

Math 370 (Section Z) Actuarial Problem Solving: Course FM/2

Instructor: Soojin Yang

Office Hours: No office hours.

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Course Objective

This course will help you prepare for the second actuarial exam, referred to as Exam 2 by the Casualty Actuarial Society and Exam FM by the Society of Actuaries. Math 370 (Z) 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 2 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 Tuesday 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 concepts. The class schedule will be roughly aligned with Math 210 and will cover actuarial related topics.

References (Not required)

- Theory of Interest by Stephen Kellison
- Derivatives Markets (2nd Edition) by Robert L. McDonald

Class Notes

Downloadable from <http://math.uiuc.edu/~syang32/math370Z.html>

Grading/Attendance 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 eleven class sessions scheduled) are missed during the semester.

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

Tentative Schedule

Class Date	Topic Scheduled
January 27	Basics of interest rates and present values
February 3	Basic annuities and perpetuities
February 10	Varying annuities and perpetuities
February 17	Rates of return and reinvestment rates
February 24	Loans and sinking funds
March 3	Bonds
March 10	Stock pricing, short sales, and yield curves
March 17	*Review Session (optional)
March 31	Financial economics I
April 7	Financial economics II
April 14	Financial economics III
April 21	Duration and yield curves
April 28	Asset-liability matching and immunization
May 5	*Review Session (optional)

*Review Session: The goal of review session is to help students prepare an actuarial exam by simulating an exam environment. Test will consist of past actuarial exams or sample questions posted previously on SOA website. This class is optional and not mandatory. That is, though you miss these two review sessions, there would be no penalty for not showing up.