Math 419C Actuarial Mathematics III Spring 2009

MWF 11:00 – 11:50 Black 202

Instructor: Cen-Tsong Lin

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Office Hours: 10 – 10:50, Monday – Friday or by appointment

Prerequisite: Math419A/B

Course goals: The goal of this course is to develop students' knowledge of the theoretical basis of certain actuarial models and the application of those models to insurance and other financial risks. After completing this sequence, students will be able to apply their knowledge to price and evaluate the risk for traditional insurance and annuities products.

Required Text: Cunningham, R., Herzog, T. and London, R.L., *Models for Quantifying Risk*, Second Edition, ACTEX Publications, Inc., 2006

Required Study Notes: (Available from SOA website)

Multi-State Transition Models With Actuarial Applications, SOA Study Notes, Code MLC-24-05

Poisson Processes (and mixture distributions), SOA Study Notes, Code: MLC-28-08

Chapters Covered:

Chapter 9	Multiple-Live Models starts 9.4
Chapter 10	Multiple-Decrement Models (including Markov Chain Models)
Chapter 14	Process Models (including Poisson Processes and mixture models)

Grading:

Homework (25%): Homework will be assigned daily throughout the quarter and due one week after it is assigned. No late homework will be accepted.

Three tests (45%): Tentative scheduled for Friday, 4/17/2009, Friday, 5/8/2009 and Friday, 5/29/2009.

Final exam (30%): 8:00 – 10:00, Wednesday, 6/10/2009 (Comprehensive)