ELEG 31204 Systems and Signals Course Syllabus

General Instructor: Jingxian Wu Office: Bell 3168
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Lacture leasting Bell 2125

Lecture location: Bell 3135 Lecture: Tu. Th. 9:30-10:45

Course Materials:

• Textbook (Optional): Luis F. Chaparro, *Signals and Systems Using Matlab*, Academic Press, 2010. ISBN :978-0-12-374716-7

• Software: Matlab

Reference: • S.S. Soliman, M.D. Srinath, Continuous and discrete signals and systems, 2nd

Ed., Prentice Hall, 1998. (Optional)

Prerequisites: Calculus III, Differential Equation (Co-requisite), Electrical Circuits I or equivalent

• Knowledge of integration, differentiation, and differential equations

• Knowledge of algebra

• Familiar with basic circuit analysis

Learning Objectives:

Continuous signals and systems, linear system analysis, convolution, Laplace transform, Fourier series, Fourier transform, discrete-time signals and systems

Grading:

• Test 1 22%

• Test 2 22%

• Test 3 22%

Homework 14%

• Lab 14%

• Quiz 6%

• A: $90 \le \text{grade} \le 100$

• B: $80 \le \text{grade} < 90$

• C: $70 \le \text{grade} \le 80$

• D: $60 \le \text{grade} < 70$

• F: $0 \le \text{grade} < 60$

• There will be NO make up for quizzes.

- Due dates for homework will be strictly enforced. Late submission within one week after due date will receive a 20% grade deduction, and no credit if submitted after one week from the due date.
- If for some legitimate reason (sickness, death in the family, etc.), you cannot take a **test** on the scheduled day, you must notify the instructor **prior** to the exam.

Online Resources:

- Course materials (Slides, Homework, Lecture Notes, Labs, References, etc) can be found at https://wuj.hosted.uark.edu/teaching/eleg3124/eleg3124.html
- Please check course website at least once per week for updates.

Academic Honesty:

Each University of Arkansas student is required to be familiar with and abide by the University's 'Academic Integrity Policy' which may be found at

http://provost.uark.edu/

Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor.

Tentative Schedule:

- Week 1 (8/19, 8/21): Ch.1 Continuous-Time Signals
- Week 2 (8/26, 8/28): Ch. 1 Continuous-Time Signals
- Week 3 (9/2, 9/4): Ch. 2 Continuous-Time Systems
- Week 4 (9/9, 9/11): Ch. 2 Continuous-Time Systems
- Week 5 (9/16, 9/18): Ch. 2 Continuous-Time Systems
- Week 6 (9/23, 9/25): Ch. 3 Fourier Series
- Week 7 (9/30, 10/2): Ch. 3 Fourier Series (Test 1 on 10/2)
- Week 8 (10/7, 10/9): Ch. 3 Fourier Series
- Week 9 (10/14, 10/16): Ch. 4 Fourier Transform (Fall break 10/14)
- Week 10 (10/21, 10/23): Ch. 4 Fourier Transform
- Week 11 (10/28, 10/30): Ch. 4 Fourier Transform
- Week 12 (11/4, 11/6): Ch. 5 Laplace Transform (Test 2 on 11/6)
- Week 13 (11/11, 11/13): Ch. 5 Laplace Transform
- Week 14 (11/18, 11/20): Ch. 5 Laplace Transform
- Week 15 (11/25, 11/27): Ch. 5 Laplace Transform (Thanksgiving 11/27)
- Week 16 (12/2, 12/4): Ch. 6 Discrete-Time System (reading day: 12/5)
- Test 3 in final week (week of 12/8, date and time TBD)

The above schedule is subject to change without prior notice.