

Spring 2017

8:00 – 9:50 TT Black 134

Instructor: Dr. Cen-Tsong Lin**Office:** Bouillon 108B, Tel: 963-2842, E-mail: ctl@cwu.edu**Office Hours:** 11:00 – 11:50 Monday – Friday**Course Goals:** Helping actuarial science students study and pass exam FM/2. We will review important topics in the interest theory and explore efficient ways of solving problems that are frequently appear on Exam FM/2.**Prerequisite:** Math 418B, I assume students are concurrently enrolled in Math 418C**Recommended Text:** Matthew J. Hassett, Michael I. Ratliff, Toni C. Garcia, Amy C. Steeby, *ACTEX FM/2 Study Manual, December 2014 Edition*, ACTEX Publications**Calculator:** A **BA II Plus** calculator is recommended for writing SOA exams.**Tentative Schedule:**

Week 1	3/27	A: Time value of money
Week 2	4/3	B: Annuities
Week 3	4/10	C: Loans
Week 4	4/17	D: Bonds
Week 5	4/24	E: General Cash Flows and Portfolios (Study notes I)
Week 6	5/1	F: Immunization
Week 7	5/8	G: Interest Rate Swaps (Study notes II)
Week 8	5/15	H: Determinants of Interest Rates (Study notes III)
Week 9	5/22	Comprehensive
Week 10	5/29	Comprehensive

Evaluation:

- Homework assignments 30%
- In class practice tests 40%
- Final exam 30%

Homework: Homework assignments are the SAMPLE EXAM PROBLEMS in each module. Use a separate notebook for this work. By the end of the quarter, turn in the notebook for a grade.**In class practice tests:** Each meeting a 30-minute, 5-question (multiple-choice) practice test will be given, those tests will be graded and returned in the following meeting.**Final Exam:** 20 multiple-choice questions, 10 – 12 noon, Tuesday, 6/6/2017.**Exam FM/2 Information:**

- The exam FM/2 is a 3-hour, 35 multiple-choice problems exam. It is jointly sponsored and administered by the Casualty Actuarial Association (CAS), Society of Actuaries (SOA), and the Canadian Institute of Actuaries (CIA).
- The Learning Objectives of Exam FM/2 is available from the website of **Society of Actuaries** <https://www.soa.org/Files/Edu/2016/edu-2016-06-fm-mfe-syllabi.pdf>

- A. Time Value of Money (10 -15%)
- B. Annuities with payments that are not contingent (15-20%)
- C. Loans (15-20%)
- D. Bonds (15-20%)
- E. General Cash Flows and Portfolios (10 - 15%)
- F. Immunization (10 -15%)
- G. Interest Rate Swaps (0 – 10%)
- H. Determinants of Interest Rates (0 – 10%)

- Exam FM schedule

2017	August	October	December
Registration deadline	June 27	September 6	October 31
CBT Dates	Aug 3 – 14	Oct 12-23	Dec 5 – 16

Exam FM Fee: \$225.00

There are three study notes that are required reading for this examination. They are:

- For Learning Objective E.2.d.ii – A [study note](#) on using Macaulay duration to approximate the effect of interest rate changes on present values. [It is Using Duration and Convexity. Sections 1-4 are required reading for this examination.](#) (11-3-16)
- For Learning Objective G – A [study note](#) on interest rate swaps. [It is Interest Rate Swaps. The entire note is required reading.](#)
- For Learning Objective H – A [study note](#) on the determinants of interest rates. [It is Determinants of Interest Rates. The entire note is required reading.](#) (11-3-16)