

**Experiment 1**  
**Biasing of Common-Emitter Amplifiers**

**Laboratory Report for ENGE 312**  
**Applications of Electronic Devices**

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**Jan 29, 2026**

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## I. PROJECT DESCRIPTION

The gain and bias stability of a common-emitter amplifier circuit was investigated in this laboratory experience. The gain of the amplifier was measured and compared between  $\beta$  values. Max Voltage Swing ( $V_{o,p-p}$ ) was also measured and compared between  $\beta$  values.

## II. THEORETICAL BACKGROUND

Consider the circuit shown in Fig. 1. It is a bjt amplifier in the common-emitter configuration.

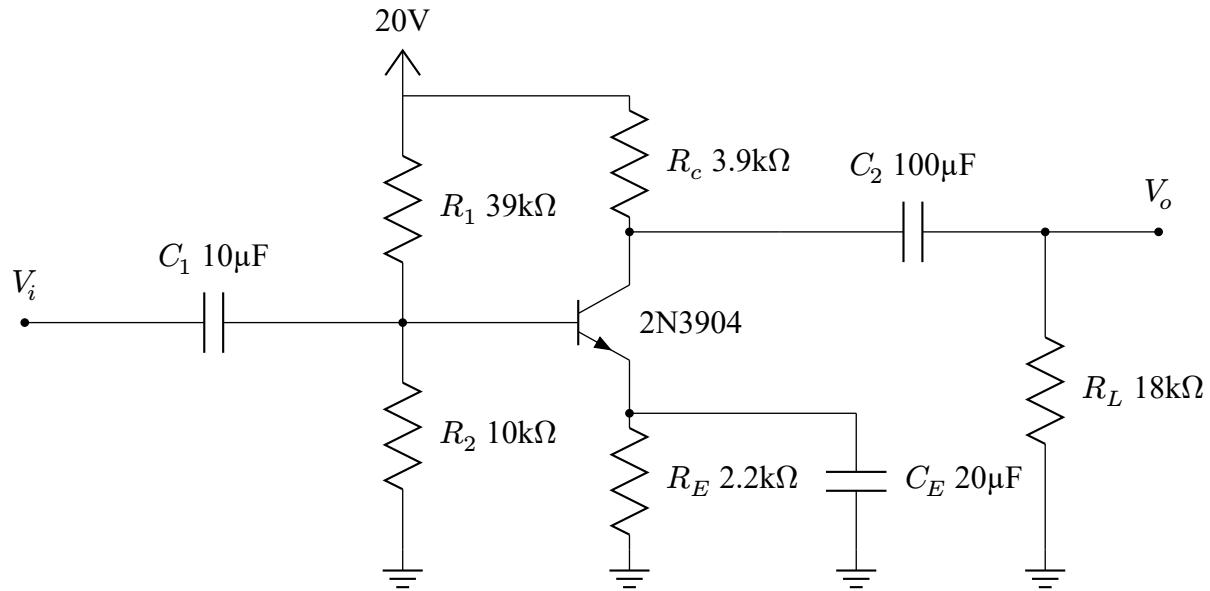


Fig. 1. BJT Amplifier in the Common Base Configuration

## III. METHODS AND MATERIALS

### A. Equipment

Your equipment table...

### B. Experimental Procedure

Your procedure...

## IV. RESULTS

### A. Sample Calculations

(if needed)

## V. DISCUSSION

Your discussion...

## VI. CONCLUSIONS

Your conclusions...