

King Fahd University Of Petroleum & Minerals  
 Department of Electrical Engineering  
 EE 204 Fundamentals of Electric Circuits

**Tentative Schedule: 2007-2008 Second Semester (072)**

INSTRUCTORS	OFFICE	Sec#	PHONE	E-MAIL	OFFICE HOURS
Jamil Bakhshwain	59-2096	04	3262	jamilb@kfupm.edu.sa	U,T 11:15-12:00

**Text:** *FUNDAMENTALS OF ELECTRIC CIRCUIT ANALYSIS*, Clayton Paul, Wiley & Sons. Inc., 2001

Wk	Date	Topics	Text	Laboratory/Tutorial
1	16 Feb.	Introduction, Basic Definitions, KCL, KVL	1.2 – 1.6	No Meeting
2	23 Feb.	Conservation of power, Series & Parallel Connection of Elements, Ohm's Law	1.7 – 1.8, 2.1 – 2.3	<b>Exp #1</b> Resistors and Ohm's Law
3	1 March	Resistors in Series and in Parallel, Voltage and Current Division	2.4 – 2.6	<b>Exp #2</b> Kirchhoff's Laws
4	8 March	Source Transformation, Principle of Superposition	2.7, 3.1	<b>Exp #3</b> Computer Simulation of DC Circuits
5	15 March	Thevenin Theorem, Norton Theorem	3.2 – 3.3	<b>Problem Session # 1</b>
6	22 March	Maximum Power Transfer, Node Voltage Method	3.4 – 3.5	No Meeting
<b>Major Exam I (1.2–3.3) March 25, 2007 (08:00 to 09:30 PM) *</b>				
7	29 March	Node Voltage Method, Mesh Current Method	3.5 (Cont.) – 3.6	<b>Exp #3</b> Experimental Part
8	5 April	Capacitors, Inductors, Series and Parallel Connections	5.1 – 5.2	<b>Exp #4</b> Current & Voltage Divider
<i>Midterm Vacation</i>				
9	19 April	Sinusoidal Source, Complex Numbers, Frequency Domain (Phasor) Circuit.	6.1 – 6.3	<b>Exp#5</b> Superposition, Thevenin & Norton Theorems
10	26 April	Frequency Domain Analysis	6.4 – 6.5	<b>Problem Session # 2</b>
11	3 May	Power Concepts, Average Power	6.6	No Meeting
<b>Major Exam II (3.4 – 6.5) May 5, 2008 (08:00 to 9:30 PM) *</b>				
12	10 May	Power Factor, RMS Values	6.6	<b>Exp #6</b> Frequency Domain Analysis
13	17 May	Commercial Power Distribution, Three Phase Circuits	6.9	<b>Exp #7</b> Max. Power Transfer
14	24 May	Three Phase Circuits, Star-Delta Connections	6.9	<b>Exp #8</b> Average and RMS Values
15	31 May	Review		<b>Final Lab Exam</b>
<i>Final Examination: Comprehensive</i>				

**Grade Distribution:**

Design Problem	Class work	Major I*	Major II*	Laboratory	Final Exam
<b>3 %</b>	<b>12 %</b>	<b>15 %</b>	<b>15 %</b>	<b>20 %</b>	<b>35 %</b>

\* Location of major exams will be posted later.

\*\* Details are to be given by your instructor.

## Suggested Practice problems:

<b>HW # 1</b>	<b>Ch. 1:</b>	1.3-1, 1.4-5, 1.5-5, 1.6-2, 1.6-6, 1.7-2, 1.8-2
<b>HW # 2</b>	<b>Ch. 2:</b>	2.2-5, 2.2-7, 2.3-2, 2.3-8, 2.4-3, 2.4-10, 2.5-7, 2.5-11
<b>HW # 3</b>	<b>Ch. 2: &amp; Ch. 3:</b>	<b>Ch.2:</b> 2.6-4, 2.7-3, 2.7-5, <b>Ch.3:</b> 3.1-2, 3.1-4, 3.2-2, 3.2-4
<b>HW # 4</b>	<b>Ch. 3:</b>	3.2-6, 3.2-12, 3.3-2, 3.3-4, 3.3-6, 3.3-12
<b>HW # 5</b>	<b>Ch. 3:</b>	3.5-2, 3.5-7, 3.6-2, 3.6-7
<b>HW # 6</b>	<b>Ch. 5:</b>	5.1-3, 5.1-6, 5.1-8, 5.2-3, 5.2-6, 5.2-8, 5.4-2
<b>HW # 7</b>	<b>Ch. 6:</b>	6.1-1(b,f), 6.1-2(a,f,g), 6.2-1(d,f), 6.2-5(b,d)
<b>HW # 8</b>	<b>Ch. 6:</b>	6.3-4, 6.3-7, 6.4-4, 6.4-7, 6.4-12
<b>HW # 9</b>	<b>Ch. 6:</b>	6.4-16, 6.4-17, 6.5-1, 6.5-4, 6.5-8

## Important Points to Remember

1. **Practice Problems:** Practice problems are to be solved completely by the students. solutions will be posted in **WebCT**.
2. **Problem Sessions:** All problem sessions will be held during the lab time.
3. **Lab. Makeup:** No lab makeup will be allowed without an official excuse from students affairs.
4. **Attendance:** According to the university regulations, any student that exceeds 20% of the scheduled class meeting without an official excuse will receive a grade of DN in the course.
5. **Official excuses:** All official excuses must be submitted to the instructor no later than one week of the date of the official excuse. The instructor may not accept late excuses.