

25SS MATH 1061 Tentative Course Outline

Week	Dates	Sections Covered
Week 1	Jan 13 – Jan 17	Review Trigonometry, Exponential and Logarithmic Functions (Appendix D, 1.4, 1.5) (2.1) The Tangent and Velocity Problems
Week 2	Jan 20 – Jan 24	Holiday: Dr. Martin Luther King Jr's Birthday (No Recitation Monday) (2.2) The Limit of a Function (2.3) Calculating Limits Using the Limit Laws (2.5) Continuity
Week 3	Jan 27 – Jan 31	(2.6) Limits At Infinity; Horizontal Asymptotes (2.7) Derivatives and Rates of Change (2.8) The Derivative of a Function
Week 4	Feb 3 – Feb 7	(3.1) Derivatives of Polynomials and Exponential Functions Test 1 Thursday (covers Exp, Log, Trig Review, 2.1, 2.2, 2.3, 2.5, 2.6, 2.7, and 2.8; 3.1 will be on Test 2)
Week 5	Feb 10 – Feb 14	(3.2) The Product and Quotient Rules (3.3) Derivatives of Trigonometric Functions (3.4) The Chain Rule
Week 6	Feb 17 – Feb 21	(3.5) Implicit Differentiation (3.6) Derivatives of Logarithmic and Inverse Trigonometric Functions (3.9) Related Rates
Week 7	Feb 24 – Feb 28	(3.9) Related Rates (3.10) Linear Approximations and Differentials (cover differentials lightly) (4.1) Maximum and Minimum Values
Week 8	Mar 3 – Mar 7	(4.1) Maximum and Minimum Values (4.2) The Mean Value Theorem (4.3) What Derivatives Tell Us about the Shape of the Graph
Week 9	Mar 10 – Mar 14	(4.5) Summary of Curve Sketching (incorporates material from 4.3) Test 2 Thursday (covers 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.9, 3.10, 4.1, 4.2, 4.3, and 4.5)
Week 10	Mar 17 – Mar 21	Spring Break – no classes
Week 11	Mar 24 – Mar 28	(4.4) Indeterminate Forms and l'Hospital's Rule (4.7) Optimization
Week 12	Mar 31 – Apr 4	(4.7) Optimization (4.9) Antiderivatives (5.1) Areas and Distances (including Sigma Notation, Appendix E)
Week 13	Apr 7 – Apr 11	(5.1) Areas and Distances (5.2) The Definite Integral (5.3) The Fundamental Theorem of Calculus
Week 14	Apr 14 – Apr 18	(5.4) Indefinite Integrals and the Net Change Theorem Test 3 Thursday (covers 4.4, 4.7, Appendix E, 5.1, 5.2, 5.3, and 5.4)
Week 15	Apr 21 – Apr 25	(5.5) The Substitution Rule (6.1) Area Between Curves (6.5) Average Value of a Function
Week 16	Apr 28 – May 2	Comprehensive Final Exam- date TBD