

# King Fahd University of Petroleum and Minerals

Electrical Engineering Department

EE205: ELECTRIC CIRCUITS II

Dr. Abdelmalek Zidouri

Second Semester 2006-2007 (061)

## A. Course Information

<b>Text Book:</b>	<b>ELECTRIC CIRCUITS, Nilsson &amp; Riedel, 6<sup>th</sup> Edition, 1999</b>				
Course	Name, Email address	Office	Phone	Office Hours	Sections
Instructors:	Dr. Abdelmalek Zidouri <i>malek@kfupm.edu.sa</i>	14/209-1	3677	SMW 10-11 M 13-14	1, 2
<b>Grading:</b>					
	Attendance, Assignments and Quizzes	Projects	Two Majors		Final
	15%	10%	40%		35%
	First Major	Second Major	Projects Due Dates		Final
Exams Dates:	Mon. Oct. 30, 2006	Mon. Dec. 11, 2006	TBA		
Exams Times:	5:00-6:30 pm	5:00-6:30 pm			
Exams Places:					
Important Dates:	Last day to drop the course <b>without</b> a permanent record	Last day to drop the course with “W” grade	Last day to drop <b>all courses</b> with “W” Thru Registrar’s office.		
	<b>Sept. 19, 2006</b>	<b>Nov. 7, 2006</b>	<b>Nov. 29, 2006</b>		

**Note #1:** Final Exam is comprehensive (i.e. covers all chapters as described in the syllabus). It is common to all sections.

**Note #2:** According to the rules and regulations of KFUPM, attendance is **MANDATORY**. More than **8** unexcused absences will be reported to the registrar office and result in a **GRADE of DN** regardless of the student’s grade.

**Note #3:** It is your responsibility to solve the homework as soon as the material is covered in the class. Homework solution will be published on WebCT. Quizzes will be given regularly based on the homework problems.

**Note #4:** You are urged to use **your instructor’s** office hours whenever is possible. To help you further I will arrange for some problem solving sessions. Date and time will be announced in class.

**Note #5:** You can access the homework solutions and any other supplement material, communication items, and any **course information** at your instructor’s WebCT course page.

## B. Tentative Course Outline and Schedule

Week	Date	Topics	Text Section	Homework Problems
1	Sept. 9-14	Introduction to 3- $\phi$ circuits	11.1-11.3	
2	Sept. 16-20	Balanced three-phase circuits	11.4-11.6	11:6,7,11,20,21
3	Sept. 24-27	Natural and step responses of RLC circuits	8.1-8.2	11:24,27,28,38,39
4	Sept. 30-Oct.4	Natural and step responses of RLC circuits	8.3-8.4	8:3,4,10,12
5	Oct. 7-11	Natural and step responses of RLC circuits. State equations and computer aided circuit analysis.	8.5 Handout*	8:25,28,32,37,45
<b>EID ALFITR Break</b>				
6	Oct. 28-Nov. 1	State equations and computer aided circuit analysis	Handout	Ch. 7 Bobrow: 6,9,21,25,38,40
<i>Major I Oct. 30, 5:00-6.30 pm (B14-108); Up to sec. 8.5</i>				
7	Nov. 4-8	Resonant circuits	Handout	Ch 10 Bobrow
8	Nov. 11-15	Resonant circuits, Circuit analysis in s-domain	Handout	23,26,27,33,40,42
9	Nov. 18-22	Circuit analysis in s-domain	Handout	Ch 10 Bobrow: 50,53,54
10	Nov. 25-29	Circuit analysis in s-domain Mutual inductance and transformers	Handout 6.4-6.5	6:35,36,37,39,40
11	Dec. 2-6	Mutual inductance and transformers	9.10, 9.11	9:60,61,63,68
<i>Major II Dec. 11, 5:00-6.30 pm (B14-108); Up to Transformers 9.11</i>				
12	Dec. 6-13	Filters and Bode plot	14.1-14.4	14:2,4,7,8,12
13	Dec. 16-20	Filters and Bode plot	14.6-14.7	14:31,32,33(c),34
<b>EID ALADHA Break</b>				
14	Jan. 6-10	Two-port networks	18.1-18.2	18:2,3,10,11
15	Jan. 13-17	Two-port networks and Review	18.3-18.4	18:19,20,30,38

\* Handouts can be downloaded from your WebCT course pages.