Math 0230 Schedule and Practice Problems

Website references below are to the website accompanying our text: [http://www.stewartcalculus.com/media/6_inside_topics.php](http://www.stewartcalculus.com/media/6_inside_topics.php). The website is used for supplementary topics that are not included in the print version of the textbook.

August 27: Integration by Substitution
ed 1: 5.5 Number 1-54 odd
ed 2: 5.5 Number 1-56 odd

August 30: Integration by Parts
ed 1: 6.1 Number 1-28 odd
ed 2: 6.1 Number 1-30 odd

September 1: Trigonometric integrals and substitution
ed 1: 6.2 Number 1-33 odd, 41-57 odd
ed 2: 6.2 Number 1-33 odd, 43-59 odd

September 3: Partial fractions
ed 1: 6.3 Number 1-39 odd
ed 2: 6.3 Number 1-39 odd

September 8: Partial fractions (cont)

September 10: Improper integrals
ed 1: 6.6 Number 5-31 odd, 41, 43, 45
ed 2: 6.6 Number 5-31 odd, 41, 43, 45

September 13: Areas between curves
ed 1: 7.1 Number 1-15 odd, 16
ed 2: 7.1 Number 1-19 odd, 18

September 15: Volumes
ed 1: 7.2 Number 1-11 odd, 21, 27
ed 2: 7.2 Number 1-11 odd, 27, 33

September 17: Volumes by cylindrical shells
ed 1: 7.3 Number 5, 6, 9, 18, 19, 20, 21, 23
ed 2: 7.3 Number 5, 6, 9, 10, 11, 12, 17, 19, 33, 34

September 20: Arc Length
ed 1: 7.4 Number 2, 3, 5, 6, 10
ed 2: 7.4 Number 2, 7, 10, 15, 17

September 22: Applications to physics and engineering (work, force)
ed 1: 7.5 Number 1, 3, 5, 7, 9, 12, 13, 15, 17, 18, 23, 25, 27, 30
ed 2: 7.6 Number 1, 3, 5, 7, 9, 12, 13, 15, 17, 18, 27, 28, 31, 34

September 24: Differential equations
ed 1: 7.6 Number 1-15 odd, 21-29
ed 2: 7.7 Number 1-15 odd, 21-29

September 27: Applications of Differential equations
ed 1: 7.6 Number 35, 37, 39, 43, 45, 46
ed 2: 7.7 Number 35, 37, 39, 43, 45, 46

September 29: Linear differential equations
[Website: Linear Differential Equations] Number 1-20

October 1: Review

October 4: Exam I

October 6: Homogeneous second order differential equations
[Website: Second Order Linear Differential Equations] Number 1-24

October 8: Inhomogeneous second order equations by undetermined coefficients
[Website: Nonhomogeneous Linear Equations] Number 1-22 (undetermined coefficients method only)

October 11: Oscillations
[Website: Applications of Second Order Differential Equations] Number 1-10
October 13: Sequences
ed1: 8.1 Number 3-36
ed2: 8.1 Number 3-40

October 18: Series
ed 1: 8.2 Number 3-29, 33, 34
ed 2: 8.2 Number 3-28, 31-34, 35-37, 43, 44

October 20: The integral and comparison tests
ed 1: 8.3 Number 2-27
ed 2: 8.3 Number 2-31

October 22: Other convergence tests
ed 1: 8.4 Number 1-18, 19-37 odd
ed 2: 8.4 Number 1-18, 19-39 odd

October 25: Other convergence tests
ed1: 8.4 Number 1-18, 19-37 odd
ed2: 8.4 Number 1-18, 19-39 odd

October 27: Power series
ed 1: 8.5 Number 3-20
ed 2: 8.5 Number 3-24

October 29: Representing functions as power series
ed 1: 8.6 Number 1-30
ed 2: 8.6 Number 1-32

November 1: Representing functions as power series (cont)

November 3: Taylor and Maclaurin series
ed 1: 8.7 Number 1-34, 37-64
ed 2: 8.7 Number 1-34, 37-64

November 5: Taylor and Maclaurin series (cont)

November 8: Applications of Taylor polynomials
ed 1: 8.8 Number 1-23
ed 2: 8.8 Number 1-23

November 10: Review

November 12: Exam II

November 15: Parametric curves
ed 1: 9.1 Number 1, 3, 5, 7, 9, 10, 13, 15, 16, 17, 18, 22, 31
ed 2: 9.1 Number 1, 3, 5, 7, 9, 10, 13, 15, 16, 17, 18, 22, 31

November 17: Calculus with parametric curves
ed 1: 9.2 Number 1-15 odd, 24, 25, 28, 30, 35, 37, 40
ed 2: 9.2 Number 1-15 odd, 24, 25, 28, 30, 35, 37, 38

November 19: Polar coordinates
ed 1: 9.3 Number 1-6, 7, 9, 10, 11, 13-20, 23-29 odd, 46, 47, 51-54
ed 2: 9.3 Number 1-6, 7, 9, 10, 11, 13-20, 23-33 odd, 46, 47, 51-54

November 29: Areas and length in polar coordinates
ed 1: 9.4 Number 1-13, 15-25 odd
ed 2: 9.4 Number 1-13, 15-25 odd

December 1: Areas and length in polar coordinates
ed 1: 9.4 Number 29-38
ed 2: 9.4 Number 29-38

December 3: Functions of Several Variables
ed 1: 11.1 Number 1-11 odd, 13-35, 41-50
ed 2: 11.1 Number 1-11 odd, 13-35, 41-50

December 5: Partial Derivatives
ed 1: 11.3 Number 1-60
ed 2: 11.3 Number 1-64
December 8:
Review

December 10:
Review

TBA:
Final Exam (all day sections)