

First Class August 26, 2009

Instructor:

Hector Erives; Phone: 505-835-5932; Email: erives@ee.nmt.edu.

Text (Required):

Digital Signal Processing; A Computer-Based Approach by Sunjit K. Mitra.

Software:

MATLAB.

Class Schedule

Mon, Wed, Fri 10:00 – 10:50 A.M., WORKC 109.

Office Hours

Mon - Fri 9:00 - 10:00 A.M. WORKC 209.

Course Overview:

Most signals we encounter are generated by natural means. A signal carries information and the objective of signal processing is to extract useful information from it. This course will cover the principles of DSP to achieve this task, which includes the implementation of infinite and finite impulse response filters, discrete and fast Fourier transforms, spectral estimation, quantization effects. Labs will include design and implementation of infinite and finite impulse response filters, sound processing, and other applications in state-of-the-art hardware.

Tentative Class Structure

Item	Description	Worth points
Homework	Homework will be assigned regularly and will be done on individual basis	15
Class participation	You are required to participate actively in class. Any student may be called upon to discuss any assignment	5
Partial tests	Three tests, and each will contain material covered since previous test	3x20=60
Final test	The final test will cover all the material	20

Laboratory Schedule:

Wed 2:00 – 5:00 P.M. WORKC 117.