

# Math 1121 (Spring 2012): Actuarial Mathematics 2

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**Lectures:** Tu & Th 9:30 am-10:45am in 300 Old Engineering Hall.

**Office Hours:** Tu & Th 1-2pm or by appointment in 404 Thackeray Hall.

**Prerequisites:** MATH 1120, STAT 1151 (helpful). The course requires knowledge of integral calculus, differential equations and basic probability.

**Description:** This course covers basic concepts of mathematical modeling in modern Finance. It will help you prepare either for *Exam MFE* by the Society of Actuaries (<http://www.soa.org>) or for *Exam 3F* of the Casualty Actuarial Society (<http://www.casact.org>).

**Text:** “*Derivatives Markets (2nd ed.)*” by R. McDonald, Addison Wesley. ISBN: 032128030X. For the **coverage**, see <http://www.beanactuary.org/exams/preliminary/exams/syllabi/2012-04-exam-mfe.pdf>.

## Supplementary Material:

- “*ACTEX Study Manual for SOA Exam MFE & CAS Exam 3F (2012 ed.)*” by G. Boronow, M. Hassett & A. Steeby, ACTEX Publications;
- “*ASM MFE Study Manual for Exam MFE/3F (9th ed.)*” by A. Weishaus, ACTEX Publications.

## Grading:

- Quizzes – 30%
- Midterm Exam – 30% ;
- Final Exam – 40 %.

## Homework and Quizzes:

1. We will have weekly quiz each Thursday for 20 minutes. No makeup quiz will be given. However, I will drop the lowest quiz score when calculating your final grade.
2. Although no homework will be collected and graded, you must do the assigned practice problems by yourself. This is the best way to prepare for quizzes and keep yourself on a solid progress.
3. I will post announcements, homework assignments, answer keys, and other resources on the Courseweb, please check it regularly.