ELEG 3124 Systems and Signals
Course Syllabus

General Information:

Instructor: Jingxian Wu
Email: wuj@uark.edu
Lecture location: Bell 1108E

Office: Bell 3168
Phone: (479) 575-6584
Lecture: Tu. Th. 12:30-1:45

Required Material:

- 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: $90 \leq \text{grade} \leq 100$
- B: $80 \leq \text{grade} < 90$
- C: $70 \leq \text{grade} < 80$
- D: $60 \leq \text{grade} < 70$
- F: $0 \leq \text{grade} < 60$

- <u>There will be NO make up for quizzes</u>.
- 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 <u>**prior** to the exam</u>.

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 (8/22, 8/24): Ch.1 Continuous-Time Signals
- Week 2 (8/29, 8/31): Ch. 1 Continuous-Time Signals
- Week 3 (9/5, 9/7): Ch. 2 Continuous-Time Systems
- Week 4 (9/12, 9/14): Ch. 2 Continuous-Time Systems
- Week 5 (9/19, 9/21): Ch. 2 Continuous-Time Systems
- Week 6 (9/26, 9/28): Ch. 3 Fourier Series (**Test 1 on 9/28**)
- Week 7 (10/3, 10/5): Ch. 3 Fourier Series
- Week 8 (10/10, 10/12): Ch. 3 Fourier Series
- Week 9 (10/17, 10/19): Ch. 4 Fourier Transform (**Fall break 10/17**)
- Week 10 (10/24, 10/26): Ch. 4 Fourier Transform
- Week 11 (10/31, 11/2): Ch. 4 Fourier Transform (**Test 2 on 11/2**)
- Week 12 (11/7, 11/9): Ch. 5 Laplace Transform
- Week 13 (11/14, 11/16): Ch. 5 Laplace Transform
- Week 14 (11/21, 11/23): Ch. 5 Laplace Transform (**Thanksgiving 11/23**)
- Week 15 (11/28, 11/30): Ch. 5 Laplace Transform
- Week 16 (12/5, 12/7): Ch. 6 Discrete-Time System **(reading day: 12/8)**
- **Test 3 in final week (week of 12/11, date and time TBD)**

The above schedule is subject to change without prior notice.