Introduction to Actuarial Mathematics

MAP 4170, 4 semester hours

Time

2:00 – 3:15 TuTh; 213 HCB 2:30 – 3:20 W; 213 HCB

Instructor Information

Name: Steve Paris

Email: paris@math.fsu.edu

Office: 202A LOV

Office Hours: 12:30 – 1:30 Tu

3:30 – 4:30 Th and by appointment

Class Information and Communications

At www.math.fsu.edu/~paris there are links to much actuarial information you may find relevant, including this syllabus and some old exams and extra study material. I also keep an email group alias for all actuarial science students. Please verify that you are included on the alias, as class communication will often rely on email to this department alias for actuarial students. I recommend that you check your my.fsu.edu email often for any new correspondences.

Prerequisites and Registration

You must have completed MAC 2312 (Calculus II) with a grade of C- or better in order to enroll in this course.

You should register for STA 4321 (Intro Math Stats) as soon as possible after having completed the prerequisite course MAC 2313 (Calculus III). This statistics class introduces you to the concepts that are tested on SOA Exam P.

University Attendance Policy

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Course Materials

I have recorded videos that cover the material on the Society of Actuaries Exam FM (Financial Mathematics for Actuaries). These videos are available through June in the following YouTube playlist:

https://www.youtube.com/watch?v=vaIqxP437bs&list=PLIYnk9FMYcksTDanxOE6LOo MhJvpz9SN3

You are also required to have a TI BA II Plus (or Professional) calculator.

Tests and Makeup Policy

There will be 4 1-hour 100-point tests and on Thursday, April 30th in 213 HCB from 7:30 to 9:30 a.m. there will be a 2-hour, 100-point, comprehensive Final Examination. Note that this is the final exam period for TuTh 2:00 p.m. classes. Exact test dates will be announced in class at least one week prior to the test date. The tentative test dates are:

Test 1: Tuesday, January 28th Test 2: Tuesday, February 25th Test 3: Thursday, March 26th Test 4: Tuesday, April 21st

All exams will be multiple choice exams and will be graded two ways: actuarially and with partial credit. Your actuarial score will be the percentage of problems you answer correctly. There is no penalty for guessing, and so all questions on all exams should be answered. Your partial credit score is self explanatory. Note that no points will be credited on your partial credit score for guessing a correct answer. Your overall exam grade will be the average of your actuarial and partial credit scores.

Makeup exams will not be given. If you know that you will be absent on a test day, please see me beforehand about the possibility of taking the test at a different time. If you miss a test due to an unexcused absence, then you will receive a 0 for that exam. If you miss a test due to an excused absence, then your final exam score will be substituted for the missed test score. It is your responsibility to present an excuse at the next attended class meeting after an absence. If this is not done, then the absence will be unexcused.

FSA and Professional Component

You are required to attend activities and participate in projects of the Future Seminole Actuaries (FSA). Information will be announced by email and in class at least one week in advance. I expect you to behave professionally and in doing so you have the chance to improve your grade in the class. Each student starts the term with 50 professional component (PC) points. Unprofessional behavior will result in deductions from your PC point total. Some common examples of unprofessional behavior are skipping class, arriving to class late or leaving early without giving prior notification or promptly giving subsequent explanation, and the most common, sending email without checking for spelling, grammar, or punctuation mistakes. I expect you to refrain from these and other forms of unprofessional behavior.

Grading

Your grade in the course is determined by the total number of points accumulated according to the following scale:

A: 493-550 B: 438-492 C: 383-437 D: 328-382 F: 0-327

Course Objectives

One of the course objectives is for each student to develop a mastery of financial mathematics used by actuaries, based on the mathematics of interest theory. Other course objectives are for each student to understand the long-term individual study commitment necessary to achieve a designation within one of the actuarial societies and for each student to increase their knowledge of the actuarial profession.

Actuarial Exam Registration

In order to be competitive in the current job market, you must pass at least one actuarial exam. Students should register for an exam as soon as you have the prerequisites for the exam. You can register online at www.soa.org by following the Exam Registration link. Exams P and FM are only offered in this area by computer-based testing (CBT).

The currently published registration schedule for upcoming 2020 SOA Preliminary Exams P and FM for which the registration deadline has not passed is:

Exam P:	CBT Dates 03/20/20 – 03/31/20; (Registration Deadline: 02/18/20) CBT Dates 05/15/20 – 05/26/20; (Registration Deadline: 04/14/20) CBT Dates 07/14/20 – 07/25/20; (Registration Deadline: 06/16/20) CBT Dates 09/10/20 – 09/21/20; (Registration Deadline: 08/11/20) CBT Dates 11/12/20 – 11/23/20; (Registration Deadline: 10/13/20)
Exam FM:	CBT Dates 02/14/20 – 02/25/20; (Registration Deadline: 01/14/20) CBT Dates 04/09/20 – 04/20/20; (Registration Deadline: 03/10/20) CBT Dates 06/11/20 – 06/22/20; (Registration Deadline: 05/12/20) CBT Dates 08/07/20 – 08/18/20; (Registration Deadline: 07/07/20) CBT Dates 10/14/20 – 10/25/20; (Registration Deadline: 09/15/20) CBT Dates 12/08/20 – 12/19/20; (Registration Deadline: 11/10/20)

Exam Mentors and Study Hall

Mr. Hubeyb Gurdogan (hg16b@my.fsu.edu) is the Graduate Teaching Assistant assigned to the program. Kristen Swinski (kls17f@my.fsu.edu) and Michael Madar (mm17as@my.fsu.edu) serve as tutors in the study hall. You do not have to be registered for an actuarial exam, or even registered for the study hall, MAT 4930, to take advantage of the help these tutors can provide. The tutorial room is 216 MCH and the schedule for the tutorial will be posted outside the door to the room.

Academic Honor Policy

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to ". . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at http://fda.fsu.edu/Academics/Academic-Honor-Policy.)

Americans With Disability Act:

Students with disabilities needing academic accommodation should:

- (1) register with and provide documentation to the Student Disability Resource Center; and
- (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center 874 Traditions Way 108 Student Services Building Florida State University Tallahassee, FL 32306-4167 (850) 644-9566 (voice) (850) 644-8504 (TDD) sdrc@admin.fsu.edu http://www.disabilitycenter.fsu.edu/

Syllabus Change Policy

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.