204312 Probability and Random Processes

1st semester 2010 (June – September)

Section 1: for CPE Students; **Section 450**: for IUP Students

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
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URL:	http://www.cpe.ku.ac.th/~anan; http://anan.phonphoem.in.th

Course Information

Lecture:	Section 1: Fri 9 – 12 (Room 202) [ภาษาไทย] Section 450: Tue 9 – 12 (Room 507) [English Language]
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:	"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

Exam Date

Midterm Exam:	Sat August 7, 2010, 16:00 – 19:00
Final Exam:	Sat September 28, 2010, 9:00 – 12:00

Grade

Midterm Exam:	40 %
Final Exam:	40 %
Homework:	20 %
Attendance:	If ((Miss ≤ 2 Classes) 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.
- More than 20 min. late is considered as 0.5 class attendances and more than 40 min. late is considered as missing one lecture.

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	Class Date (Sec 450)	Class Date (Sec 1)	Note	Description
1	Tue, June 8	Fri, June 11		Intro to Prob - Set Theory
2	Tue, June 15	Fri, June 18		Conditional Prob
3	Tue, June 22	Fri, June 25		Prob Sequental
4	Tue, June 29	Fri, July 2		Discrete RV – 1
5	Tue, July 6	Fri, July 9		Discrete RV – 2
6	Tue, July 13	Fri, July 16		Multiple Discrete RV – 1
	Tue, July 20	*Fri, July 23*	*No Class*	*Graduation Ceremony*
	Tue, July 27		*No Class*	*Buddhist Lent's Day*
7		*Fri, July 30*	Make Up for Sec 450	Multiple Discrete RV- 2
Sat, Aug 7, 2010 (16:00 – 19:00)				**Midterm Exam**
8	Tue, Aug 10	Fri, Aug 13		Cont Random Variable – 1
9	Tue, Aug 17	Fri, Aug 20		Cont Random Variable – 2
10	Tue, Aug 24	Fri, Aug 27		Cont Random Variable – 3
11	Tue, Aug 31	Fri, Sep 3		Mult Cont RV – 1
12	Tue, Sep 7	Fri, Sep 10		Mult Cont RV – 2
13	Tue, Sep 14	Fri, Sep 17		Stochastic Process – 1
14	Tue, Sep 21	Fri, Sep 24		Stochastic Process – 2
Tue, Sep 28, 2010 (9:00 – 12:00)				**Final Exam**