

## EE 201 (Sections 5 and 10) ELECTRIC CIRCUITS I

### First Semester (051) Tentative Schedule

Textbook: *ELECTRIC CIRCUITS*, Nilsson & Riedel, 6<sup>th</sup> Edition, 2001.

**Instructor:** Dr. Alakhddhar, S. Zaki

**Office:** 14-275 **Hours:** S.W. 11:00-11:50 AM and M. 12:00-12:50 PM or (by appointment)

**Tel:** 2360, **E-mail:** zakiha@kfupm.edu.sa

**Course web site in WebCT** <http://webcourses.kfupm.edu.sa> **My Web:** <http://faculty.kfupm.edu.sa/ee/zakiha/>

Wk	Date	Topics	Text	HW	Laboratory
1	10-14 Sep.	Circuits Variables, Sources, Power and Energy	1.1-1.6, 2.1	1	No Experiment
2	17-21 Sep.	Ohm's Law, KCL, KVL, Dependent Sources	2.2-2.5	2	Exp # 1:Electrical circuits simulation using Multisim Elec. Workbench :An Intro.
3	26-28 Sep.*	Resistive Circuits, Nodal Analysis	3.1-3.4, 3.7, 4.1	3	No Experiment
4	1-5 Oct.	Nodal Analysis (Continued), Mesh Analysis	4.2-4.5	4	Exp #2 : Electric circuit fundamentals
5	8-12 Oct.	Mesh Analysis, Source Transformation,	4.6-4.9	5	Exp # 3 : Resistors in series, color codes & power rating
6	15-19 Oct.	Thevenin and Norton Equivalent Circuits.	4.10-4.11	6	No Experiment
<b>Major Exam I (Sections 1.1-4.9), Wednesday 19 October 2005</b>					
7	22-26 Oct.**	Maximum Power Transfer, Superposition.	4.12-4.13,5.1-5.2	7	Exp # 4 : Kirchoff's laws
8	12-16 Nov.	Operational Amplifiers	5.3-5.6		Exp # 5: Series-parallel circuits, voltage—current divider.
9	19 -23 Nov.	Inductors, Capacitors, First Order Circuits	6.1-6.3,7.1-7.2	8	Exp # 6 : Superposition theory.
10	26-30 Nov.	First Order Circuits (Continued)	7.3-7.7	9	Exp # 7 : Thevenin's theorem and maximum power transfer
11	3-7 Dec.	First Order Circuits (contd.), Sinusoidal Response, Complex Numbers	9.1-9.2, App. B.	10	Exp # 8 : DC sweep analysis
12	10-14 Dec.	Frequency Domain Analysis.	9.3-9.7	11	Exp # 9 : Transients of a first order RC circuit
13	17-21 Dec.	Frequency Domain Analysis (continued).	9.8, 9.9, 9.12	12	Exp # 10 : The oscilloscope and function generator
<b>Major Exam II (Sections 4.10-9.2), Wednesday 21 December 2005</b>					
14	24-28 Dec.	Average and Reactive Power, Complex Power	10.1-10.5	13	Exp # 11 : Sinusoidal AC analysis.
15	31 Dec-4 Jan.***	Maximum Power Transfer	10.6	14	Final Lab. Exam
16	21Jan.	Review			
Final Examination					

\* Saturday, 24 September 2005 (National Holiday).

\*\* Wednesday, 26 October 2005 (Last Day of Classes before Id el-Fitr Vacation).

\*\*\* Wednesday, 4 January 2006 (Last Day of Classes before Id-al-Adha Vacation).

### Grade Distribution:

Major Exams	30% (All major exams will be taken in class).
Quizzes	10%
Design Problem	5%
Laboratory	20%
Final Exam	35%

### Homework List:

HW #1: 1.13, 1.15, 1.21, 2.6, 2.9, 2.12	HW #8: 5.10, 5.19, 6.4, 6.6, 6.14, 6.30
HW #2: 2.13, 2.14, 2.21, 2.25, 2.27	HW #9: 7.6, 7.14, 7.19, 7.28, 7.58
HW #3: 3.8(a), 3.12, 3.15, 3.46, 3.51	HW #10: 7.65, 7.88, 9.1, 9.2, 9.3, 9.6, 9.8
HW #4: 4.5, 4.9, 4.23, 4.24, 4.26, 4.32	HW #11: 9.10, 9.11, 9.22, 9.23
HW #5: 4.38, 4.42, 4.51, 4.53, 4.54	HW #12: 9.31, 9.35, 9.42, 9.50
HW #6: 4.55, 4.58, 4.59, 4.61, 4.66	HW #13: 10.1, 10.5, 10.10, 10.12
HW #7: 4.75, 4.76, 4.77, 4.90, 4.92	HW #14: 10.20, 10.21, 10.22, 10.31, 10.32

### Important Points to Remember:

- Home-work: The homework assignments are to be solved completely by the students. However, the homework solution will not be collected. Instead, a quiz related to the homework problems is expected in the week following the homework assignment date.
- Homework solutions will be posted on the following link: Web-CT <http://webcourses.kfupm.edu.sa>
- 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.
- 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 a late excuse.
- The course material and announcements are available online and can be accessed through the Web-CT. You are strongly encouraged to systematically review this online material to enhance your understanding of the course.