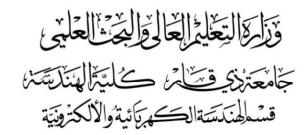
Ministry of Higher Education and Scinetific Research Thi-Qar University Collage of Engineering Electrical and Electronic Engineering Dept





العدد : التاريخ : / / ٢٠

Course number and name	EE 2200: Electronics I
Credits and contact hours	3 credits and 4 hours
Course coordinator	
Textbook	Microelectronic Circuits w/CD, 6th edition, Sedra/Smith,
	2010 Schematic Capture w/ Cadence Pspice w/CD, 2nd
	edition, M Herniter, 2003
Course Information	a. Prerequisites: EE 1100 Circuits I, EE 1110 Circuits II, and
	EE 1200 Electronic Physics Required
Topics to be covered	- Basic semiconductor concepts, current flow in
	semiconductors, physical structure and operation of pn
	junction
	-Terminal characteristics of ideal and junction diodes, diode
	circuits, diode modeling of forward characteristics, Zener
	diode, diode application- rectifiers, clamping, clipping, voltage
	regulation, Schottky-Barrier diode, photodiodes, light emitting
	diode (LED)
	- Physical structure and operation of BJT, current-voltage
	characteristics of <i>npn</i> BJT and <i>pnp</i> BJT, BJT circuit DC
	analysis, small-signal operation and models (CE,CB,CC),
	discrete BJT amplifier
	 Analog concept, transistor amplifier, single-stage and multi-
15 15 1 h	stage amplifiers