University of Houston
Department of Mathematics
MATH 1432

Text: *CALCULUS, 9th edition.* Authors: Salas & Hille. Publisher: John Wiley & Sons, Inc. Text is in electronic form.

WebCT Information

Homework Assignments: html pdf

Exam Calendar
All exams will be departmental exams given at CASA.

Syllabus

Chapter 7. THE TRANSCENDENTAL FUNCTIONS

Section 7.1. One-to-One Functions;Inverses
Section 7.2-3. The Logarithm Function
Section 7.4. The Exponential Function
Section 7.5. Arbitrary Powers;Other Bases; Estimating *e*
Section 7.6. Exponential Growth and Decay
Section 7.7. The Inverse Trigonometric Functions
Section 7.8. The Hyperbolic Sine and Cosine Functions

Chapter 8. TECHNIQUES OF INTEGRATION

Section 8.2. Integration by Parts
Section 8.3. Powers and Products of Trigonometric Functions
Section 8.4. Trigonometric Substitutions

EXAM 1

Section 8.5. Partial Fractions
Section 8.7. Numerical Integration

Chapter 9. POLAR COORDINATES; PARAMETRIC EQUATIONS

Section 9.3. Polar Coordinates
Section 9.4. Graphing in Polar Coordinates
Section 9.5. Area in Polar Coordinates
Section 9.6. Curves Given Parametrically

Section 9.7. Tangents to Curves Given Parametrically
Section 9.8 Arc Length and Speed

Chapter 10. SEQUENCES; INDETERMINATE FORMS; IMPROPER INTEGRALS

Section 10.1-2. The Least Upper Bound Axiom; Sequences of Real Numbers
Section 10.3-4. Limit of a Sequence; Some Important Limits

EXAM 2

Section 10.5. The Indeterminate Form(0/0)
Section 10.6. The Indeterminate Form(∞/∞); Other Indeterminate Forms
Section 10.7. Improper Integrals

Chapter 11. INFINITE SERIES

Section 11.1. Infinite Series
Section 11.2. The Integral Test; Comparison Theorems
Section 11.3. The Root Test; The Ratio Test
Section 11.4. Absolute and Conditional Convergence; Alternating Series
Section 11.5. Taylor Polynomials in x; Taylor Series in x.
Section 11.6. Taylor Polynomials in x-a; Taylor Series in x-a.
Section 11.7. Power Series
Section 11.8. Differentiation and Integration of Power Series

EXAM 3