

California State University, Northridge - Spring 2021
College of Engineering & Computer Science
Department of Electrical & Computer Engineering

Course Outline
ECE 351 - Linear Systems II
Last Updated 1/5/2021

Instructor: David Schwartz
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Class Schedule: Tu Th 2:00 – 3:15 PM viaZoom

Office Hours: via Email

COURSE DESCRIPTION

Prerequisite: ECE 350. Continuation of ECE 350, with concentration on discrete system models. Techniques developed include Z-transforms, Fourier Analysis, impulse response, convolution for discrete linear systems

TEXTBOOK Signals and Systems: Analysis Using Transform Methods & MATLAB **3rd Edition** by M.J. Roberts . Available from Bookstore, Amazon and McGraw Hill at (<https://www.mheducation.com/highered/product/signals-systems-analysis-using-transform-methods-matlab-roberts/M9780078028120.html#textbookCollapse>)

SOFTWARE

MATLAB – **To participate in this course you must have access to Matlab.**

Matlab is licensed to all CSUN ECE students. See the following link for installation details:
<https://www.csun.edu/it/matlab>

If you are unable to install Matlab on a computer, you can access it online at:
<https://mycsunsoftware.csun.edu/>

PREREQUISITE

Prerequisite: ECE 350

GRADING POLICY

+ / - Grading is used in this course
Late work will not generally be accepted.

Communications		All course related information will be posted on Canvas. Questions regarding this course should be sent by email to dms@csun.edu . Please do not use Canvas to send emails to me!
Homework	N/A	Will be assigned but not collect. Homework will form the basis of most quizzes.
Quizzes	100%	There will be about 10 to 12 in-class quizzes quizzes. Most Quizzes will be timed and submitted via canvas during class time. Quizzes will normally occur once a week. Some quiz questions will be made available in advance. The answers to such questions, as either figures and/or text, will be uploaded during the quiz time. There will be no make-up quizzes, but your lowest quiz score will be dropped.
Final Exam	N/A	There will be no final exam in this class

Tentative Schedule

Week(s)	Topic	Reference
1-2	Chapter 3 Discrete-Time Signal Description	Chapter 3
3	Chapter 4 Description of Systems	Chapter 4 Section 3
4	Time-Domain System Analysis	Chapter 5 Section 3
5-7	Discrete-Time Fourier Methods	Chapter 7
9-10	The z Transform	Chapter 9
11-12	Sampling and Signal Processing	Chapter 10
12-15	Frequency Response Analysis	Chapter 11 Sections 4
	There will be no final exam	