

ECE 3600 Exam 2 Study Guide

The 2nd Exam will be on Tuesday 11/16/10.

The first part will be a **closed book, no calculator** questions, ~ 25 - 35 points

The second part will be a **open book, open notes, with calculator** problems.

The exam will cover

1. Auto-transformers

Calculations

Possible questions

Connections

Power ratings

2. Per-Unit analysis

Base Values S_{base} V_{base} I_{base} Z_{base}

Per-phase

Why?

Bases selections, why
and when do they change

Why?

3. One-Line Diagrams and variations

Base transformation

Calculations

Why?

common symbols

4. Synchronous generators and motors

Know the phasor diagram! Problems like Hw SG1 & SG2

losses, construction,
limits, operation

5. 3-phase induction motors (not single phase)

Know how to work with the model. Problems like Hw 15 - 17 p.2

operation

slip

6. Homeworks 9 - 17 p.2

7. Labs 2 - 3, esp 3

8. I'll look through my notes and find a question or two

Field trip to Rocky
Mountain Power Dispatch

9. "