# ÇANKAYA UNIVERSITY ELECTRONIC AND COMMUNICATION ENGINEERING (ECE) DEPARTMENT 2016-2017 FALL (I) SEMESTR

1	CURSE NAME	ELECTRONICS+LAB (3-2-4)
2	COURSE CODE	ECE-347
3	COURSE LEVEL	UNDERGRADUATE-3RDYEAR
4	YEAR GIVEN	2016-2017
5	SEMESTR GIVEN	1st (FALL)
6	COURSE TYPE	MANDATORY
7	WEEKLY HOURS	3T+2L
8	CREDITS	4
9	INSTRUCTOR	Assist. Prof. Özgür Ergül

### 1. COURSE SYLLABUS :

	CONTENTS	WEEKS
1.	Frequency Response of RC networks (Ch.9)	1
2.	Frequency Response of BJT and FET amplifiers (Ch.9)	2
3.	Differential and Operational Amplifiers (Op-Amp's) (Ch.10)	3
4.	Op-Amp applications (Ch.11)	1
5.	Linear Digital Integrated Circuits (IC's) (Ch.13)	1
6.	Power Amplifiers (Ch.12)	2
7.	Negative Feedback and Oscillators (Ch.14)	2
8	Regulators (Ch.15)	1
9	Other two-terminal devices (varactor, optical, pnpn etc.) (Ch.16)	1
11	Power Amplifiers and Linear Digital ICs	1

## **References :**

# 1-Electronic Devices and Circuit Theory, R.L. Boylestadt, L. Nashelsky, Pearson Prentice-Hall International Edition, 2009 (10th Ed.), ISBN-13:978-0-13-606463-3

2-Electronic Devices, T.L. Floyd, Pearson, 2011 (9th. Ed.), ISBN 13:978-0-13-266888-0

3-The Art of Electronics, P. Horowitz, W. Hill, Cambridge University Press, 1989, (2nd Ed.), ISBN : 978-0-521-37095-0

4-Microelectronic Circuits, Adel S. Sedra and Kenneth C. Smith, Oxford University Press (1998)

5-Introduction to Electronics Design, F.H. Mitchell, JR, F.H. Mitchell, SR, Prentice-Hall, 1992 (2nd Ed.)

#### **GRADING SYSTEM**

Theoretical Part: 75 points (30 points for midterm, 35 points for final exam, 10 points for Homeworks+attendance) Laboratory (Experiments): 25 points

### **IMPORTANT RULES**

You have to attend <u>AT LEAST 80%</u> of the Experimental Part (Lab.) <u>TO PASS</u> the course. If you missed the attendance of an experiment, the result of its Report, Quiz and Other Works would be <u>ZERO</u>.