

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

Tentative Schedule: 2004-2005 First Semester (041)

INSTRUCTOR	OFFICE	PHONE	E-MAIL	OFFICE HOURS
Haitham Tayyar	14/257-2	4810	haitham@kfupm.edu.sa	Sun 10:15 - 11:45 am Tue 2:00 - 3:00 pm

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

Wk	Date	Topics	Text	Laboratory/Tutorial
1	Sep. 11	Introduction, Basic Definitions, KCL, KVL	1.2 – 1.6	No Meeting
2	Sep. 18	Conservation of power, Series & Parallel Connection of Elements, Ohm's Law	1.7 – 1.8, 2.1 – 2.3	No Meeting
3	Sep. 25	Resistors in Series and in Parallel, Voltage and Current Division	2.4 – 2.6	Exp #1 Resistors and Ohm's Law
4	Oct. 2	Source Transformation, Principle of Superposition	2.7, 3.1	Exp #2 Kirchhoff's Laws
5	Oct. 9	Thevenin Theorem, Norton Theorem	3.2 – 3.3	Problem Session # 1
6	Oct. 16	Maximum Power Transfer, Node Voltage Method	3.4 – 3.5	Exp #3 Computer Simulation of DC Circuits
<i>Major Exam I October 23, 2004 (5:30-7:00 pm)</i>				
7	Oct. 23	Node Voltage Method, Mesh Current Method	3.5 (Cont.) – 3.6	Exp #3 Experimental Part
8	Oct. 30	Capacitors, Inductors, Series and Parallel Connections	5.1 – 5.2	Exp #4 Current & Voltage Divider
9	Nov. 20	Sinusoidal Source, Complex Numbers, Frequency Domain (Phasor) Circuit.	6.1 – 6.3	Exp #5 Superposition, Thevenin & Norton Theorems
10	Nov. 27	Frequency Domain Analysis	6.4 – 6.5	No Meeting
11	Dec. 4	Power Concepts, Average Power	6.6	Problem Session # 2
12	Dec. 11	Power Factor, RMS Values	6.6 + Handout	Exp #6 Frequency Domain Analysis
<i>Major Exam II December 20, 2004 (5:30-7:00 pm)</i>				
13	Dec. 18	Commercial Power Distribution, Three Phase Circuits	6.9 + Handout	Exp #7 Max. Power Transfer
14	Dec. 25	Three Phase Circuits, Star-Delta Connections	6.9 + Handout	Exp #8 Average and RMS Values
15	Jan. 1	Review		Final Lab Exam
<i>Final Examination</i>				

Grade Distribution:

Design Problem	Quizzes	Two Major Exams	Laboratory	Final Exam
5 %	10 %	15 % Each	20 %	35 %

List of Homework problems:

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

Important Points to Remember

1. **Home-work:** The homework assignment is to be solved completely by the students. Homework solutions will be posted in **building 26**, in the bulletin board between rooms 248 & 249. Homework **solutions will also be posted in the network.**
2. **Problem Sessions:** All problem sessions will be held during the lab periods.
3. **Lab. Makeup:** No lab makeup will be allowed without an official excuse.
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.