

Lexington Community College
Syllabus

COURSE: ETE 108 Practical Electricity
3 Credit hours – 4 contact hours
Prerequisite – none

INSTRUCTOR: Robert Blake, Office MB 137, Phone 257-4872 ext. 4110

PROGRAM

COORDINATOR: Michael Binzer, Office MB 125, Phone 257-4872 ext. 4109

DIVISION: Physical Sciences and Engineering Technologies, MB 114
Phone: 257-4872 ext. 4004

DIVISION CHAIR: Ms Cindy Barber, Office MB 118, Phone 2574872 ext. 4112

OFFICE HOURS: By appointment and as posted

TEXT: Introductory Circuit Analysis, Boylsted (Recommended)

DESCRIPTION: Basics concepts of electricity, electronic components, and the electrical profession will be covered in this course. Topics will include the basic electrical properties, using meters and oscilloscopes, building prototype circuits, soldering, and the basics of managing an electrical project. Lecture: 2hrs. Laboratory: 2hrs.

OBJECTIVE: To acquaint the student with the basic concepts, practices and methods used in the field of electricity.

PROCEDURE: Two one hour and fifty minute periods per week consisting of lecture, demonstration and laboratory exercises. Unannounced quizzes, two examinations and a comprehensive final examination will be given. Homework will be given and collected.

EVALUATION: Student performance will be judged by the instructor's evaluation of the student's competence in completing the laboratory assignments, quizzes, examinations, homework assignments and participation in classroom discussions and activities.

GRADING:

540 – 600	A	2 Examinations	200 points
480 539	B	Final Exam	200 points
420 479	C	Lab Assignments	100 points
360 419	D	Quizzes	<u>100</u> points
Below 360	E	Total	600 points

LATE WORK

Work submitted later than one class period past the due date may not be accepted.

WITHDRAWAL

A grade of W will be given to any student withdrawing from this course up to and including the last day of classes.

Missed work may be made up if missed for a valid reason as determined by the instructor. Any missed work must be made up within a reasonable time period.

ETE 108 TOPICAL SEQUENCE

1. Introduction – Course scope and purpose, lab safety and orientation, homework and laboratory report format, calculations, numerical accuracy, scientific notation and units.
2. Structure of matter, electrical units, circuit diagrams, components and symbols.
3. DC voltage, current and resistance measurement techniques.
4. Simple series DC circuits and voltage division.
5. Simple parallel DC circuits and current division.
6. Simple series-parallel DC circuits.
7. Introduction to Electronics Workbench
8. Introduction to AC terminology and measurement.
9. AC voltage, current and frequency measurement techniques.
10. Soldering techniques.