

EC2400 (3-1) DISCRETE SYSTEMS

Fall Quarter AY2004/2005

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Text: McClellan *et al*, *Signal Processing First*, Prentice Hall, 2003.

Course web site: <http://web.nps.navy.mil/~therrien/EC2400/EC2400.html>

Approximate* course outline

Week	Topic	Text chapters	Notes
1	Sinusoids	2	
2	Spectrum Representation	3	
3			QUIZ #1
4	Sampling and aliasing	4	
5	FIR filters	5	
6	Frequency response of FIR filters	6	
7	(review period / computer project)		MID-TERM
8	z-transform	7	
9	IIR filters	8	
10	TBD		QUIZ #2
11	TBD		

* A more detailed list of reading topics, assignments, etc. is found in the weekly lesson plan.

Quizzes and exams

There will be a midterm exam and two short quizzes. Quizzes will be approximately 20 minutes long. The midterm exam will be 1 hour. There is a regularly scheduled 2-hour final exam which will be comprehensive. Unless otherwise stated, there will be no sheets of notes allowed.

Grading

Computer assignments	20%
Quiz #1	10%
Quiz #2	10%
Mid term	20%
Final exam	40%
Total	100%

Lectures, reading, and homework problems

You are responsible both for the material presented in the lectures and the material in the assigned sections of the text. *Please read Chapter 1 of the text before coming to the first class.* It will give you some idea what the course is about. The lecture slides are available for downloading from the web site. Please download copies of the slides in time for each class; you can use these for taking notes. I will not be providing hard-copy handouts. Problems will be assigned each week and solutions will be posted the following week.

Problem sessions

We will schedule some problem sessions during the extra (4th) period. It is intended to help you learn how to approach and solve problems using probabilistic methods so that you can complete the homework on your own.

Computer assignments

There will be two computer assignments to be turned in. These will form a part of your grade in the course (see “Grading” below). Although you may “cross-check” results with other students, you are expected to complete and write up each assignment on your own. The computer assignments are the “labs;” there is no formal lab period.