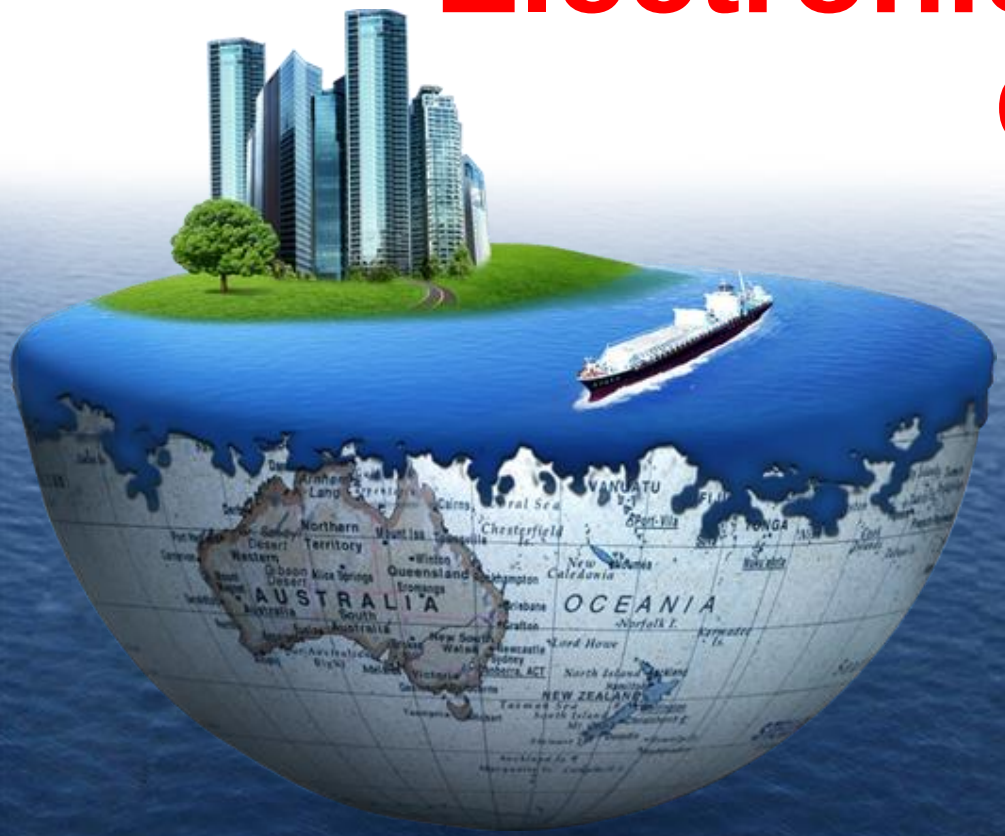
Electronic Engineering

COM 121



Assist. Prof.
Basma M. Yousef

Course Aims

No.	Aims
#1	Explain skills and use of amplifier circuits and their design specifications related to frequency response and feedback topologies to the development of multiple engineering fields.
#2	Demonstrate practical skills in simulation, construction and testing of MOSFET and simple amplifier circuits

Program Learning Outcomes

A2.	Use computational facilities and techniques, measuring instruments, workshops and laboratories equipment to design experiments, collect, analyze, and interpret results and assess the findings and conclude remarks.
A10.	Maintain management of self/ Time, flexibility to adapt to change, working under contradictory conditions and engage in long-life-self learning

Course Learning Outcomes

LO1	Solve engineering problems related to Transistors circuit applications
LO2	Solve engineering problems related to biasing circuits of JFET and MOSFET
LO3	List the construction, operation, characteristics, design and analysis of Amplifier and Filter Circuits
LO4	Simulate transistor, FET ,MOSFET ,OP-AMP and filter circuits using spice simulation.

Contact Hours

Teaching Hours

Number of weekly contact hours:

Course name	Lecture	Tutorial /Laboratory	Total contact	Term work	O/L	Final	Total
Electronic Engineering	3	2	5	30	30	90	150

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Chapter 2

Field Effected Transistors

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Chapter 3

FET Biasing

CONTENTS

Chapter 4

Operational Amplifiers

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Chapter 5 Active Filter

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Chapter 6

Power Supplies and Voltage Regulations

Assessments

No.	Evaluation method	Weights
1	Mid-term examination	9 %
2	final examination	60%
3	Reports-sheets	3%
4	Practical examination	10%
5	Quiz	3 %
6	Report	10%
7	Mini project	10%
8	Attendance	5%
	Total	100%

References

No.	Reference List
1	Boylestad, Robert L., and Louis Nashelsky. Electronic devices and circuit theory. Pearson Education India, 2009.
2	Floyd, Thomas L. Electronic devices (electron flow version). Prentice-Hall, Inc., 2007.
3	Sedra, A., K. C. Smith, T. Chan Carusone, and V. Gaudet. "Microelectronic circuits 8th edition." (2020): 1235-1236.

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