

Electronics _ Code (EPE170)
2015-2016 Second Term

Week #01			
Lecture 1	Ch. 1	Outline to Identify Course + Atom	Monday 15-2-2016 Dr. Emad
Lecture 2		Materials used in Electronics + Current in Semiconductors + N-Type and P-Type Semiconductor + PN Junction	Thursday 18-2-2016 Dr. Emad

Week #02			
Lecture 3	Ch. 2	Diode Operation + VI Ch/s of Diode + Temp. Effect on Diode Operation + Diode analytical Model (Forward & Reverse Region) + Solved Examples	Monday 22-2-2016 Dr. Emad
Lecture 4		Models of Diode + Solved Examples + Half-Wave Rectifier + Effect of Barrier Potential + PIV + Transformer Coupling + Solved Examples	Thursday 25-2-2016 Dr. Emad

Week #03			
Lecture 5	Ch. 2	Full-wave Rectifier + Average Output + Center-tapped Full-wave Rectifier + Effect of Turns Ratio on Output Voltage + PIV + Full-wave Bridge Rectifier + Solved Examples	Monday 29-2-2016 Dr. Emad
Lecture 6		Power Supply Filters and Regulators + Solved Examples	Thursday 3-3-2016 Dr. Emad

Week #04			
Lecture 7	Ch. 2	Diode Limiters (Clippers) + Solved Example+ Biased Limiters+ Solved Example + Voltage-Divider Bias + Solved Example + Diode Clampers + Solved Example	Monday 7-3-2016 Dr. Emad
Lecture 8		Voltage Multipliers + Diode DataSheet+ Troublshooting	Thursday 10-3-2016 Eng. Ahmed Hammad

Week #05			
Lecture 9	Ch. 2	How to prepare and design a linear power supply (15V) + Proteus program	Monday 14-3-2016 Dr. Emad
Lecture 10	Ch. 3	Zener Diode (Ch/s + Regulation + Equivalent Circuit + Temp. Coeff. + Power Dissipation + Zener diode Datasheet + Zener Regulation with variable input voltage + Solved Examples	Thursday 17-3-2016 Dr. Emad

Week #06			
Lecture 11	Ch. 3	Zener Regulation with a variable load + Solved Examples + zener limiter + solved example + varactor diode + varactor datasheet + optical diodes (LED) +LED biasing + light emission + radiation pattern + VI ch/s for LEDs + LED applications + LED display	Monday 21-3-2016 Dr. Emad
Lecture 12		Photodiode + Laser Diode + Schottky Diode + (Vedio on Schottky Diode) + Steps of Design of Power Supply linear 15V + Prices of Components + Where you can to buy the components+ How Can manage components on PCB Board + How Can manage components on general purpose board + vedio on Soldering طريقة اللحام بالكاوية	Thursday 24-3-2016 Dr. Emad

Week #07			
		MidTerm _ Monday 28-3-2016	