MATH 544 – METHODS OF APPLIED MATH. II

Semester: Spring 2003
Instructor: Uğurhan Muğan
Office: Room #A-117 (Faculty of Science) **Phone:** 1590

Exams & Grading: 1 Midterms (%35)
(Tentative)   • **1ˢᵗ Midterm**   March 26, 2003 @ 13:40-15:30, Room #.........

Final exam (%40)
• **Final Exam**   **To Be Announced**, Room #..........
Homework & quizzes (%25)
75% attendance is obligatory

Course Schedule: Wednesday, 13:40-15:30   Room #Z-19
Friday, 9:40-10:30   Room #Z-19
Office Hours: Monday, 13:30-15:30

Textbook: J. Kevorkian, *PDE's, Analytical Solution Techniques*, (Brooks/Cole,1990)

Supplementary
• F. John, *PDE's*
• Couraht & Hilbert, *Meth. of Math. Phys. I*
• P.R.Garabedian, *Partial Differential Equations*

Week		Subject	MT	HW
#1	Feb. 3	The Single First Order Equations		
#2	Feb. 17	Quasilinear Equations		
#3	Feb. 24	Cauchy Problem For The Quasi-Linear Equations		
#4	Mar. 3	Shock Waves		
#5	Mar. 10	Shock Fitting (General Case)		
#6	Mar. 17	Specific Examples		
#7	Mar. 24	Burger's Equation	#1	
#8	Mar. 31	Hyperbolic System		
#9	Apr. 7	Hyperbolic System		
#10	Apr. 14	Linear Second Order Eq's With Two Independent Variables		
#11	Apr. 21	Linear Second Order Eq's With Two Independent Variables		
#12	Apr. 28	Nonlinear First Order Eq's.		
#13	May 5	Nonlinear First Order Eq's.		
#14	May. 12	Inverse Scattering Transform		
#15				