

COURSE SYLLABUS
SOUTHEAST MISSOURI STATE UNIVERSITY

Department of Mathematics
Title of Course: Actuaries Seminar III

Course No. MA 528
March 1, 2013

I. Catalog Description and Credit Hours of Course:

Solving modeling problems using actuarial methods. (1 credit hour).

II. Prerequisites:

MA525 (or co-requisite)

III. Objectives of Course:

To provide innovative strategies for problem solving that prepare students for the actuarial modeling exam of the Society of Actuaries.

IV. Expectations of Students:

Participation is expected in discussions during seminar meetings and in problem-solving activities. Students are to complete assignments, solve problems, and prepare to take the actuarial modeling exam of the Society of Actuaries.

V. Student Learning Outcomes:

- 1) Students will solve a variety of actuarial science problems involving construction of empirical models.
- 2) Students will solve a variety of actuarial science problems involving construction and selection of parametric models.
- 3) Students will solve a variety of problems involving several actuarial models.

VI. Course Outline:

Instructor initiated problem solving techniques. Student presentations of problem solutions to study material provided from the Society of Actuaries.

1. Problems involving severity models	1 hour
2. Problems involving frequency models	1 hour
3. Problems involving aggregate models	1 hour
4. Problems involving empirical models	3 hours
5. Problems involving parametric models	3 hours
6. Problems involving credibility	3 hours
7. Problems involving simulation	1 hour
8. Exams	2 hours

Total **15 Hours**

VII. Suggested Textbook:

Klugman, S.A., Panjer, H.H. and Willmot, G.E. (2012): Loss Models: From Data to Decisions, (Fourth Edition), John Wiley & Sons.

VIII. Basis of Student Evaluation:

A. Class participation	10%
B. Problems and solutions	30%
C. Exams	60%

IX. Grading Scale

Graduate Student

90% - 100% = A

80% - 89% = B

70% - 79% = C

0% - 69% = F

Undergraduate Student

90% - 100% = A

80% - 89% = B

70% - 79% = C

60% - 69% = D

0% - 59% = F

The weight of the evaluation criteria may vary according to each instructor and will be communicated at the beginning of the course.

X. Academic Policy Statement:

Students will be expected to abide by the University Policy for Academic Honesty regarding plagiarism and academic honesty. Refer to:

<http://www6.semo.edu/judaffairs/code.html>

XI. Student with Disabilities Statement:

If a student has a special need addressed by the Americans with Disabilities Act (ADA) and requires materials in an alternative format, please notify the instructor at the beginning of the course. Reasonable efforts will be made to accommodate special needs.

Questions, comments or requests regarding this course or program should be taken to your instructor. Unanswered questions or unresolved issues involving this class may be taken to the Chairperson of the Department of Mathematics.