## MATH 390 INTRODUCTION TO ACTUARIAL MATHEMATICS (3 units)

## **Course Outline**

Topics	# of Weeks
Review of Algebra and Calculus	0.5
Basic Probability Concepts	0.5
Conditional Probability and Independence	0.5
Combinatorial Principles	0.5
Random Variables and Probability Distributions	0.5
Expectation and other Distribution Parameters	0.5
Frequently Used Discrete Distributions	0.5
Frequently Used Continuous Distributions	0.5
Joint, Marginal, and Conditional Distributions	1.0
Transformations of Random Variables	0.5
Risk Management Concepts	0.5
Practice Exam 1	1.0
Practice Exam 2	1.0
Practice Exam 3	1.0
Practice Exam 4	1.0
Practice Exam 5	1.0
Practice Exam 6	1.0
SOA/CAS Past Exams	1.0
Tests	1.0

## Textbook:ACTEX Study Manual for the SOA Exam P and CAS Exam 1, 2006 Edition,<br/>by S. A. Broverman

**Note:** The course helps students to prepare for the SOA Exam P and CAS Exam 1. The SOA catalog may change over time. Instructor needs to follow any updates to the catalog. The past exams posted on the SOA and CAS website are good resources in the study of the course.