INTRODUCTION

1. Lesson 1 - 17 minutes

This lecture serves as an introduction to the course and is intended to provide an indication of the importance and scope of the field of digital signal processing. It is suggested that in addition to viewing the lecture you read the introduction to the text (pages 1-7) and casually peruse the text and manual to obtain a general picture of the scope of this course.

As mentioned in the preface this course assumes a previous exposure to linear system theory for continuous-time signals and systems including Fourier and Laplace Transforms. If it has been some time since you have used that material, you may want to spend a few hours reviewing this background. There is a long list of excellent texts on linear system theory and everyone has his favorite. I would suggest that you look through one that you are familiar with. Several that I have found useful are:

Cooper, G.R. and C.D. McGillem Methods of Signal and System Analysis Holt, Rinehart and Winston, Inc., New York 1967.

Lathi, B.P. Signals, Systems and Communication John Wiley and Sons, Inc., New York 1965.

Oppenheim, A.V. and A.S. Willsky Signals and Systems Prentice-Hall, Inc., New Jersey 1983.

Papoulis, A The Fourier Integral and Its Applications McGraw-Hill Book Company, New York 1962.

Resource: Digital Signal Processing
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