A. Stolp
1/5/03

HW # 1 due M, 1/13 by 5:00 pm in a yet-to-be-determined locker

    Ch. 1: 3 (Problem 1.3 on p.49)

    Ex1.3 (Exercises 1.3 on p.6) You do not have to mathematically verify that the two approaches are equivalent, as long as you get percentages that approach 100%.

    Ch. 1: 9 Hint: use N=3 see if the expressions work

    Ch. 1: 10

Answers: 3c) $0.1 \cdot V \cdot \sin(1000 \cdot t)$ 3d) $100 \cdot mV \cdot \sin(6283 \cdot t)$

    9c) 10 bits, 4.89 mV

Go through the syllabus.

Talk about problem sessions

ECE3700 + ECE2100 = Very busy semester
                 Plan on it!

How can you survive??

1. Easiest way to get through school is to actually learn and try to retain what you are asked to learn.

    Even if you're too busy, don't lose your good study practices.
    What you "just get by" on today will cost you later.

    Don't fall for the "I'll never need to know this" trap. Sure, much of what you learn you may not use, but some you will need, either in the current class, or future classes, or maybe sometime in your career. Don't waste time second-guessing the curriculum, It'll still be easier to just do your best to learn and retain.

2. Don't fall for the "traps".

    Homework answers, Problem session solutions, Posted solutions, Lecture notes.

3. KEEP UP! Use calendar.

4. Make "permanent notes" after you've finished a subject or section and feel that you know it.

Review problems

Signals

For us: A time-varying voltage or current that carriers information.
               | |
               | Audio, video, position, temperature, digital data, etc...
In some unpredictable fashion
DC is not a signal, Neither is a pure sine wave. If you can predict it, what information is it providing??
Neither DC nor pure sine wave have any "bandwidth".

Recall Fourier series: Any periodic waveform can be represented by a series of sinewaves of different frequencies.