

# Course Objectives/Course Outline

## Spokane Community College

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**Course Title: SOLID STATE DEVICES**  
**Prefix and Course Number: ELECT 131**

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**Learning/Performance Expectations (e.g., outcomes, performance objectives, competencies, etc.)**

AT THE COMPLETION OF THIS COURSE, A STUDENT SHOULD BE ABLE TO:

- Use proper solid state device and circuit terminology
- State the fundamental principles of solid state devices and circuits
- Identify common solid state devices and symbols
- Calculate circuit parameters for solid state device circuits
- Demonstrate basic troubleshooting techniques for solid state device circuits

### **COURSE OUTLINE:**

- I. Course Overview
- II. Personal Safety
- III. Semiconductors
- IV. Diodes
  - A. Theory
  - B. Diode Circuits
- V. Transistor Fundamentals
- VI. Amplifiers
- VII. FETs
  - A. JFETs
  - B. MOSFETs
- VIII. Troubleshooting Solid State Circuits