01204312 Probability and Random Processes

1st semester 2012 (August – December)

Section 450

Instructor Information

Instructor:	Associate Prof. Anan Phonphoem, Ph.D. (**รศ.ดร.อนันต์ ผลเพิ่ม**)
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: Tue 9 – 12 (Room 203)
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; Introduction to Statistics; statistical inferences; application to computer engineering problems.
Text Book:	"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
Supplement:	1. "Probability, Random Variables, and Stochastic Processes," 3rd Edition, Athanasios Papoulis, MgGraw-Hill 2. "Probability and Random Process for Electrical Engineering," 2nd Edition, Alberto Leon-Garcia, Addison Wesley

Grade

Midterm Exam:	40 %
Final Exam:	45 %
Attendance:	5 %
Homework & Assignment:	10 %

If ((Attendance Score ≥ 85%) and (You are the 1st rank for the particular grade))

Then (one stop adjustment automatically) /* e.g. "C+" becomes "B" */

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 – MinLate)/100
> 100 min	0
If missing class • with “letter of leave of absence in advanced” • without “letter of leave of absence in advanced”	 0.5 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 Sequental
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	Mult Cont RV – 1
12	Mult Cont RV – 2
13	Stochastic Process – 1
14	Statistics-1
15	Statistics-2
16	Final Exam