

01204312 Probability and Random Processes

Summer 2012 (April – May)

Section 450: for IUP Students

Instructor Information

Instructor:	Associate Prof. Anan Phonphoem, Ph.D. (รศ.ดร.อนันต์ พลเพิ่ม)
Office:	Building 15, Room 407 (and Room 710: IWING Lab)
Office Hours:	Monday 12:00 – 2:00 PM or by appointment
Tel. No.:	02-942-8555 ext 1428
Email:	anan.p@ku.ac.th
URL:	http://www.cpe.ku.ac.th/~anan ; http://anan.phonphoem.in.th

Course Information

Lecture:	Section 450: Mon Wed Fri 9 – 12 (Room 507) [Schedule may be changed due to time constraints]
Class URL:	http://www.cpe.ku.ac.th/~anan
Prerequisite:	417168 Engineering Mathematics II
Course Description:	Probability; conditional probability and independence of events; random variables; distribution and density functions; functions of one random variable; multiple random variables; operations on one and multiple random variables; laws of large numbers; central limit theorem; random processes and their applications; application to computer engineering problems.
Text Book:	<u>"Probability and Stochastic Processes: A Friendly Introduction for Electrical and Computer Engineers," Roy D. Yates and David J. Goodman, John Wiley & Sons, Inc., Second Edition, 2005, ISBN 0-471-45259-9</u>
Supplement:	1. <u>"Probability, Random Variables, and Stochastic Processes,"</u> 3 rd Edition, Athanasios Papoulis, McGraw-Hill 2. <u>"Probability and Random Process for Electrical Engineering,"</u> 2 nd Edition, Alberto Leon-Garcia, Addison Wesley

Grade

Midterm Exam:	40 %
Final Exam:	40 %
Homework:	10 %
Attendance:	10 %

Grading Policy

- Your Grade is based on the overall class performance. However, the cumulative score **below 50%** is considered as **fail (F)**.
- An **"F"** grade will be given to any form of cheating (for all parties).
- Make-up exam will only be provided for restrict circumstances such as severe illness.
- You are not allowed to take a midterm exam if you miss more than 2 lectures and also not allowed to take final exam if you miss more than 4 lectures.

Attendance Score

Description	Score (0 – 1)
0 – 15 min	1
15.01 – 100 min	$(100 - \text{MinLate})/100$
> 100 min	0
If missing class	
• with “letter of leave of absence in advanced”	0.5
• without “letter of leave of absence in advanced”	0

Assignment Policy

- All hard-copy assignments must be handed in at the beginning of the class (> 15 min. is considered late). For soft-copy will be timed by the local time stamp.
- No Late assignment will be graded.
- No credit for plagiarism and considered as cheating.
- No credit for copying homework or assignment (for all copies) and considered as cheating.

Tentative Course Schedule

Week	Description
1	Intro to Prob - Set Theory
2	Conditional Prob
3	Prob Sequential
4	Discrete RV – 1
5	Discrete RV – 2
6	Multiple Discrete RV – 1
7	Multiple Discrete RV – 2
8	Midterm Exam
9	Cont Random Variable – 1
10	Cont Random Variable – 2
11	Cont Random Variable – 3
12	Mult Cont RV – 1
13	Mult Cont RV – 2
14	Stochastic Process – 1
15	Final Exam