

STAT 472-473: Life Contingencies and Financial Economics

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Required Texts:

STAT 472: *Actuarial Mathematics (Second Edition), 1997*, by Bowers, N.L., Gerber, H.U., Hickman, J.C., Jones, D.A. and Nesbitt, C.J.,

STAT 473: *Derivatives Markets (Second Edition), 2006*, by McDonald, R.L.

Recommended Texts:

STAT 472: *ACTEX Study Manual for the SOA Exam MLC, Life Contingencies, 2007 Edition*, by Matthew J. Hassett, Ph.D., ASA., Donald G. Stewart, Ph.D., Amy C. Steeby, MBA

STAT 473: *ACTEX Study Manual for the SOA Exam MFE, Financial Economics, Fall 2007 Edition*, by Matthew J. Hassett, Ph.D., ASA, Amy C. Steeby, MBA

STAT 472-473: *Models for Quantifying Risk, Second Edition 2006*, by Cunningham, R., Herzog, T. and London, R.L

Topics:

In STAT 472-473 we hope to cover essentially all of the topics on Exam MLC from Bowers, et. al. Specifically, we will cover

Chapter 3,
Chapter 4, Sections 4.1–4.4,
Chapter 5, Sections 5.1–5.4,
Chapter 6, Sections 6.1(excluding utility-theory approach), 6.2–6.4,
Chapter 7, Section 7.1(excluding utility-theory approach), 7.2–7.6,
Chapter 8, Sections 8.1–8.4,
Chapter 9, Sections 9.1–9.5, 9.6.1, 9.7, 9.9,
Chapter 10, Sections 10.1–10.4, 10.5–10.5.1, 10.5.4, 10.6
Chapter 11, Sections 11.1–11.3,
Chapter 15, Sections 15.1–15.2.1, 15.4, 15.6–15.6.1.

The materials from chapters 11 and 15 will probably be covered in 473. We will also cover the required material on Markov Chains and Poisson processes. We will then spend the remainder of 473 doing as much of the MFE material as we can.

Procedures

Initially, homework will be assigned daily and **collected daily**. Later we may move to weekly assignments. Unless otherwise stated, homework is due **at the beginning** of each class period. You should make careful note of any questions you have before handing in the work. Two homework grades will be dropped. Late homework will count as one of the dropped assignments.

Homework + quizzes	100 points
Exams	200 points (2@100 each)
Final (Not Cumulative)	100 points

The exams will be in the evening. The purpose of having evening exams is to allow you more time. It is expected that the majority of students will finish early.

In compensation for the evening exams, there will be no class on 10/15 and 11/24.

In the event of a major campus emergency, (e.g. Swine Flu pandemic) course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control.

Academic Adjustments

Students who have been certified by the Office of the Dean of Students -- Adaptive Programs as eligible for *academic adjustments* should go to MATH 242 and request the information sheet for *this* semester that explains how to proceed this semester to get these adjustments made in Mathematics courses. *This should be done during the first week of classes*. Only students who have been certified by the ODOS -- Adaptive Programs and who have requested ODOS to send their certification letter to their instructor are eligible for academic adjustments. Students who are currently undergoing an evaluation process to determine whether they are eligible for academic adjustments are encouraged to find out *now* what procedures they will have to follow when they are certified by requesting the above mentioned Information Sheet from MATH 242. Large print copies of the Information Sheet are available from MATH 242 upon request.