

# ETRO 210 : Electronic Technology 1

**Credits:** 3

**Class Hours:** 6 lecture/lab

**Prerequisites:** "C" or higher in ETRO 106.

**Description:** This course introduces basic theory as well as operations of solid-state devices and applies to diodes, bipolar transistors, field effect transistors, Zener diodes, photonic devices, and other semiconductor devices. Students will study electronic circuits performing rectifying and amplification. They will also investigate common amplifier devices and usages, and instrumentation applications.

**Semester Offered:** Fall

**Course Student Learning Outcomes (CSLOs):**

1. List common amplifier devices and describe the purpose of each component in an amplifier circuit.
2. Explain the uses of operational amplifiers and how they differ from other amplifiers.
3. Identify semiconductor devices and list common usages.