

CATALOG INFORMATION

Dept and Nbr: ELEC 71BL      Title: ELECT DEVICES LAB  
Full Title: Electronic Devices Lab  
Last Reviewed: 11/5/1997

| Units   |      | Course Hours per Week |      | Nbr of Weeks | Course Hours Total |       |
|---------|------|-----------------------|------|--------------|--------------------|-------|
| Maximum | 2.00 | Lecture Scheduled     | 1.00 | 17.5         | Lecture Scheduled  | 17.50 |
| Minimum | 2.00 | Lab Scheduled         | 2.00 | 17.5         | Lab Scheduled      | 35.00 |
|         |      | Contact DHR           | 1.00 |              | Contact DHR        | 17.50 |
|         |      | Contact Total         | 4.00 |              | Contact Total      | 70.00 |
|         |      | Non-contact DHR       | 0    |              | Non-contact DHR    | 0     |

Total Out of Class Hours: 35.00

Total Student Learning Hours: 105.00

Title 5 Category: AA Degree Applicable  
Grading: Grade Only  
Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP  
Also Listed As:  
Formerly:

**Catalog Description:**  
Continuation of the study of Linear electronic circuits. Electronic devices are studied for recertification, amplification, and oscillating circuits.

**Prerequisites/Corequisites:**  
Completion of ELEC 71AL. Not open to students who have completed ELEC 61L.

**Recommended Preparation:**

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: Continuation of Electronic Technology 71AL. (Grade Only)  
Prerequisites/Corequisites: Completion of ELEC 71AL. Not open to students who have completed ELEC 61L.  
Recommended:  
Limits on Enrollment:  
Transfer Credit:  
Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

|                      |                      |                   |                  |
|----------------------|----------------------|-------------------|------------------|
| <b>AS Degree:</b>    | <b>Area</b>          | <b>Effective:</b> | <b>Inactive:</b> |
| <b>CSU GE:</b>       | <b>Transfer Area</b> | <b>Effective:</b> | <b>Inactive:</b> |
| <b>IGETC:</b>        | <b>Transfer Area</b> | <b>Effective:</b> | <b>Inactive:</b> |
| <b>CSU Transfer:</b> |                      | <b>Effective:</b> | <b>Inactive:</b> |
| <b>UC Transfer:</b>  |                      | <b>Effective:</b> | <b>Inactive:</b> |

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

The student will be able to:

1. use an oscilloscope, VTVM, DVM, and VOM to obtain AC and DC measurements of fundamental electronic circuits for performance evaluation.
2. present the performance data and evaluation of the circuit in the form of a standardized laboratory report.
3. prepare graphs from measurement data to illustrate the performance of specific circuits.

### **Topics and Scope:**

1. Common collector amplifier.
2. Common base amplifier.
3. Zener regulation.
4. Complementary symmetry amplifier.
5. Triode amplifier.
6. 2 stage triode amplifier.
7. JFET amplifier.
8. Operational amplifier.
9. Inverting and non-inverting.
10. Series resonance.
11. Parallel resonance.

### **Assignment:**

06.01.09 CRC approved inactivation 4/27/09. mpuha

### **Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.

Writing  
0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Lab reports

Problem solving  
90 - 95%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

HANDS-ON LAB TEST

Skill Demonstrations  
5 - 10%

**Exams:** All forms of formal testing, other than skill performance exams.

None

Exams  
0 - 0%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None

Other Category  
0 - 0%

### **Representative Textbooks and Materials:**

Lab assignments provided by Electronics Department and experiments for electronic principles.