Course #: **Math 202**
Title: Elements of Differential Equations

Textbook: A First Course in Differential Equations by D.G. Zill, 7th and 8th Editions.

Wk	Date	Sec.	Material	Homework
1	Sept.10-14	1.1 1.2	Definitions and Terminology Initial Value Problems-Existence and uniqueness	4,8,14,20,24 2,4,8,16,18,22
2	Sept.17-21	2.1 2.2	Solution curves Separable Variables	1,3,7,8,15,17,20 6,14,22,24,44
National Holiday: Saturday 24 September 2005				
3	Sept.25-28	2.3 2.4	Linear Equations Exact Equations-Integrating Factors	2,5,10,17,30 2,5,9,15,25,34,42,43
4	Oct.01-05	2.5 3.1	Solutions by Substitutions Linear Equations (Modeling)	6,8,13,21,26,30 5,8,13,20,21,23,27
5	Oct.08-12	4.1.1 4.1.2	Initial and Boundary Value Problems Homogeneous Equations	5,8,11,12 16,19,23, 24,25,28,29
6	Oct.15-19	4.1.3 4.2	Nonhomogeneous Equations Reduction of Order	33,36,38 3,5,12,13,14,18,19
7	Oct. 22-26	4.3 4.5	Homogeneous Linear Equations with Constant Coefficients Annihilator Approach	12,20,35,40,51 3,10,12,24,30,54,62
Id Al-Fitr: 27 October 2005 – 11 November 2005				
8	Nov.12-17*	4.6 4.7	Variation of Parameters Cauchy-Euler Equations	11,13,17,27 8,12,25,37,38
9	Nov.19-23	6.1 6.1.1	Solutions about Ordinary Points Review of Power Series	1,5,10,12
10	Nov.26-30	6.1.2	Solutions about Ordinary Points	13,16,18,28
11	Dec.03-07	6.2	Solutions about Singular Points	3,9,14,19,25
12	Dec.10-14	A.II.2 A.II.3	Gauss Elimination Eigenvalue Problem	31,34,38 47,48,49,50
13	Dec.17-21	8.1 8.2	Preliminary Theory Homogeneous Linear Systems with Constant coefficients	1,4,10,15,24
14	Dec.24-28	8.2.1 8.2.2	Distinct Real Eigenvalues Repeated Eigenvalues (m=2,3)	3,6,11,13 19,21,26,28
15	Dec.31,2005- Jan.04,2006	8.2.3 8.3 (8.3.2)	Complex Eigenvalues Variation of Parameters (Optional)	33,38,42,44 1,3,8,13,18
Id Al-Adha: 05 January 2006 – 20 January 2006				
16	Jan.21-25		Review	

Remark: Section 8.3.2 in the 8th edition corresponds to section 8.3 in the 7th edition.
Some of the homework problems in the 8th and the 7th editions are different.

- ***Thursday November 17 is a normal Saturday class**
- KFUPM attendance policy will be enforced**. DN grade for 9 and more unexcused absences**
- Exam # 1: Sunday October 9, 2005 (Suggested by the CS)
- Mid Term warning: Tuesday October 18, 2005
- Exam # 2: Tuesday December 6, 2005 (Suggested by the CS)
- Final Exams: January 28 – February 07, 2006
- Tuesday, September 20, 2005: Last day for dropping courses without permanent record
- Tuesday, November 15, 2005: Last day for dropping courses with a grade of "W"
- Wednesday, December 07, 2005: Last day for withdrawal from all courses with grade of "WP/WF"

Instructor		
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