Course Schedule

Week /Date	Tuesday	Assignments Due Tuesday	Friday	Assignments Due Friday
WEEK 0 JAN 25			***Course Overview*** WHY COMPLEX? FACTS OF COMPLEX LIFE	
WEEK 1 JAN 29-FEB 1	***Chapter 1*** INTRODUCING SIGNALS SAMPLE APPLICATION PRESENTATION	CONCEPT BUILD 0 (APX E)	***Classifying signals; Operations***	CONCEPT QUIZ 0; *Application presentations*
WEEK 2 FEB 5-8	***Chapter 2*** INTRODUCING SYSTEMS	CONCEPT BUILD 1 (CH 1)	***Classifying systems; Connecting systems***	CONCEPT QUIZ 1; *App. Pres.*
WEEK 3 FEB 12-15	***Chapter 3*** TIME-DOMAIN ANALYSIS OF LTI CT SYSTEMS	CONCEPT BUILD 2 (CH 2)	***Impulse response; convolution***	CONCEPT QUIZ 2; *App. Pres.*
WEEK 4 FEB 19-22	***Convolution methods***	CONCEPT BUILD 3 (CH 3)	***Chapter 4*** SIGNAL REPRESENTATION USING FOURIER SERIES	CONCEPT QUIZ3; *App. Pres.*
WEEK 5 FEB 26-MAR 1	***Orthogonal signal space; Fourier basis functions***	NONE	***CT Fourier series***	CONCEPT QUIZ 4; *App. Pres.*
WEEK 6 MAR 5-8	***Chapter 5*** CT FOURIER TRANSFORM INVERSE FOURIER TRANSFORM	CONCEPT BUILD 4 (CH 4)	***CT Fourier Transform of periodic functions; CT Fourier Series coefficients as samples of the CT Fourier Transform***	CONCEPT QUIZ 5; *App. Pres.*

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WEEK 7 MAR 12-15	***Properties of the CT Fourier Transform; Fourier transform of real, even, and odd functions.***	CONCEPT BUILD 5 (CH 5)	***EXAM I*** *COVERS MATERIAL UP THROUGH LAST FRIDAY, MARCH 9*	NONE
MAR 18-22	***SPRING BREAK!***			
WEEK 8 MAR 26-29	***Chapter 9*** DT SIGNALS AND SYSTEMS TEAM FORMATION	SUBMIT TEAM MEMBERS' NAMES	***Sampling and Quantization***	PROJECT PROPOSAL
WEEK 9 APR 2-5	***Chapter 10*** TIME-DOMAIN ANALYSIS OF DT SYSTEMS DIFFERENCE EQUATIONS; IMPULSE RESPONSE	CONCEPT BUILD 6 (CH 9)	**OLIN MONDAY—NO CLASS**	NONE
WEEK 10 APR 9-12	***Convolution; convolution properties***	REVISED PROJ. PROPOSALS	***Chapter 11*** DISCRETE-TIME FOURIER SERIES AND TRANSFORM	CONCEPT QUIZ 6 CONCEPT BUILD 7 (CH 10)
WEEK 11 APR 16-19	***Properties of the DTFT; Frequency response of LTI DT systems; Magnitude and phase spectra***	WORK ON FINAL PROJECTS	***Chapter 13*** THE Z-TRANSFORM AND INVERSE Z-TRANSFORM; UNILATERAL/BILATERAL	CONCEPT QUIZ 7 CONCEPT BUILD 8 (CH 11)
WEEK 12 APR 23-26	***Properties of the z-transform; Solution of difference equations; Stability analysis; Frequency response*** ***Digital Filters***	WORK ON FINAL PROJECTS	***Connections:*** DT TO CT VIA THE **Z TRANSFORM** AND THE **LAPLACE TRANSFORM**; LTI SYSTEM ANALYSIS USING THE Z AND LAPLACE TRANSFORMS	CONCEPT QUIZ 8 CONCEPT BUILD 9 (CH 13)
WEEK 13 APR 30 - MAY 3	***Final Project Presentations and Demonstrations***	FINAL PROJECT REPORTS	***Final Project Presentations and Demonstrations*** **EXAM II** WILL OCCUR DURING FINALS PERIOD, DATE/TIME TBD BY THE REGISTRAR	FINAL PROJECT REPORTS