ECE 323 Electronics III Study Guide #1 2 April 2013

Phil Bolger quote of the week: “There’s a lot to be learned from studying this design, but to apply the lessons you have to start over with a blank sheet.”

Tasks for this week: Inventory skills and knowledge acquired in 2 years of Electronics courses, Inventory parts in the lab kit, Sketch the project.

Make a plan for attaining the 323 knowledge and skills

Make a plan for a successful project

First Week Look at Course Outcomes:

Analysis and design single transistor and op-amp AC and DC feedback networks
A catalog of sinusoidal waveform generators
Logic families and gates
Electronic multiplier/phase detector: Gilbert Cell, Diode Ring, and Exclusive OR
Interfacing between analog and digital circuits
Phase locked loop -- acquiring lock
Phase locked loop -- locked
Applying Electronics Engineering course work to open-ended projects
Introduction to Electronic Prototyping

This week in lab: Inventory the contents of the ECE 323 Lab Kit and make some notes in your lab notebook on each component.

Ungraded Exercise -- Independent Self Study -- due in class April 9

Review the course outcomes listed above and pick two that interest you. Find the pages in the textbook that cover the material, read through it, and make a study plan to learn the material quickly, on your own, assuming that you have an interview next week and know you will be asked questions on that topic. Turn in one page listing the two topics, the textbook pages, the homework problems you would do, and one new homework problem you have created to demonstrate your understanding of each topic.