

Instructor Dr. Abdullah M. Al-Shaalan . . .

Office 2 C 1 1 2

Text Book *Introduction to Electricity, Electronics and Electromagnetics*,
Fifth Edition, 2002. (By: Robert L. Boylestad and Louis Nashelsky)

The following chapters and sections will be covered:

Chapter 2 - DC Networks

- 2.5 Resistance and Ohm's Law
- 2.8 Series DC Networks
- 2.10 Parallel DC Networks

Chapter 3 - Series / Parallel DC Networks, Theorems and Storage Elements

- 3.2 Series/Parallel Networks
- 3.3 Current Sources
- 3.5 Multisource Networks
- 3.7 Network Theorems
- 3.10 Capacitors
- 3.11 Inductors

Chapter 4 - AC Networks

- 4.2 Sinusoidal (AC) Waveform
- 4.4 Effective (RMS) Values
- 4.5 Average Values
- 4.7 The R, L, C Elements
- 4.8 Phasors and Complex Numbers
- 4.9 Series (AC) Networks
- 4.10 Parallel (AC) Networks

Chapter 5 - AC Network Theorems, Polyphase Systems and Resonance

- 5.2 Series/Parallel (AC) Networks
- 5.3 Multisource (AC) Networks
- 5.4 Network Theorems
- 5.8 Power (AC)

Grading

Attendance	5
First midterm Exam	15
Homeworks + Quizzes	10