

MATH 4260/5260 Actuarial Math I

Fall 2010

Time: 1:00-2:15 pm TR
Classroom: 238 Math Sci Bldg.
Instructor: Dr. Maria Rizzo
Office: MSC 413 Hours: TBA
Phone: 419-372-7474 email: mrizzo
URL: personal.bgsu.edu/~mrizzo/
Prerequisite: MATH 4410 or MATH 5410

Required textbook (MATH 4260-4270 and MATH 5260-5270): “Models for Quantifying Risk” by Robin Cunningham, Thomas Herzog and Richard London, Actex, Third Edition ISBN 978-1-56698-673-1. This is a two semester course, which covers much of the learning objectives of the SOA actuarial exam MLC (CAS 3L) and part of SOA exam C (CAS 4).

Chapter 1 - Review of Interest Theory
Chapter 2 - Review of Probability
Chapter 3 - Survival Models
Chapter 4 - The Life Table
Chapter 5 - Contingent Payment Models
Chapter 6 - Contingent Annuity Models
Chapter 7 - Funding Plans of Contingent Contracts
Chapter 8 - Contingent Contract Reserves
Chapter 9 - Models Dependent on Multiple Survivals
Chapter 10 - Multiple Contingencies with Applications
Chapter 11 - Claim Frequency Models
Chapter 12 - Claim Severity Models
Chapter 13 - Models for Aggregate Payments
Handout – Asset Shares
Handout – Multistate Models

Catalog description: Brief introduction to annuities certain; survival distributions and life tables, life insurance, life annuities, net premiums, net premium reserves. Intended to prepare students for actuarial examinations. Prerequisite: C or better in MATH 441.

Exam 1: 50 points
Exam 2: 50 points
Homework: 50 points
Final Exam 100 points

The course grade will be determined by the percentage of total points earned: 90%-100% A, 80%-89% B, 70%-79% C, 60%-69% D, <60% F.