101-1 Preliminary Syllabus, Da-Yeh Univ

Information

Title		Serial No. / ID	2065 / EEI3123
Dept.		School System / Class	3 1
Lecturer		Full or Part-time	
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	( )789 / H228	Language	Chinese

Introduction

This course contains comprehensive treatment of continuous and discrete time signals and systems. The course begins with the time-domain aspects of signals and systems, the discrete-and continuous-time convolution models, the input/output difference and differential equation models. Then, the treatment of signals and systems from frequency-domain points is discussed. Fourier theory is applied to both kinds of systems. On the other hand, Laplace and z-transform are used for the analysis of continuous and discrete time systems and signals, respectively. Analog and digital filters, sampling and signal reconstruction is also considered.

Outline

1.   Fundamental concepts
2.   Time-domain models of systems
3.   Fourier series and Fourier transform
4.   Fourier analysis of discrete-time signals
5.   Midterm
6.   Fourier analysis of continuous-time signals
7.   Laplace transform of continuous systems
8.   Z-transform of discrete-time systems.
9.   Final Exam.

Prerequisite

Calculus and elementary differential equations.