

Math 419A Actuarial Mathematics I

Fall 2010

MW 3:00 – 4:15 PM

Bouillon 101

Instructor: Cen-Tsong Lin

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Office Hours: 9 – 9:50, Monday – Friday or by appointment

Prerequisite: Math411A and Math418A (concurrent with Math 418A is OK)

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 (Math 419A/B/C), students will be able to apply their knowledge to price and evaluate the risk for traditional insurance and annuities products. After completing Math 419A, students will be able to calculate and demonstrate mortality rates, survival time, and benefit premiums for traditional insurance and annuity products.

Required Text: Cunningham, R., Herzog, T. and London, R.L., *Models for Quantifying Risk*, 3rd Edition, ACTEX Publications, Inc., 2008

Course outlines:

- Chapter 3 Survival Models (continuous parametric context)
- Chapter 4 The life table (discrete tabular context)
- Chapter 5 Contingent payment models (insurance models)
- Chapter 6 Contingent annuity models (life annuities)

Grading Policy

Two tests: Wed, 10/3/2010 and Wed, 11/10/2010	50%
Homework assignments:	20%
Final exam: noon – 2:00, Thur, 12/09/2008 (Comprehensive)	30%
Total	100%

Note:

- The due day of homework assignment is one week after it is assigned.
- This syllabus, homework assignments and class handouts are also available in the following website: www.cwu.edu/~ctl