

ECE 312 2nd Exam study guide

The one hour exam is scheduled at the beginning of the Monday, March 5th class. The exam is closed-book/closed-note. No calculators (or any other electronic devices) can be used during the exam.

You will be allowed one sheet (8.5 x 11 inch) of notes. Both sides of the paper may be used.

You will not need paper; all answers will be written on the exam sheets.

The exam will cover all material up we've covered in class from sections 4.3, 5.3, 7.2 and all of chapter 3.

The exam will have a mixture of calculations and concepts. The calculations will be simple enough so that calculators won't be needed. You also will not need a table of integrals or a table of Fourier transforms.

So, what should you put on your sheet of notes?

You might want to put a couple of example homework problems so you understand the calculations involved. But don't forget concepts. For example.

1. How does the DFT relate to the DTFS? To the CTFS?
2. A period signal is sampled. However, the sampled signal may not necessarily be periodic unless some precautions are taken. Do you know what those precautions are?
3. How would you calculate the frequency response of a discrete LTI system?
4. How is a discrete signal altered when it is time scaled? Time shifted?
5. What are eigenfunctions and eigenvalues of discrete LTI systems?
6. How is convolution performed in discrete LTI systems?
7. Physically realizable systems are always causal. Why?