ELEG3143 Probability and Stochastic Process Course Syllabus

General Information:	Instructor: Jingxian Wu Email: wui@uark.edu	Office: Bell 3181 Phone: (479) 575-6584
inoi mation.	Office Hour: Tu Th 0.30 10.30	T Holle. (479) 375-0384
	Lecture location: Bell 2273	Lecture: Tu. Th. 8:00-9:20
	TA: Guoqing Zhou	gzhou@uark.edu
	Office: ENGR 109	Office Hour: Wed 3:00-5:00 PM
Required Material:	 Textbook: G. R. Cooper and C. D. McGillem, <i>Probabilistic Methods of Signal and System Analysis</i>, 3rd Ed., Oxford University Press, 1999. ISBN :9780195123548. Software: Matlab 	
Reference:	 S. M. Ross, Introduction to Probability Models, 9th Ed., Academic Press, 2007. (optional) A. Papoulis and S. U. Pillai, Probability, Random Variables and Stochastic Processes, 4th Ed., McGraw Hill, 2002. (optional) R. D. Yates and D. Goodman, Probability and Stochastic Processes: A Friendly Introduction for Electrical and Computer Engineers, 2nd Edition, Wiley, May 2004. (optional). 	
Prerequisites:	 System and Signal Analysis, Calculus I & II Knowledge of integration and differentiation Knowledge of algebra Familiar with Fourier transform and Laplace transform Knowledge of linear time invariant system 	
Learning Objectives:	Probability, random variables, stochastic processes, auto correlation, power spectral density, systems with random inputs in the time and frequency domain, and applications.	
Grading:	 Test 1 22% Test 2 22% Test 3 22% Homework 22% Quiz 12% 	 A: 90 ≤ grade ≤ 100 B: 80 ≤ grade < 90 C: 70 ≤ grade < 80 D: 60 ≤ grade < 70 F: 0 ≤ grade < 60
	 Each student has 1 personal day: you can miss 1 class without losing point. Each missing class will result in a 1 point deduction of your final grade. <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 prior to the 	

<u>exam</u>.

Online Resources:	 Course materials (Slides, Homework, Labs, References, etc) can be found at http://comp.uark.edu/~wuj/teaching/eleg3143/eleg3143.html Please check course website at least once per week for updates. 		
Academic Honesty:	Academic honesty is fundamental to the activities of an academic institution and success of students. Any form of copy and plagiarism will not be tolerated in this class. Any kind of activities related to academic dishonesty will be dealt with on a case-by-case basis and may be grounds for dismissal from the class.		
Tentative	• Week 1 (1/18, 1/20): Ch.1 Introduction to Probability		
Schedule:	• Week 2 (1/25, 1/27): Ch. 1 Introduction to Probability		
	• Week 3 (2/1, 2/3): Ch. 1 Introduction on Probability, Ch. 2 Random Variables		
	• Week 4 (2/8, 2/10): Ch. 2 Random Variables		
	• Week 5 (2/15, 2/17): Ch. 2 Random Variables		
	• Week 6 (2/22, 2/24): Ch. 3 Several Random Variables (Test 1on 2/22)		
	• Week 7 (3/1, 3/3): Ch. 3 Several Random Variables		
	• Week 8 (3/8, 3/10): Ch. 4 Elements of Statistics		
	• Week 9 (3/15, 3/17): Ch. 4 Elements of Statistics, Ch5 Random Process		
	• Week 10 (3/22, 3/24): Spring Break		
	• Week 11 (3/29, 3/31): Ch. 5 Random Process (Test 2 on 3/31)		
	• Week 12 (4/5, 4/7): Ch. 5 Random Process		
	• Week 13 (4/12, 4/14): Ch. 6 Correlation Function		
	• Week 14 (4/19, 4/21): Ch. 6 Correlation Function		
	• Week 15 (4/26, 4/28): Ch. 7 Spectral Density		
	• Week 16 (5/3, 5/5): Ch. 7 Spectral Density (Test 3 on 5/5) (dead day: 5/6)		

The above schedule is subject to change without prior notice.