This course covers the mathematical theory behind life contingencies and provides students with an introduction to a portion of the material covered in the Society of Actuaries course 3 examination. Topics include survival models, life insurance, life annuities, benefit premiums, benefit reserves, multiple life functions and multiple decrement models.

Textbook: Course Notes

Prerequisite: MATH-121, 384* and STAT-251* or permission of the instructor.

Instructor: Mark Pawziuk (Empire Life Insurance Co.)

Evaluation: Final Examination 60%
Midterm Test 20%
Assignments (Best 5 of 6) 20%

Topics:

• Review of Fundamentals, Survival Analysis
• Life Insurance
• Life Annuities
• Benefit Premiums
• Benefit Reserves
• Analysis of Benefit Reserves
• Multiple Life Models
• Multiple Decrement Models