MATH 221   **Daily Syllabus**   **Fall 2011**

Sep. 1: Radians, sine, cosine 8.1, 8.2
Sep. 6: Differentiation of sine, cosine 8.3
Sep. 8: Tangent, secant, etc. 8.4
Sep. 12: Quiz 1: 8.1, 8.2, 8.3, 8.4
Sep. 13: Integration by subst. 9.1
Sep. 15: Integration by parts 9.2
Sep. 19: Quiz 2: 9.1, 9.2
Sep. 20: Subst. and parts (9.1+9.2 cont.)
Sep. 22: Definite ints. 9.3, Improper ints. 9.6
Sep. 26: Quiz 3: 9.1(cont.), 9.2(cont.), 9.3, 9.6
Sep. 27: Approximation 9.4
Sep. 29: Applications 9.5
Oct. 3: Quiz 4: 9.4, 9.5
Oct. 4: Review
Oct. 6: EXAM 1 (8.1 – 9.6)
Oct. 10: Return Exam 1
Oct. 11: Diff. equ. 10.1, Sep. of variables 10.2
Oct. 13: First order diff. equ. 10.3
Oct. 17: Quiz 5: 10.1, 10.2, 10.3
Oct. 18: Applications 10.4
Oct. 20: Graphing solutions 10.5
Oct. 24: Quiz 6: 10.4, 10.5
Oct. 25: Applications 10.6
Oct. 27: Taylor polynomials 11.1
Oct. 31: Quiz 7: 10.6, 11.1
Nov. 1: Review

Nov. 3: EXAM 2 (10.1 – 10.6, 11.1)
Nov. 7: Return Exam 2
Nov. 8: Newton-Raphson algorithm 11.2
Nov. 10: Infinite series 11.3
Nov. 14: Quiz 8: 11.2 11.3
Nov. 15: Series with pos. terms 11.4
Nov. 17: Taylor series 11.5
Nov. 21: Quiz 9: 11.4, 11.5
Nov. 22: Discrete r. v. 12.1, Continuous r. v. 12.2
Nov. 28: Quiz 10: 12.1, 12.2
Nov. 29: Exp. val., etc. 12.3, Expon. r. v. 12.4
Dec. 1: Normal r. v. 12.4, Poisson r. v. 12.5
Dec. 5: Quiz 11: 12.3, 12.4, 12.5
Dec. 6: Review
Dec. 8: EXAM 3 (11.1 – 12.5)
Dec. 12: Return Exam 3
Dec. 13: Review
Dec. 15: FINAL EXAM 1:30-3:30

Homework assignments

8.1: 1-17 (odd)
8.2: 1-33 (odd)
8.3: 1-47 (odd), 51
8.4: 1-39 (odd)
9.1: 1-33 (odd)
9.2: 1-23 (odd)
9.1 (cont.): 35-53 (odd)
9.2 (cont.): 25-37 (odd)
9.3: 1-19 (odd), 25
9.4: 1, 5, 7, 11, 15, 19, 25, 27
9.5: 3, 7, 9, 12
9.6: 1, 5, 9, 13, 17, 21, 25, 29, 33, 37, 39
10.1: 1-29 (odd)
10.2: 1, 5, 9, 13, 17, 21, 25, 29, 31, 33, 35, 39

10.3: 1, 3, 7, 13, 19, 21, 23, 25
10.4: 3, 5, 7, 9, 13, 15, 17, 19, 21, 23, 25
10.5: 1-37 (odd)
10.6: 1, 7-25 (odd)
11.1: 1, 3, 5, 7, 9, 13-25 (odd)
11.2: 1, 5, 7, 9, 11, 19
11.3: 1-21 (odd), 23, 27-39 (odd)
11.4: 1-17 (odd)
11.5: 1-15 (odd), 16, 17, 18, 19, 23
12.1: 1, 2, 3, 5, 7, 8, 9
12.2: 1, 5, 7, 11, 15, 21, 23, 25, 31, 32
12.3: 1, 3, 9, 11, 15, 17, 19, 21
12.4: 1-13 (odd), 23, 25, 27, 29, 31
12.5: 5, 7, 9

Numerical Exercises

In order to improve students' numerical skills, on each midterm exam there will be three numerical problems, each worth 2 points. They will involve addition, subtraction, multiplication, and division of fractions and decimals. Examples:

$$0.3 + 0.4, \quad 0.3 \times 0.2, \quad .5000 - .4287, \quad 1.23/.3, \quad \frac{2}{3} + \frac{4}{7}, \quad \frac{5}{6} - \frac{4}{7}, \quad (\frac{2}{9})/(\frac{3}{5}), \quad \frac{2}{9} \times \frac{6}{7}$$

$$\textit{Answers:} \quad 0.7, \quad 0.06, \quad .0713, \quad 4.1, \quad \frac{26}{21} \text{ or } 1\frac{5}{21}, \quad \frac{11}{42}, \quad \frac{10}{27}, \quad \frac{4}{21}$$