

# KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS

## Electrical Engineering Department

### EE 201 ELECTRIC CIRCUITS

#### Summer Term (063) Tentative Schedule

INSTRUCTORS	OFFICE	PHONE	OFFICE HOURS	E-MAIL
<b>Dr. Hussain Alzahr</b>	59-1069	1434	SUMTW 11:40-12:30 pm	<a href="mailto:alzahrh@kfupm.edu.sa">alzahrh@kfupm.edu.sa</a>

Textbook: **ELECTRIC CIRCUITS**, Nilsson & Riedel, 7<sup>th</sup>. Edition, 2005

Wk	Date	Topics	Text	H.W./Quiz	Laboratory/Tutorial
1	1-5 July	Circuits variables: voltage and current, power and energy, ideal sources, Ohm's Law, KCL, KVL	1.1-1.6, 2.2-2.4	H.W. # 1	No Lab. Exp # 1 Multisim Electronics Workbench
2	7-11 July	Circuits with Dependent Sources Resistive Circuits, VDR, CDR, Nodal Analysis	2.5, 3.1-3.4, 4.1-4.2	Quiz # 1 H.W. # 2	Exp # 2 Electric Circuit Fundamentals Exp # 3 Resistors in Series, Color Codes & Power Rating
3	14-18 July	Nodal Analysis (cont.), Mesh Analysis, Source Transformation	4.3-4.9	Quiz # 2 H.W. #3	No Exp. Exp # 4 Kirchhoff's Laws
<b>Saturday July 21: Major Exam I</b>					
4	21-25 July	Thevenin And Norton Eq. Circuits. Max. Power Transfer, Superposition.	4.10-4.11 4.12-4.13	H.W. #4	Exp # 5 Series & Parallel Circuits, VDR & CDR Exp # 6 Superposition Theorem
5	28 Jul-1 Aug	Operational Amplifiers Inductors, Capacitors, First Order Circuits	5.1-5.6 6.1-6.3,7.1-7.2	Quiz # 3 H.W. #5	Exp # 7 Thevenin's Theorem and Maximum Power Transfer Exp # 8 DC Sweep Analysis
6	4 -8 Aug	First Order Circuits (Cont.) Sinusoidal Response, Complex Numbers Frequency Domain Analysis.	7.3-7.7 9.1-9.2, Appendix B.	Quiz # 4 H.W. #6	Exp # 9 Transients of a First Order RC Circuit Exp # 10 The Oscilloscope and Function Generator
<b>Saturday Aug. 11: Major Exam II</b>					
7	11-15 Aug	Frequency Domain Analysis. Average and Reactive Power, Complex Power	9.3-9.9 10.1-10.4	Quiz # 5 H.W. #7	Exp # 11 Sinusoidal AC Analysis Lab. Test
8	18-20 Aug	Maximum Power Transfer	10.5-10.6		No Lab.

\*July 24 is the last day for W

\*\* August 1 is the last day for dropping all courses

#### Grade Distribution:

Two Major Exams	30%
Quizzes	12%
Attendance & Participation	3%
H.W.	5%
Laboratory	20% (3% Pre-Labs + 7% Lab Reports + 3% Lab Quizzes 7%Lab. Final)
Final Exam	30%

#### Home work list:

H.W #1: 1.12, 1.13, 1.19, 1.26, 2.4, 2.6, 2.12, 2.20, 2.25, 2.26	(Due date: Sat July 7 <sup>th</sup> )
H.W #2: 2.28, 2.29, 3.4, 3.7(c), 3.8, 3.13, 4.3, 4.15, 4.19, 4.25, 4.27, 4.29	(Due date: Sat July 14 <sup>th</sup> )
H.W #3: 4.51, 4.52, 4.55, 4.56, 4.59, 4.60, 4.63, 4.67, 4.68, 4.70	(Due date: Sat July 21 <sup>st</sup> )
H.W #4: 4.73, 4.75, 4.86, 4.88, 5.2, 5.10, 5.13, 6.2, 6.4, 6.13	(Due date: Sat July 28 <sup>th</sup> )
H.W #5: 7.4, 7.10, 7.11, 7.21, 7.35, 7.46, 7.47, 7.63, 7.84, 9.1, 9.6, 9.8	(Due date: Sat. Aug. 4 <sup>th</sup> )
H.W #6: 9.9, 9.10, 9.13, 9.14, 9.15, 9.26, 9.32, 9.36,	(Due date: Sat Aug. 11 <sup>th</sup> )
H.W #7: 9.51, 10.1, 10.3, 10.4, 10.7, 10.9, 10.17, 10.19, 10.22, 10.29	(Due date: Sat Aug. 18 <sup>th</sup> )

#### Important Points to Remember

1. Home-work: No late homework will be graded. Solutions will be posted in the class web page.
2. Pre-Labs: Each student must submit the pre-lab. Assignment at the beginning of each lab. (no pre-labs. for the first two experiments). No pre-lab. will be accepted if the lab. instructor has already started the experiment.
3. Lab. Makeup: No lab. make-up 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.