## MATH 240-02 – DIFFERENTIAL EQUATIONS

Semester:	Spring 2000		
Instructor:	Alex Degtyarev	Phone:	x 2135
Office:	Room SA-130	E-mail:	degt@fen.bilkent.edu.tr
Assistant:	Ozgür Ceyhan	Office:	SA-103
Exams & Grading:	<ul> <li>Midterms (25% each) 1st Midterm 2nd Midterm</li> <li>Final Exam (40%)</li> <li>Quizzes (10%)</li> </ul>		$\begin{array}{c} 2000 @ 1:40  \mathrm{pm} \\ 00 @ 1:40  \mathrm{pm} \end{array}$
Sample Exams	are available from http://www.fen.bilkent.edu.tr/~degt		
Course Schedule:	Tuesday $8:40-9:30 \text{ am}$ Friday $1:40-3:30 \text{ pm}$		
Office Hours:	$\begin{array}{ll} {\rm Tuesday} \ 9{:}40{-}10{:}30{\rm am} \\ {\rm Friday} \ \ 9{:}40{-}10{:}30{\rm am} \end{array}$		
Textbook:	Rainville, Bedient & Bedient, <i>Elementary Differential Equations</i> , 8th Edition (Prentice-Hall Inc., Simon & Schuster)		
Supplementary:	<ul> <li>Boyce &amp; DiPrima, Elementary Differential Equations and Boundary Value Problems (Wiley, New York, 1992),</li> <li>Ross, Differential Equations (Wiley, New York, 1986)</li> </ul>		

Week Subject		MT	
#1	Feb.7-11	Introduction to Differential Equations	
#2	Feb.14-18	First Order O.D.E. Separation of Variables	
#3	Feb.21-25	Integrating Factors. Homogeneous Equations	
#4	Feb.28-Mar.3	Applications of First Order O.D.E.	
#5	Mar.6-10	Linear Dependence. Wronskian	
#6	Mar.13-15	Reduction of Order	
#7	Mar.20-24	Method of Undetermined Coefficients	1
#8	Mar.27-31	Variation of Parameters	
#9	Apr.3-7	Applications of Second Order O.D.E.	
#10	Apr.10-14	Inverse Differential Operators	
#11	Apr.17-21	Singularities of Differential Equations	
#12	Apr.24-28	Series Solutions	2
#13	May 1-5	Series Solutions	
#14	May 8-12	The Laplace Transform	
#15	May 15-18	The Laplace Transform	