UNIVERSITY OF TEXAS AT DALLAS

Telecommunications Engineering

 $TE3302 \ Signals \ \mathcal{C} \ Systems$ Problem Set #11: Fourier Transform and Sampling

Date assigned: November 29, 2000

Date due: December 8, 2000 (Friday)

Homework is due at the beginning of class. Late homework will not be accepted.

Reading: Signals & Systems, Chapter 7

You may use any computer program to help you solve these problems, check answers, etc.

Problem 11.1 Fourier Transform Properties

Problem 4.12 in Signals & Systems.

Problem 11.2 Fourier Transform - Convolution Property

Problem 4.19 in Signals & Systems.

Problem 11.3 Fourier Transform

Problem 4.21 (a), (b), and (h) in Signals & Systems.

Problem 11.4 Sampling Theorem

Problem 7.1 and 7.2 in Signals & Systems

Problem 11.5 Sampling Theorem

Problem 7.6 in Signals & Systems