

**University of Arkansas - Fort Smith**  
**5210 Grand Avenue**  
**P. O. Box 3649**  
**Fort Smith, AR 72913**  
**479-788-7000**

**General Syllabus**

**ELEG 2111 Electric Circuits II Laboratory**

Credit Hours: 1

Lecture Hours: 0

Laboratory Hours: 2

Corequisite: ELEG 2113 Electric Circuits II

Effective Catalog: 2018-2019

**I. Course Information**

**A. Catalog Description**

Experimental investigation of the steady-state behavior of circuits excited by sinusoidal sources. Includes test and measure equipment and techniques, single- and three phase circuits, power in single- and three-phase circuits, transformers, and resonance.

**B. Additional Information - None**

**II. Student Learning Outcomes**

**A. Subject Matter**

Upon completion of this course the student will be able to:

1. Conduct hands-on lab exercises to demonstrate understanding of the content in Electric Circuits II.
2. Solve AC circuit problems.
3. Use test and measurement equipment in appropriate ways.
4. Use computer technology to solve different types of circuits.

**B. University Learning Outcomes**

This course enhances student abilities in the following general education areas:

**Analytical Skills**

**Critical Thinking Skills** - The student will identify and solve problems using solutions that complement the Electric Circuits II lecture course.

### **III. Major Course Topics**

- A. Analog and digital scopes
- B. Probes
- C. Signal-phase AC circuits
- D. Power in signal-phase AC circuits
- E. Power in three-phase AC circuits
- F. Transformers
- G. Resonance