

## ESE 547 Fall 2009; October 7

Class	Topics	Sections	Reading
6	Windowed FIR Filter Design	10.1.1	Sec. 10.1.2
	Windowed FIR Filter Design Examples	Notes	Sec. 10.5.4

Homework for this week: Study for test.

Homework for next week:

1. Chapter 10: Problems 4, 5, 8, 11, and 15, p.578 (For previous edition, try Chapter 7: Problems 34, 35, and 40, p. 503.)
2. (MATLAB): Do problems M10.2, M10.9, and M10.10, p. 584. (For previous edition, try M7.14, M7.19, and M7.20, p. 511.)
3. (MATLAB) In a system with sampling frequency 88.2kHz, a lowpass filter is needed with the following specifications: passband 0 – 20kHz, with at most 1% gain error; stopband 24.1kHz up, with at least 60dB rejection. Use MATLAB to find the coefficients of such a filter using
  - (a) The Blackman window
  - (b) The Kaiser window

**Test next week, Wednesday, October 14th, from 2:15 to 4:15 pm; the test covers everything up to the end of class 5. You are allowed to bring one sheet of paper, with whatever information you like written on both sides.**