

Math 370 (Section X)
Actuarial Problem Solving: Course P/1

Instructor: Soojin Yang

Office Hours: No office hours.

Email: syang32@illinois.edu

Website: <http://math.uiuc.edu/~syang32>

Mailbox: Room 250 Altgeld Hall (Math. Dept. office)

Course Objective

This course will help you prepare for the first actuarial exam, referred to as Exam 1 by the Casualty Actuarial Society and Exam P by the Society of Actuaries. Math 370 (X) can be taken for credit (1 hour only), or you are welcome to sit in on the course without registering (either for assistance with Course 1 exam preparation, or simply because you would like more exposure to the material covered), assuming there are enough seats available in the classroom. The class will meet on most Monday evenings during the spring 2009 semester (see below for specific meeting and non-meeting dates). The class will begin at 7 pm, and will last no more than two hours.

Prerequisites

There is no requirement for this class, but you should know about basic calculus and probability concepts. The class schedule will be roughly aligned with Math 408 and will cover actuarial related topics.

References (Not required)

- Hogg and Tanis, *Probability and statistical inference*, Prentice Hall
- Mathew J. Hassett, *Probability for risk management*, Actex

Class Notes

Downloadable from <http://math.uiuc.edu/~syang32/math370X.html>

Grading/Attendance policy

For those wishing to take this course for one hour of credit (the maximum available), grading is on an S/U basis. Regular attendance is expected. A student will not receive credit for this course if more than three class sessions (of the total twelve class sessions scheduled) are missed during the semester.

Disability Accommodations

Students with disabilities requiring assistance should contact the instructor as soon as possible.

Course Outline

General probability
Discrete distributions
Continuous distributions
Multivariate distributions
Normal distribution and Central Limit Theorem

Tentative Schedule for Math 370X

| Date | Course Contests |
|-------------|---|
| Jan 26th | General Probability |
| Feb 2nd | Discrete Random Variable |
| Feb 9th | Continuous Random Variable |
| Feb 16th | <i>Review Session</i> |
| Feb 23rd | Integrals |
| Mar 2nd | Variance, Covariance |
| Mar 9th | Moment-Generating Function |
| Mar 16th | <i>Review Session</i> |
| Mar 30th | Joint Distribution and Double Integrals |
| Apr 6th | Normal Distribution |
| Apr 13th | Central Limit Theorem |
| Apr 20th | <i>Review Session</i> |