311 Midterm 2

Review Topics

- BJT Circuits
    1. Base Bias
    2. Voltage Divider Bias
        - Thevenin Solution
        - Approximation Technique
    3. DC Analysis
        - Mode of Operation
        - Load Line Analysis and Q-point
        - Optimized Q-point
        - Operating Parameters
        - Characteristic Curve
    4. AC Analysis
        - CE Common Emitter Amplifiers
        - Amplifier Parameters
        - Amplifier Input/Output and Source/Load Impedances
        - T-Equivalent Model
        - Multiple State Amplifiers
    5. Review Common Emitter Amplifier Lab
- Opamp Circuits
    1. Voltage Follower
    2. Inverting Amplifier
    3. Non-Inverting Amplifier
    4. Summer
    5. Differential Amplifier with emphasis on Signal Conditioning of Voltage Levels
        - I.E. Given a voltage range and input, can you scale and offset the voltage output of a device to match the given input.
- Mosfet
    1. Switching Application
        - Vgs, Vgs(th), Rds(on)
        - Power Dissipated

Also review Zener Diodes and Power Supply from 1st Midterm