REGULAR COURSE SYLLABUS

School of: Professional Studies

Department: Engineering Technology

Prefix & Course Number: EET 2165

Course Title: Electronics Laboratory

Banner course title (30 characters): Electronics Laboratory

Check All That Apply: Required for Major: X  Required for Minor: X  Specified Elective: ___

Required for Concentration: ___  Elective: ___  Service Course: ___

To receive Title IV financial aid funds, all institutions of higher education must comply with the federal definition of a credit hour. The Higher Learning Commission requires institutions to maintain policies and procedures for verifying compliance with this definition.

Federal Credit Hour Definition: A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally-established equivalency that reasonably approximates not less than:

(1) one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or

(2) at least an equivalent amount of work as required in paragraph (1) of this definition for other activities as established by an institution, including laboratory work, internships, practica, studio work, and other academic work leading toward the award of credit hours. 34CFR 600.2 (11/1/2010)

Credit Hours: 1 (0+2)

Face-to-Face or Equivalent Hours per course:

Lecture _____  Lab 30  Internship _____  Practicum _____  Other (please specify type and hours):

Additional Student Work Hours per course: 30

Schedule Type: A  Grade Mode: L

Variable topics umbrella course: No X Yes  If Yes, number of credit hours allowed ___

Specified repeatable course: No X Yes

APPROVED:

Department Chair OR Program Director  Date

Dean OR Associate Dean  Date

Associate VP, Academic and Student Affairs  Date

*If crosslisted, attach completed Course Crosslisting Agreement Form
Catalog Course Description:
The student will develop the laboratory skills necessary for integration of electronic devices in applications such as filtering, amplification, and oscillation. The student will integrate the lecture content of EET2145 in the practical, hands-on laboratory exercises developed in this course.

Specific Variable Topics Course Description (if applicable, umbrella course description included above):

Required Reading and Other Materials will be equivalent to:

Specific, Measurable Student Behavioral Learning Objectives:
Upon completion of this course the student should be able to:
1. Analyze circuits by calculation.
3. Construct, analyze and measure circuits with respect to design and models.
4. Document laboratory results in formal reports.

Detailed Outline of Course Content:
I. Introduction and Review of Laboratory Equipment, Safety, Etc...

II. Diodes
   A. Properties and Behavior
   B. Special Diodes

III. Transistors
   C. Transistor Properties and Behavior
   D. Simple Transistor Circuits

IV. Amplifiers
   E. Single Stage Transistor Amplifiers
   F. Multistage Amplifiers
   G. JFET Amplifiers
   H. Summing Amplifier (Op-amps)
   I. Amplifier Frequency Response

V. Voltage Regulators

Evaluation of Student Performance:
1. Laboratory Reports