COURSE SYLLABUS

Actuarial Seminar I – STAT 397 – 1 Credit Review Course

Spring Semester, 2008, Tuesdays, 1:00 – 2:00pm in Damen Hall, Room 128 <u>Prerequisite</u>: Multivariable Calculus (MATH 263) and Probability (STAT 304) <u>Text</u>: Samuel A. Broverman, *ACTEX Study Manual SOA Exam P CAS Exam 1*, 2007 Edition.

 Instructor:
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 <u>Office Hours</u>:
 Tuesdays 10 – 11am, Thursdays 10 – 11am and 1 – 2pm, and by appointment.

 <u>Course Web Page</u>:
 http://www.math.luc.edu/~tobrien/courses/stat397/coursehomepage.html

Course Overview

Using tools from Multivariable Calculus and Introductory Probability Theory, this review course prepares students for the first actuarial exam, "Exam P". Topics covered include a review of basic probability, random variables, expectation, moment generating functions, popular discrete and continuous distributions, change of variable technique, order statistics, and risk management concepts. Grading will be based on class participation and ten in-class weekly quizzes. Final grades will be based on the formula: 25% from the student's class participation and 75% from the student's quiz average. In the calculation of the student's quiz average, the lowest two quiz scores will be dropped and the remaining eight scores will be averaged.

Final course (letter) grades will be awarded according to the following grading scheme:

	[92.5, 100] = A	[90.0, 92.5] = A-
[87.5, 90.0] = B+	[82.5, 87.5] = B	[80.0, 82.5] = B-
[77.5, 80.0) = C+	[72.5, 77.5] = C	[70.0, 72.5] = C-
[67.5, 70.0] = D+	[60.0, 67.5] = D	[0.0, 60.0] = F

Preliminary Semester Schedule (with Chapters from Text in parentheses)

Tuesday's pre-Spring Break	Tuesday's post Spring Break	
15 Jan – Introduction	11 Mar – Discrete Distributions (6)	
22 Jan – Review of Algebra and Calculus (0)	18 Mar – Conditional Distributions (7)	
29 Jan – Basic Probability Concepts (1)	25 Mar – Joint, Marginal and Conditional Dist's. (8)	
5 Feb – Conditional Probability & Indep. (2)	1 Apr – Transformations of Random Variables (9)	
12 Feb – Combinatorial Principles (3)	8 Apr – Risk Management Concepts (10)	
19 Feb – RV's and Probability Distributions (4)	15 Apr – Practice Exams	
26 Feb – Expectation (5)	22 Apr – Practice Exams	

Note: Quizzes will be about 15-20 minutes in length and will be closed-book.