King Fahd University of Petroleum and Minerals
Department of Electrical Engineering
EE 204 Fundamentals of Electric Circuits
Semester 052

Instructor: Dr. Wajih A. Abu-Al-Saud
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Office Hours: UT @ 11:00am – 12:00 pm
M @ 9:00 am – 12:00 pm, and by appointment.

Textbook: ***Fundamentals of Electric Circuit Analysis***, by Clayton R. Paul, J. Wiley & Sons, Inc, 2001.

Grade Distribution:	**Points**
Major Exam I	**16 %**
Major Exam II	**16 %**
7 Quizzes	**12 %**
Homework	**6 %**
Laboratory	**20 %**
Final Exam	**30 %**
Total	**100 %**

Regulations

1. University regulations regarding attendance are observed and enforced (a grade of DN will be given after the 5th unexcused absence). Only official excuses will be accepted and must be submitted no later than the second lecture after the excused absence.
2. Homework assignments will be handed by the instructor at least one week before the due date. On the due date of each homework assignment, the solution of that homework assignment will be posted on WebCT. You will get a quiz on the same material of that homework assignment the next lecture.
3. Final exam will be comprehensive and common for all lecture sections.

Wk	Day	Date	Topics	Text	Quiz & HW due	Laboratory/Tutorial
1	U T	12 Feb. 14 Feb.	Introduction, Basic Definitions, KCL, KVL	1.2–1.6		No Meeting
2	U T	19 Feb. 21 Feb.	Conservation of power, Series and Parallel Connection of elements, Ohm's Law	1.7–18, 2.1–2.3	HW 1 Due	**Exp #1** Resistors and Ohm's Law
3	U T	26 Feb. 28 Feb.	Resistors in Series and in Parallel, Voltage and Current division	2.4–2.6	Quiz 1	**Exp #2** Kirchhoff's Laws
4	U T	5 Mar. 7 Mar.	Source transformation, Principle of Superposition	2.7, 3.1	HW 2 Due Quiz 2	**Exp #3** Computer Simulation of DC Circuits
5	U T	12 Mar. 14 Mar.	Thevenin Theorem, Norton Theorem	3.2–3.3	HW 3 Due	**Problem Session # 1**
6	U T	19 Mar. 21 Mar.	Maximum Power Transfer, Node Voltage Method	3.4–3.5	Quiz 3	No Meeting
Major Exam I, Wednesday, 22 March., 7:00 pm – 9:00 pm, OAB Building (Sections 1.2–3.3)						
7	U T	26 Mar. 28 Mar.	Node Voltage Method, Mesh Current Method,	3.5 (cont.), 3.6		**Exp #3** Experimental Part
Midterm Break, Saturday and Sunday, 1-2 April						
8	T	4 Apr.	Capacitors, Inductors, Series and Paral. connect.	5.1–5.2	HW 4 Due	No Meeting
9	U T	9 Apr. 11 Apr.	Sinusoidal Source, Complex Numbers, Frequency Domain (Phasor) Circuit.	6.1–6.3	Quiz 4	**Exp #4** Current & Voltage Divider
10	U T	16 Apr. 18 Apr.	Frequency Domain Analysis	6.4–6.5	HW 5 Due	**Exp #5** Superposition, Thevinin & Norton Th.
11	U T	23 Apr. 25 Apr.	Power Concepts, Average power	6.6	Quiz 5	**Problem Session # 2**
Major Exam II, Saturday, 29 April, 7:00 pm – 9:00 pm, OAB Building (Sections 3.4–6.5)						
12	U T	30 Apr. 2 May	Power factor, RMS values	6.6 + Handouts		**Exp #6** Frequency Domain Analysis
13	U T	7 May 9 May	Commercial Power distribution, Three phase circuits	6.9 + Handouts	HW 6 Due Quiz 6	**Exp #7** Max. Power Transfer
14	U T	14 May 16 May	Three phase circuits	6.9	HW 7 Due	**Exp #8** Average and RMS Values
15	U T	21 May 23 May	Star-Delta Connections, Review		Quiz 7	**Final Lab Exam**
16	U	21 May	Review			
Final Exam, To be scheduled by Registrar (Sections 1.2–6.9)						