ECE 3600 Exam 1 Study Guide

The 1st Exam will be on Thursday 9/27/12.

The first part will be a **closed book, no calculator** questions, ~ 20 - 40 points

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

The exam will cover	Possible closed-book questions
1. HW 1 Energy sources, plant efficiencies	All
2. HW 2 AC steady-state review, used extensively throughout class	
3. HW 3 RMS & Single-phase AC power. P Q $\mathbf{S}$ $\lvert\mathbf{S}\rvert$ pf correction of pf	Basic relationships and units What is "good"
4. HW 4&5 3-phase AC power. $\mathbf{V_L}$ $\mathbf{V_{LL}}$ $\mathbf{V_{LN}}$ $\mathbf{I_L}$ $\mathbf{I_{LL}}$ $\mathbf{I_Y}$ $\mathbf{S_{3\phi}}$ $\mathbf{S_{1\phi}}$ $\mathbf{Z_Y} = \frac{\mathbf{Z_\Delta}}{3}$ $\mathbf{Z_\Delta} = 3\cdot\mathbf{Z_y}$ pf correction of pf Basic one-Line diagrams	Basic magnitude and phase relationships
5. HW 6 Magnetic circuits $B = \mu\cdot H$ $H = \frac{N\cdot i}{l_c}$	Flux density, Field intensity, Permeability, B-H curve.
7. HW 7 - 8 Transformers, including nonideal	Transformer basics, including ratings and impedance transformation.
8. Lab 1	Electrocution Safety. Deadly current, body resistance, etc. Basic concepts
9. Field trip to Gadsby power plant	Rankine power cycle

You can download old exams from HW page on class web site.
But remember, they may cover more than we did in our class.