



The Hashemite University
Faculty of Engineering
Course Syllabus

Course Title:	Electrical Circuits for non EE	Course Number:	409208
Department:	Electrical Engineering	Designation:	Compulsory
Prerequisite(s):	Physics I		
Instructor:	Ashraf A. Ali	Instructor's Office:	E. 3057
Instructor's e-mail:	ashraf@hu.edu.jo		
Office Hours:	(11:00-12:00)) Sun, Tus, Thu, (11:00-12:30)) Mon, Wed,		
Time:	Monday, Wednesday : 12:30-1:00	Class Room:	Bio 121
Course description:	Units, definitions, independent sources, dependent sources, Ohm's law, Kirchhoff's laws, division rule. Nodal analysis, Mesh Analysis, Linearity and superposition, Thevenin's and Norton's theorems. Inductance and capacitance, source free RL and RC circuits, RLC circuits, Operational Amplifiers and applications.		
Textbook(s):	"Principles and Applications of Electrical Engineering", 5 th Edition, Giorgio Rizzoni, McGraw-Hill, 2007.		
Other required material:	Lecture Notes		
Course objectives:	The Student should be able to : - Discuss and explain the circuits theory. - Develop the student problem solving skills. - Develop the student analysis and design skills.		
Topics covered:	<input checked="" type="checkbox"/> Fundamentals of electrical Circuits. <input checked="" type="checkbox"/> Resistive Network Analysis. <input checked="" type="checkbox"/> AC Network Analysis. <input checked="" type="checkbox"/> Transient Analysis. <input checked="" type="checkbox"/> Diodes and Operational Amplifiers.		
Class/laboratory schedule:	Monday , Wednesday : 2 class sessions weekly; 75 minutes each.		
Grading Plan:	First Exam (20 Points) Second Exam (20 Points) HW, Attendance (10 Points) Final Exam (50 Points) Will be announced by the registrar		
General Notes:	Attendance is mandatory and students are allowed 15% absence Discussion is encouraged: No question is dumb You may come in late but don't disturb Office hours are to your benefit; utilize them		