I. Catalog Description and Credit Hours of Course:
Solving financial mathematics problems that are unique to actuarial science. (1 credit hour).

II. Prerequisites:
MA526 or permission of instructor

III. Objectives of Course:
To provide innovative strategies for problem solving that prepare students to take the financial mathematics 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 financial mathematics exam of the Society of Actuaries.

V. Student Learning Outcomes:
1) Students will solve a variety of actuarial science problems involving interest theory.
2) Students will solve a variety of actuarial science problems involving financial economics.
3) Students will present solutions for a variety of actuarial science problems to class.

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

1. Interest theory problems 8 hours
2. Financial economics problems 5 hours
3. Exams 2 hours
Total 15 Hours

VII. Suggested Textbook:

VIII. Basis of Student Evaluation:
A. Class participation 10%
B. Problems and solutions 30%
C. Exams 60%
IX. Grading Scale

<table>
<thead>
<tr>
<th></th>
<th>Graduate Student</th>
<th>Undergraduate Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% - 100% = A</td>
<td>90% - 100% = A</td>
<td></td>
</tr>
<tr>
<td>80% - 89% = B</td>
<td>80% - 89% = B</td>
<td></td>
</tr>
<tr>
<td>70% - 79% = C</td>
<td>70% - 79% = C</td>
<td></td>
</tr>
<tr>
<td>0% - 69% = F</td>
<td>60% - 69% = D</td>
<td></td>
</tr>
<tr>
<td>0% - 59% = F</td>
<td>0% - 59% = F</td>
<td></td>
</tr>
</tbody>
</table>

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.