

**NEW YORK CITY COLLEGE OF TECHNOLOGY**  
**The City University of New York**

**DEPARTMENT:** Electrical and Telecommunications  
Engineering Technology

**SUBJECT CODE** EET1241/ET252  
**AND TITLE:** Electronics Lab

**COURSE DESCRIPTION:** Experiments based on material in EET 1240/ET 212 give the students experience in using the oscilloscope, signal generator and function generator for analyzing and testing electronic circuits

**PRE-COREQUISITES:** EET1240/ET212, ET1222/ET242

**TEXTBOOK:** Laboratory manual provided by the department

**COURSE OBJECTIVES/  
COURSE OUTCOMES:** Upon completion of this course students should be able to :

1. Wire electronic circuits and be able to use equipment such as oscilloscope, dc and audio power supplies and multimeter to take proper measurements in a timely professional manner (ABET Criteria 2a, 2b, 2c, 2f).
2. Use linear and semilog graph paper to plot experimental data (ABET Criteria 2a, 2b, 2f, 2k).
3. Analyze and interpret experimental data and write reports in a professional timely manner (ABET Criteria 2a, 2b, 2c, 2g, 2k).

**TOPICS:** Topics include use of oscilloscope, diode characteristics and application in dc power supplies, zener diode characteristics, bipolar transistor characteristics, CB, CE amplifiers CC and multistage amplifiers, frequency response of a CE amplifier and operational amplifier application with feedback.

**LAB HOURS:** 3

**CREDITS:** 1

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**GRADING POLICY:**

Midterm Exam: 25%  
Lab Reports 40%  
Final Examination 35%

<u>Letter Grade</u>	<u>Numerical Grade Ranges</u>	<u>Quality</u>
A	93-100	4.0
A-	90-92.9	3.7
B+	87-89.9	3.3
B	83-86.9	3.0
B-	80-82.9	2.7
C+	77-79.9	2.3
C	70-76.9	2.0
D	60-69.9	1.0
F	59.9 and below	0.0

**Experiment Title**

Week #1	Orientation
Week #2	Scope Demonstration
Week #3	Oscilloscope
Week #4	Oscilloscope
Week #5	Diode
Week #6	DC Power Supply
Week #7	Mid-Term Exam
Week #8	Zener Diode
Week #9	Transistor Characteristics
Week #10	Common Base Amplifier
Week #11	Common Emitter Amplifier
Week #12	Cascade and The Follower
Week #13	Frequency Response
Week #14	OP AMP
Week #15	Final Exam