

01219214 Probability and Statistics for Software Knowledge Engineering

1st semester 2015 (Aug – December) 3 Credits

Section 450

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.: 02-7970999 ext 1428, 1430
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Instructor Information

Instructor: Supaporn Erjongmanee (ดร.สุภาพร เอื้องจมานี)
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Course Information

Lecture: Section 450: Fri 1 – 4 PM (Room 203)
Class URL: <http://www.cpe.ku.ac.th/~anan>
Prerequisite:
Course Description: Probability; conditional probability and independence of events; random variables; distribution and density functions; functions of one random variable; multiple random variables; statistical inference; estimation; hypothesis testing; regression; application to software and knowledge engineering problems.
Text Book: 1. "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
2. "Probability and Statistics for engineers and scientists," Anthony Hayter, **Third Edition, 2007**, ISBN 0-495-10878-2
Supplement: 1. "Probability, Random Variables, and Stochastic Processes," 3rd Edition, Athanasios Papoulis, McGraw-Hill

Grade

Midterm Exam: 55 %
Final Exam: 25 %
Homework: 10 %
Assignment: 10 %

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	Fri, Aug 21	Orientation and Intro to Prob. Theory	Anan Phonphoem
2	Fri, Aug 28	Conditional Prob, Independent	Anan Phonphoem
3	Fri, Sep 4	Discrete Random Variable I	Anan Phonphoem
4	Fri, Sep 11	Discrete Random Variable II	Anan Phonphoem
5	Fri, Sep 18	Discrete Random Variable III	Anan Phonphoem
6	Fri, Sep 25	Multiple Discrete RV	Anan Phonphoem
7	Fri, Oct 2	Cont Random Variable - 1	Anan Phonphoem
8	Fri, Oct 9	Cont Random Variable - 2	Anan Phonphoem
9	Fri, Oct 16	Mixed RV ; Multiple Continuous RV - 1	Anan Phonphoem
10		Multiple Continuous RV - 2	Anan Phonphoem
	Fri, Oct 23	Chulalongkorn Day	
	Fri, Oct 30	Commencement Day	
	Thu, Nov 5	(12 - 3 PM) Midterm Exam	
11	Fri, Nov 13	Intro to Statistics	Supaporn Erjongmanee
12	Fri, Nov 20	Descriptive Statistics	Supaporn Erjongmanee
13	Fri, Nov 27	Statistical Estimation	Supaporn Erjongmanee
14	Fri, Dec 4	Confidence Intervals	Supaporn Erjongmanee
15	Fri, Dec 11	Hypothesis Testing, Regression	Supaporn Erjongmanee
	Thu, Dec 17	(1 - 4 PM) Final Exam	