Syllabus

Course: EENG 4610 and 5610 Digital Signal Processing

Text: Digital Signal Processing: Principles, Algorithms, and Applications, Fifth Edition, John G. Proakis and Dimitris G. Manolakis, 2022 Pearson Education, Inc., ISBN-13: 9780137348619

Hours: MW 9:05-10:25 AM

Instructor: John Polson, Ph.D. john.polson@unt.edu

Office Hours: Before and After class. Other times by zoom appointment (not on exam days)

Grades:

Item	Weight 4610	Weight 5610	Grade	Average
Exam 1	20 %	20 %	A	90 -100
Exam 2	20 %	20 %	B	80 - 89
Exam 3	20 %	20 %	C	70 - 79
HW / Quiz	20 %	10 %	D	60 - 69
Programming	20 %	20 %	F	0 - 59
Project	N/A	10 %		

Any scaling or curving of grades is done at the end of the semester (unlikely). Instructor's assessment of professional conduct may move score +/- 5%. The schedule is on the back side of this syllabus and is subject to change. Watch Canvas AND e-mail.

There may be assigned seating for exams. There may be different versions of the exams

Homework: You should work and understand every assigned problem and more. Follow homework submission standards. Each problem (or section of a problem) has equal weight and is graded 10 points for correct answer, 5 points for incorrect answer, and 0 points for missing problem. Homework is not accepted late. Homework is due via Canvas midnight Saturdays.

Academic Dishonesty: You are expected to follow the guidelines in the student handbook.

Submission Standards (5% penalty for not following standard)

1. ***PRINT*** your name and student number on every page (Last, First).
2. Start each problem on a new sheet of paper.
3. **Work in soft pencil and neatly erase any corrections.**
4. Work neatly down the paper in a single column.
5. Double underline your answer.
6. Number pages in the upper right hand corner A/B. Where: A is current out of total B (for this problem).
7. Upload a single file in the following format.

EENG2710	Due Date (A Thursday)	Last, First Student Number	Assignment #	A/B
	Problem Number. Given: (Single line drawn with a straight edge separates Given from Required).			
	Required: (Single line drawn with a straight edge separates Required from Solution).			
	Solution: Double Underline your Answer! Make it neat and easy to grade!!!			

Monday, August 17, 2026	Classes Begin	Event
Monday, August 17, 2026	Meeting 1	Syllabus + Intro to Signals, Systems, and Signal Processing
Wednesday, August 19, 2026	Meeting 2	Discrete-Time Signals and Systems
Saturday, August 22, 2026	HW01	Chapter 1: TBD
Monday, August 24, 2026	Meeting 3	Discrete-Time Signals and Systems
Wednesday, August 26, 2026	Meeting 4	Discrete-Time Signals and Systems
Saturday, August 29, 2026	HW02	Chapter 2: TBD
Monday, August 31, 2026	Meeting 5	The Z-Transform and Its Applications
Wednesday, September 2, 2026	Meeting 6	The Z-Transform and Its Applications
Monday, September 7, 2026		Labor Day - No Classes - University Closed
Wednesday, September 9, 2026	Meeting 7	The Z-Transform and Its Applications
Saturday, September 12, 2026	HW03	Chapter 3: TBD
Monday, September 14, 2026	Meeting 8	Review
Wednesday, September 16, 2026	Meeting 9	Midterm Exam: Chapters 1-3
Monday, September 21, 2026	Meeting 10	Frequency Analysis of Signals
Wednesday, September 23, 2026	Meeting 11	Frequency Analysis of Signals
Saturday, September 26, 2026	HW04	Chapter 4: TBD
Monday, September 28, 2026	Meeting 12	Frequency-Domain Analysis of LTI Systems
Wednesday, September 30, 2026	Meeting 13	Frequency-Domain Analysis of LTI Systems
Saturday, October 3, 2026	HW05	Chapter 5: TBD
Monday, October 5, 2026	Meeting 14	Sampling and Reconstruction of Signals
Wednesday, October 7, 2026	Meeting 15	Midterm Exam: Chapters 4 - 6
Saturday, October 10, 2026	HW06	Chapter 6: TBD
Monday, October 12, 2026	Meeting 16	The DFT
Wednesday, October 14, 2026	Meeting 17	The DFT
Saturday, October 17, 2026	HW07	Chapter 7:TBD
Monday, October 19, 2026	Meeting 18	The FFT
Wednesday, October 21, 2026	Meeting 19	The FFT
Saturday, October 24, 2026	HW08	Chapter 8: TBD
Monday, October 26, 2026	Meeting 20	Implementation of Discrete Time Systems
Wednesday, October 28, 2026	Meeting 21	Implementation of Discrete Time Systems
Monday, November 2, 2026	Meeting 22	Implementation of Discrete Time Systems
Wednesday, November 4, 2026	Meeting 23	Design of Digital Filters
Friday, November 6, 2026		W-Day
Saturday, November 7, 2026	HW09	Chapter 9: TBD
Monday, November 9, 2026	Meeting 24	Design of Digital Filters
Wednesday, November 11, 2026	Meeting 25	Multirate Digital Signal Processing
Monday, November 16, 2026	Meeting 26	Multirate Digital Signal Processing
Wednesday, November 18, 2026	Meeting 27	Slop
Saturday, November 21, 2026	HW10	Chapter 10 - 12: TBD
Monday, November 23, 2026		Thanksgiving Break - No classes November 23-29, 2026
Monday, November 30, 2026	Meeting 28	Review
Wednesday, December 2, 2026	Meeting 29	Final Exam