

ECE 312 Exam #1 Study Guide

This one-hour exam is scheduled for Wednesday, February 16th.

The exam will cover material from chapters 1, 2, 4, 6, 8 and 10 in the textbook.

The exam is closed book/closed notes.

You may have one (1) 8.5 x 11 inch page of notes. Both sides of this page may be used.

You will be asked to solve integrals. You will not need to put any integral tables on your one page of notes as I will provide you with an integral table during the exam.

You will not need to put Fourier transform tables on your notes, but I will expect you to be familiar with the Fourier transform properties. For example,

$$\frac{d^n x(t)}{dt^n} \leftrightarrow (j\omega)^n X(\omega)$$

No calculators are allowed. In fact, you may not use any electronic device whatsoever during the exam.

Since you can't use any calculators, I will not ask you to solve $e^{j\theta}$ for say $\theta = 2\pi/9$ or any other type of strange angles. I will, however, expect you to know the real and imaginary components of $e^{j\theta}$ for $\theta = \{0, \pm\pi/2, \pm\pi, \pm2\pi\}$.

You will also be asked concepts. For instance, knowing why is it important for a signal to be time-limited if you want to calculate its energy is an important concept.