

Department of Electrical Engineering University of Arkansas

# ELEG 31204 SYSTEMS AND SIGNALS Ch. 0 Preface

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## **GENERAL INFORMATION**

### • Instructor: Dr. Jingxian Wu

- Office: Bell 3168
- Email: <u>wuj@uark.edu</u>
- Phone: (479) 575-6584

## • Office Hours

- Tue. Thu. 11 12
- Lecture Schedule
  - Tu. Th. 12:30 1:45
  - Bell 1108E



# **COURSE MATERIALS**

### Required Course Materials (Free!)

- Lecture notes, homework, lab manual
- Can be downloaded at the course website
  - Main link: <u>https://wuj.hosted.uark.edu/teaching/eleg3124/eleg3124.html</u>
  - Alternative link via Open Education Resource (OER) <u>https://scholarworks.uark.edu/oer/5/</u>

### • Text Books (optional)

 Luis F. Chaparro, Signals and Systems Using Matlab, Academic Press, 2010. ISBN :978-0-12-374716-7.

#### • Required Software

- Matlab
- Free for all UofA students

### References (optional)

 S.S. Soliman, M.D. Srinath, *Continuous and discrete signals and systems*, 2<sup>nd</sup> Ed., Prentice Hall, 1998.



# **COURSE INFORMATION**

### • Pre-requisite:

- Calculus I, II, and III, Differential Equation (co-requisite)
- Electrical Circuits I
- This course involves heavy mathematical derivations
  - It is a Mathematics course.
    - Integration, differentiation, differential equation, etc.
    - Examples with detailed step-by-step derivation will be given during lecture
      - A great opportunity for you to review and practice your Math skills!
  - A large number of examples will be given in class It's ESSENTIAL for you to repeat all the examples by yourself after class.
  - Homework solutions will be posted after the due dates.
  - You are encouraged to study in groups on homework assignments.
  - Use the office hours of the TA.

## • Teaching format

- Slides
- Examples
- Exercises
- Homework assignments (problems, software)
- Labs



## TEST

## • Tests

- Three tests. Each covers 1/3 of the semester.
  - No comprehensive test.

- You can bring a double-sided equation sheet
  - Handwritten
  - Equations only
  - No text description
  - Upload the equation sheet together with your answer sheet (attach the equation sheet to the end of the test).

 The questions will be very similar to examples in class or homework problems.



# **TENTATIVE SCHEDULE**

- Week 1 (8/20, 8/22): Ch.1 Continuous-Time Signals
- Week 2 (8/27, 8/29): Ch. 1 Continuous-Time Signals
- Week 3 (9/3, 9/5): Ch. 2 Continuous-Time Systems
- Week 4 (9/10, 9/12): Ch. 2 Continuous-Time Systems
- Week 5 (9/17, 9/19): Ch. 2 Continuous-Time Systems
- Week 6 (9/24, 9/26): Ch. 3 Fourier Series (Test 1 on 9/26)
- Week 7 (10/1, 10/3): Ch. 3 Fourier Series
- Week 8 (10/8, 10/10): Ch. 3 Fourier Series
- Week 9 (10/15, 10/17): Ch. 4 Fourier Transform (Fall break 10/15)
- Week 10 (10/22, 10/24): Ch. 4 Fourier Transform
- Week 11 (10/29, 10/31): Ch. 4 Fourier Transform (Test 2 on 10/31)
- Week 12 (11/5, 11/7): Ch. 5 Laplace Transform
- Week 13 (11/12, 11/14): Ch. 5 Laplace Transform
- Week 14 (11/19, 11/21): Ch. 5 Laplace Transform
- Week 15 (11/26, 11/28): Ch. 5 Laplace Transform (Thanksgiving 11/28)
- Week 16 (12/3, 12/5): Ch. 6 Discrete-Time System (reading day: 12/6)
- Test 3 in final week (week of 12/9, date and time TBD)



### • Grades Percentage

—	Test 1	22%
_	Test 2	22%
_	Test 3	22%
_	Homework	14%
_	Lab	14%
_	Quiz	6%

### • Grades

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



# **GRADING POLICY**

- Due dates for homework and lab report will be strictly enforced. Late submission within one week after due will receive a 20% deduction; no credit if submitted one week past due.
- Homework and lab reports should be submitted directly on blackboard
- There will be NO make up for quizzes.
- If for some legitimate reason (sickness, death in the family, etc.), you cannot take an exam on the scheduled day, you must notify the instructor prior to the exam.



# **ONLINE RESOURCES**

### • Course Home Page

- https://wuj.hosted.uark.edu/teaching/eleg3124/eleg3124.html
- All the course related materials, such as slides, homework assignments, lecture notes, homework solutions, links, announcements, etc., will be posted on this website.
- Please check the webpage regularly (at least once per week) for update.
- Blackboard



# **ADDITIONAL ISSUES**

## 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 <u>http://provost.uark.edu/</u>
- Any kind of activities related to academic dishonesty (copying homework, lab report, code, plagiarism, etc.) will be dealt with.
- If you are not sure about plagiarism, please contact the instructor.
- Questions are welcome in my class
  - You are very welcome to raise any question related to course materials.
  - Please feel free to stop me at any time if you have any question.
  - You can also ask me question via email or during office hours.
- BE ON TIME!
- No texting or web surfing during class.
- Have Fun!

