COURSE SYLLABUS

Actuarial Seminar I – STAT 396
Fall Semester, 2007, Tuesdays and Thursdays, 2:30 – 3:30pm in Damen Hall, Room 128
Prerequisite: Multivariable Calculus (MATH 263); Probability (STAT 304 or 203) strongly recommended
Text: Thomas McGannon, *Study Guide and Solutions Manual for Exam P of the Society of Actuaries*, 2005

Instructor: Dr. Timothy E. O'Brien   Email: tobrie1@luc.edu
Office: Damen Hall, Room 321   Office Phone: (773) 508-2129
Office Hours: Mondays 2.30-3.30pm, Tuesdays and Thursdays 11.30am – 12.30pm, and by apptmt.
Course Web Page: **http://www.math.luc.edu/~tobrien/courses/stat396/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, correlation, change of variable technique, order statistics,
and the central limit theorem. Grading will be based on class participation and seven in-class weekly quizzes.
Quizzes will be given at the start of class on 4 September, 11 September, 18 September, 25 September, 2 October,
11 October and 18 October, the last day of this class. Final grades will be based on the formula: 33.3% from the
student's class participation and 66.7% from the student's quiz average. In the calculation of the student's quiz
average, the lowest quiz score will be dropped and the remaining six 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	Thursday
28 Aug – Intro Probability (1)	30 Aug – Intro Probability (1)
4 Sept – Quiz 1; Random Variables (2)	6 Sept – Random Variables (2)
11 Sept – Quiz 2; Expectation (3)	13 Sept – Expectation (3)
18 Sept – Quiz 3; Moment Generating Functions (4)	20 Sept – Moment Generating Functions (4)
25 Sept – Quiz 4; Special Continuous Densities (5)	27 Sept – **Correlation (6)**
2 Oct – **Quiz 5 on Ch. 5 & 6; Change of Variables (7)**	4 Oct – **Order Statistics (7)**
9 Oct – **No Class – Fall Break**	11 Oct – **Quiz 6 on Ch. 7; Central Limit Theorem (8)**
16 Oct – **Central Limit Theorem (8)**	18 Oct – **Quiz 7 on Ch.8**

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