Learning Objectives:

A student who successfully fulfills the course requirements will have demonstrated:

- The ability to identify and correctly utilize the external lead structure and basic electrical characteristics of common semiconductor devices (pn-junctions, MOSFET’s, and BJT’s)

- The ability to analyze and design D.C. bias circuits

- The ability to utilize D.C. and A.C. models of semiconductor devices in both analysis and design

- The ability to analyze and design single and multistage amplifiers at low, mid and high frequencies

- The ability to use a CAD tool (e.g., SPICE) in circuit analysis and design