Math 411A Introduction to Probability Theory Fall 2012

10 – 10:50 MTTF Bouillon 102

Instructor: Cen-Tsong Lin

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Office Hours: 11:00 to 11:50 Monday – Friday

Course goals: The goal of this course is to deliver the knowledge of probability theory and lay the foundation work for the mathematical statistics course. At the conclusion of this course, students will understand the following topics:

(i) Properties of probability, conditional probability, independence, Bayes' Theorem.

- (ii) Mathematical expectation of random variables; Discrete and continuous random variable and their distributions.
- (iii) Bivariate distributions, multivariate probability distributions.

The content of this course covers most of <u>SOA exam P</u> material. Students are encouraged to take Exam P in the <u>coming</u>

March.

Prerequisite: MATH 272.2 or permission

Required Text: Hogg and Tanis, Probability and Statistical Inference, 8th edition, Prentice Hall

Sections Covered: Chapters 1 – 5 (Target)

Evaluation:

- Homework assignments and quizzes (15%)
- 3 in-class tests (60%), tentative dates: 10/5, 10/26, 11/16.
- Final exam (25%): Comprehensive, 8:00 10:00, Tuesday, 12/4/2012

Course Conduct:

- Homework assignment will be assigned daily and the due date is one week from the day it is assigned. No late homework will be accepted.
- The assignments and class handouts will be also posted at the class website: <u>www.cwu.edu/~ctl</u> for your convenience.
- No make-up test will be given unless you can document a circumstance that is beyond your control and unexpectedly prevented you from taking the test.

Grading:

Your grade will be assigned based on the following scale:

	93% → A	90% → A-
87% → B+	$83\% \rightarrow B$	$80\% \rightarrow B$ -
77% → C+	$73\% \rightarrow C$	70% → C-
67% → D+	63% → D	60% → D-

I reserve the right to adjust the above scale (in student's favor) if deemed appropriate.