating Series
03/29 Fri. Easter Break
04/01 Mon. Easter Break
04/02 Tue. Quiz 9, Topics 11.4, 11.5
04/03 Wed. 11.6. Absolute Convergence and the Ratio and Root Tests
04/05 Fri. 11.7. Strategy for Testing Series
04/08 Mon. 11.8. Power Series
04/09 Tue. Quiz 10, Topics 11.6, 11.7
04/10 Wed. 11.9. Representations of Functions as Power Series
04/12 Fri. 11.10. Taylor and MacLaurin Series
04/15 Mon. 11.11. Applications of Taylor Polynomials
04/16 Tue. Quiz 11, Topics 11.8, 11.9, 11.10
04/17 Wed. 10.1. Curves Defined by Parametric Equations
04/19 Fri. 10.2. Calculus with Parametric Curves
04/22 Mon. Review for Exam 3
04/23 Tue. Exam 3 (No Tutorial)
04/24 Wed. Return of Exam 3, Catch up/review
04/26 Fri. 10.3. Polar Coordinates

04/29 Mon. 10.4. Areas and Lengths in Polar Coordinates
04/30 Tue. Review
05/01 Wed. Review
05/07 Tue. Final Exam 1:45-3:45 p.m.

