

**Study List for Quiz #4:**

1. Transformers
2. Impedance matching
3. I vs. V for diodes
4. Signal rectification, filtering, and voltage regulation

**Equation List:** [units in square brackets]

$$\frac{v_s}{v_p} = \frac{N_s}{N_p} \qquad P_p \approx P_s \qquad \frac{Z_s}{Z_p} = \left( \frac{N_s}{N_p} \right)^2$$
$$C \approx \frac{i}{\Delta V \cdot f} \text{ [F=A/(V}\cdot\text{Hz)]} \qquad r = \frac{\Delta V}{V_{DC}} \qquad V_p = \sqrt{2} \cdot V_{rms}$$