

01204312 Probability and Random Processes

1st semester 2013 (June – September)

Section 1

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 1: Wed 9 – 12 (Room 203) [ภาษาไทย]
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, McGraw-Hill
2. “Probability and Random Process for Electrical Engineering,” 2nd Edition, Alberto Leon-Garcia, Addison Wesley

Grade

Midterm Exam: 42 %
Final Exam: 43 %
Homework & Assignment: 15 %

If ((Attendance Score \geq 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	$(100 - \text{MinLate})/100$
> 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	Date	Description
1	June 12, 2013	Intro to Prob - Set Theory
2	June 19, 2013	Conditional Prob
3	June 26, 2013	Prob Sequential
4	July 3, 2013	Discrete RV – 1
5	July 10, 2013	Discrete RV – 2
	July 17, 2013	No Class (WUNCA Conference)
6	July 24, 2013	Multiple Discrete RV – 1
7	July 31, 2013	Multiple Discrete RV- 2
8	Aug 7, 2013	Cont Random Variable – 1
9	Aug 13, 2013	Midterm Exam (12 – 15)
10	Aug 21, 2013	Cont Random Variable – 2
11	Aug 28, 2013	Mult Cont RV – 1
12	Sep 4, 2013	Mult Cont RV – 2
13	Sep 11, 2013	Stochastic Process
14	Sep 18, 2013	Statistics-1
15	Sep 25, 2013	Statistics-2
16	Oct 11, 2013	Final Exam (13 – 16)