ELEC 63 Course Outline as of Fall 2009

CATALOG INFORMATION

Dept and Nbr: ELEC 63   Title: ELEC CIRCUIT THEORY
Full Title: Electronic Circuit Theory
Last Reviewed: 11/5/1997

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	4.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	4.00	Lab Scheduled	2.00	10	Lab Scheduled	35.00
		Contact DHR	1.00		Contact DHR	17.50
		Contact Total	6.00		Contact Total	105.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00   Total Student Learning Hours: 210.00

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:
Review of Elec 62 subject matter, AM, FM, SSB and power supplies. Introduce operational amplifiers and all of their configurations, advanced devices anf their circuits and large scale linear integrated systems.

Prerequisites/Corequisites:
Course Completion of ELEC 62

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: Continuation of Elec 62. Systems approach to current state-of-the-art applications. (Grade Only)
Prerequisites/Corequisites: Course Completion of ELEC 62
Recommended:
Limits on Enrollment:
Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**	Effective:	Inactive:
CSU GE:	**Transfer Area**	Effective:	Inactive:
IGETC:	**Transfer Area**	Effective:	Inactive:

CSU Transfer: Effective: Inactive:

UC Transfer: Effective: Inactive:

CID:

Certificate/Major Applicable:
Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:
  The student will be able to:
    1. apply discrete components into large systems.
    2. build, measure, and analyze basic op-amp configurations.
    3. identify op-amp circuits.
    4. measure and analyze op-amp parameters.

Topics and Scope:

 1. Fundamental concepts of:
      a. amplitude modulation
      b. frequency modulation
      c. single side bands and power
 2. Operational amplifier fundamentals as applied to systems
      a. theory of operation
      b. how applied to systems

Assignment:

 Hands-on experiments and problem solving.

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.

Homework problems, Lab reports, Quizzes, Exams

Problem solving 15 - 25%

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

Class performances, Performance exams

Skill Demonstrations 15 - 40%

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

Multiple choice, True/false, Matching items, Completion

Exams 40 - 60%

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

None

Other Category 0 - 0%

Representative Textbooks and Materials:
LINEAR INTEGRATED CIRCUITS by D.J. Dailey.