Republic of Iraq

The Ministry Of Higher Education

& Scientific Research

بسم الله الرحمن الرحيم

University: Technology

College: Electrical Engineering

Department: Electronic Engineering

Stage: Fourth

Lecturer name: Microwave Electronics

Qualification: Doctorate

Place of work: University of Technology

Flow up of implementation syllibus plan

Course Instructor	Dr. Khalida Shaaban Rijab				
E-mail	Khshrijab89@yahoo.com				
Title	Microwave Electronics				
Course Coordinator	Dr. Khalida Shaaban Rijab				
Course Objective	Student studies the main components of electronic circuits for microwave and radio frequencies , and the disposal of the basic components of these circuits including lumped and microstrip elements. Analysis and design of amplifiers and filters on the ability of various kinds and other electronic circuits at high frequencies.				
Course Description					
Textbook	1- "Microwave Devices of circuits". By Samual y. liao 2- "Microwave engineering" By David M. Pozar				
Course Assessments	Term Tests	Laboratory	Quizzes	Project	Final Exam
	(20%)	-	(10%)	-	(70%)
General Notes					

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Course Weekly Outline

Week	Date	Topes Covered	Lab. Experiment Assignments	Notes
1	2014/10/11-5	Introduction to microwave		
2	2014/10/12-18	Equivalent cct. for a two port		
3	2014/10/19-25	The Scattering Matrix		
4	2014/10/12-18	Properties of S. Parameters		
5	2014/11/1-26	Examples		
6	2014/11/8-2	Transmission lines and waveguides		
7	2014/11/15-9	T.L. equivalent cct. and Parameters		
8	2014/11/22-16	Examples		
9	2014/11/29-23	Microwave components, Directional couplers		
10	2014/12/6-11/30	Scattering Matrix of D.C.		
11	2014/12/13-7	Examples		
12	2014/12/20-14	Microwave circulator		
13	2014/12/27-21	Microwave Isolators		
14	-1014/12/28 2015/1/3	RF behavior of passive components		
15	2015/1/10-4	Examples		
16	2015/1/17-11	Quiz		
Half – year break				
17	2015/2/14-8	Microwave solid state devices		

18	**2015/2/21-15**	**M.w. Tunnel diode, principles operation, characteristics…**		
19	**2014/2/28-22**	**Tunnel diode parallel and serial loading**		
20	**2014/3/7-1**	**Examples**		
21	**2015/3/14-8**	**Gunn effect diodes**		
22	**2015/3/21-15**	**RF and Microwave Resonators**		
23	**2015/3/28-22**	**RF filters types**		
24	**2015/4/4-3/29**	**RF filters design by the insertion loss method**		
25	**2015/4/11-5**	**Stepped impedance low-pass filters**		
26	**2014/4/18-12**	**Examples**		
27	**2015/4/25-19**	**Microwave transistor Amplifier design**		
28	**2015/5/2-4/26**	**Types of noise and noise figure**		
29	**2015/5/9-3**	**Examples**		
30	**2015/5/16-10**	Quiz		

INSTRUCTOR Signature:

Dr. Khalida Shaaban Rijab

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