



### Course Syllabus

*“Energy is the power that drives every human being. It is not lost by exertion but maintained by it.”*  
Germaine Greer, b. 1939

<b>Instructor</b>	Prof. Hala J. El-Khozondar Office: N519 Email: <a href="mailto:hkhonzondar@iugaza.edu">hkhonzondar@iugaza.edu</a> Homepage: <a href="http://www.iugaza.edu/homes/hkhonzondar">www.iugaza.edu/homes/hkhonzondar</a>
<b>Meetings</b>	Room L404 on Saturday, Monday, Wednesday from 10:00-11:00
<b>Prerequisite:</b>	Electric circuits I
<b>Topics</b>	Introduction to PN junction Semiconductor Diode and its applications Special purpose diodes and their applications Bipolar Junction Transistors (BJT); DC and small AC signal analysis Field Effect Transistors (FET); DC and small AC signal analysis
<b>Textbook</b> <b>Helpful site</b>	Thomas L. Floyd, Electronic Devices, 7 <sup>th</sup> ed., Prentice-Hall, 2002.
<b>Reference</b>	1- Robert Boylestad and Louis Nashelsky, Electronic Devices and Circuit Theory, Sixth Edition, 1996. 2-M. Kaufman and J. Wilson, Electronic Technology, Schaum's Outline series. 3- Charles A. Schuler, Electronics Principles and Applications, 1979 4- Albert P. Malvino, Electronics Principles, 3 <sup>rd</sup> ed., 1998.
<b>Course Objectives</b>	To know the characteristics of electronic components such as diodes and transistors To be familiar with their applications To be able to analysis simple electronic circuits To be able to use computer software (Orcad or Multisim) to analyze electronic circuits
<b>Intended Learning Outcomes</b>	To design a power supply using diodes To build an amplifier circuit using transistors To analyze a given electronic circuit
<b>Assessment</b>	Midterm Exam (35%) Assignments (10%) Quizzes (10%) Final Exam (45%)
<b>Homework Policy</b>	Homework assignments will be given in a regular basis. Each assignment is to be returned within one week. <i>No delay will be accepted except with good excuse.</i>
<b>Office Hours</b>	As posted on the office's door, or by appointment.

**Course outline:**

Teaching starts on Saturday: January 31, 2016 and ends on Monday: May, 15, 2016  
(15 weeks)

<b>Chapter number</b>	<b>Number of Weeks (number of meetings)</b>	<b>Homework problems</b>
Chapter 1	1 (3 meetings)	Problems: 16(c, d), 17(c, d), 18 (b, c), 21, 22
Chapter 2	2 (6 meetings)	1(b), 3, 4, 5(c, d), 8, 11, 17, 22(c), 23 (f), 25(a), 28(b, c), 35, 41, 47, 48, 51
Chapter 3	1 (3 meetings)	6, 9, 13, 15, 28, 45
Chapter 4	2 (6 meetings)	8, 15, 18 (a), 22, 25, 47
<b>Midterm</b>	<b>Tuesday, March 22</b>	<b>11:00-12:30</b>
Chapter 5	1 (3 meetings)	1, 6, 10, 14, 17, 21, 26, 30, 52
Chapter 6	3 (6 meetings)	3, 6, 8, 12, 23, 25, 29, 31, 33, 58
Chapter 7	2 (4 meetings)	9, 13, 16, 19, 21, 24, 35 (b), 38 (b), 40, 67
Chapter 8	1 (3 meetings)	3, 6, 7, 13, 20, 23, 27, 30, 51
<b>Final</b>	<b>Sunday, May 15</b>	