Actuarial Mathematics II, Math 631

• Purpose of Course

The Math 630/631/632 sequence is designed to introduce students to the mathematical content of the theory of life contingencies. The sequence includes some material from several new Examinations of the Society of Actuaries and the Casualty Actuarial Society. The sequence is required for the undergraduate major in actuarial science.

• Prerequisite

Mathematics 630 or permission of instructor.

• Text

Actuarial Mathematics 2nd edition, Newton L. Bowers, Jr., et al, Society of Actuaries, 1997.

• Syllabus

| Week 1 | Continuous and Discrete Premiums |
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| Week 2 | <i>m</i> -thly Payment Premiums, Apportionable Premiums |
| Week 3 | Accumulation Type Benefits |
| Week 4 & 5 | Benefit Reserves |
| Week 6 & 7 | Analysis of Benefit Reserves |
| Week 8 | Joint Distributions of Future Lifetimes, Joint-Life Status, and Last-Survivor |
| | Status |
| Week 9 | Dependent Lifetime Model, Insurance and Annuity Benefits |
| Week 10 | Special Mortality Assumptions, Simple Contingent Functions and Their |
| | Evaluations |

• Grade

Two midterms at 100 points each, and a final exam at 200 points. The course grade is based on the total 400 points.

• Disability Statement

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in f 50 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; http://www.ods.ohio-state.edu.

• Academic Misconduct Statement

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but riot limited to, cases of plagiarism arid dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee. For additional information, see the Code of Student Conduct (http://studentaffairs.osu.edu/resource-csc.asp).