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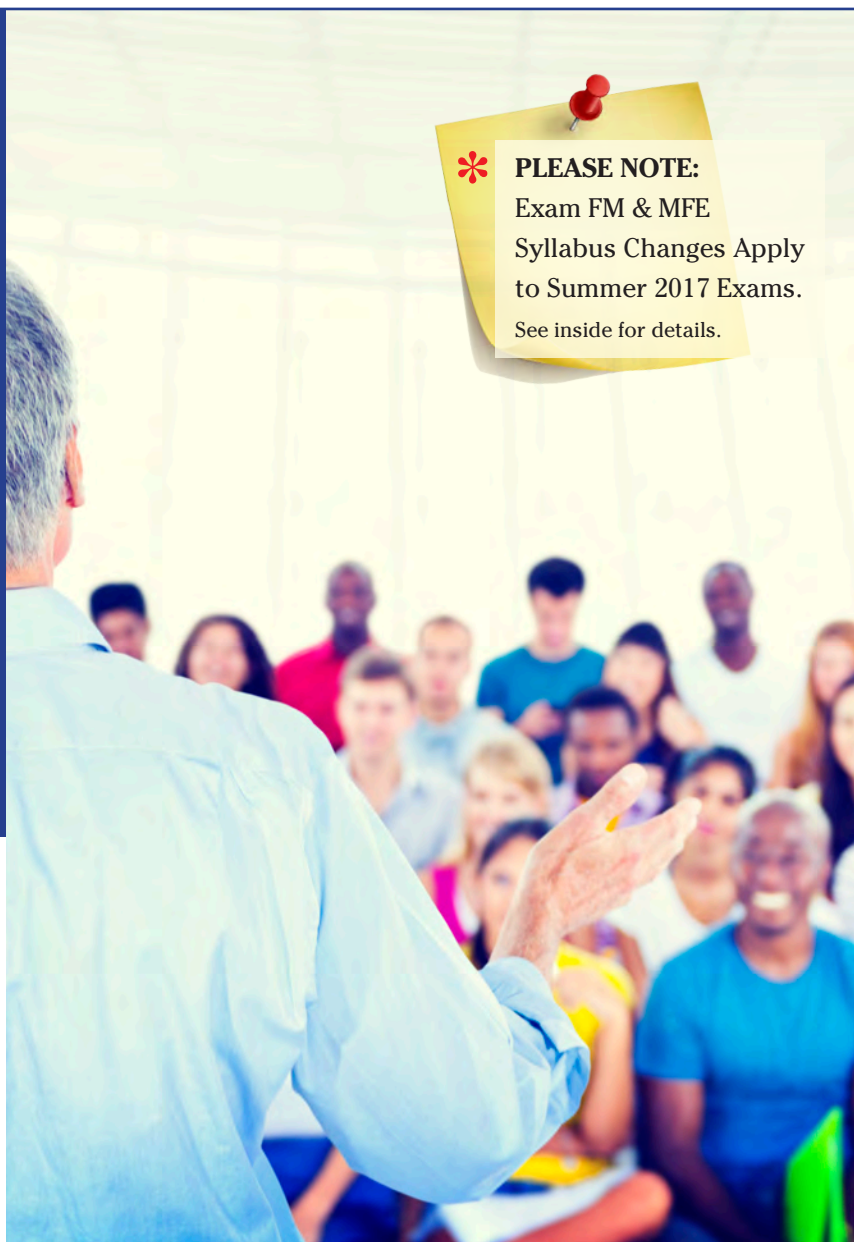See website for details

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ACTEX Learning

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Dear Actuarial Educators & Students,

We are proud to announce that we are changing our business name from ACTEX Publications to ACTEX Learning. The actuarial education industry has undergone a significant transformation in the past several years, and our new identity is designed to mirror the growth of our organization, and communicate our full range of capabilities. What is not changing is our unrivaled commitment to you.

As part of our company's transformation, we now offer a variety of training and learning opportunities beyond our printed materials. We offer online exam prep courses, both scheduled and on-demand. We also offer training for professionals and students through on-demand e-courses, webinars, and live sessions. Contact us if you are interested in a particular topic, and we will do our best to meet your needs. Past session topics have included: best practices in Excel and VBA, ERM, communication and leadership, and the social role of an actuary.

We look forward to continuing to serve the educational needs of the actuarial community. Your success is our mission.

Warm Regards,

Stephen Camilli, FSA
President
Stephen@ActexMadRiver.com

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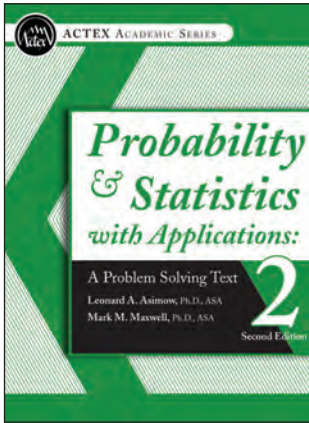- Send returns to:
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2nd Edition | Official **SOA Exam P**
Syllabus Reference

Leonard A. Asimow, Ph.D., ASA | Mark M. Maxwell, Ph.D., ASA

Probability and Statistics with Applications is an introductory textbook designed to make the subject accessible to college freshmen and sophomores concurrent with Calc II and III, **with a prerequisite of just one semester of calculus.** It is organized specifically to meet the needs of students who are preparing for the Society of Actuaries qualifying Examination P and Casualty Actuarial Society's Exam S.

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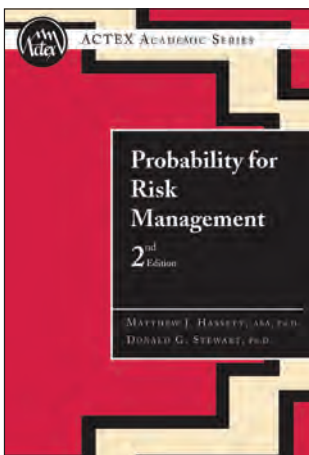Solutions Manual:
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ACTEX
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Samuel A. Broverman, Ph.D., ASA

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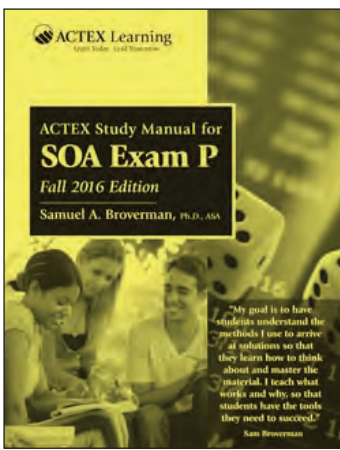$104.00 Spiral-Bound
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The ACTEX Exam P Study Manual has been written precisely and carefully to cover all of the SOA learning objectives for this exam. It is time-tested and is the market leader in Exam P study guides for self-study students, as well as for students enrolled in college and university courses.

Students using this manual will gain a thorough understanding of all topics covered on this exam syllabus. The manual contains 10 modules with examples and problem sets from prior actuarial exams at the end of each module, all with detailed solutions. Following the modules are 8 original practice exams with detailed solutions, providing students with ample opportunity for the necessary drilling on important concepts and formulas critical to exam success. There are over 500 problems included in this manual.

Comprehensive review notes and illustrative examples for each topic.

- Probability and Combinatorics
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- Expectation and Parameters
- Transformations
- Risk Management Concepts

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Review Questions, P. Murdza, FCAS & S. Camilli, FSA

Calculus Review, S. Broverman, Ph.D., ASA

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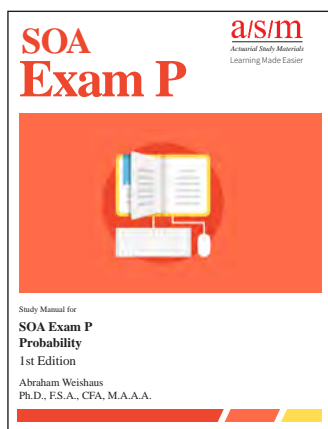
a/s/m
P Study Manual
1st Edition, 1 Volume

Abraham Weishaus, Ph.D., FSA, CFA, MAAA

Study Manual for
SOA Exam P
Probability
1st Edition

Abraham Weishaus
Ph.D., F.S.A., CFA, M.A.A.A.

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NEW

This manual offers comprehensive coverage of the syllabus for Exam P. In its 29 lessons, the following topics are discussed:

- Basic properties of probability
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- Conditional probability and Bayes' Theorem
- Random variables
- Moments, percentiles, and modes
- Joint distributions

- Binomial, negative binomial, Poisson, exponential, and normal distributions
- Central limit theorem
- Order statistics
- Moment generating functions
- Transformations of random variables

The manual has over 500 pages with about 79 examples and 589 exercises. Of these exercises, 143 are original; the others are taken from old exams or are SOA sample questions. All exercises have complete solutions. In addition, the manual has 6 practice exams consisting of 30 original questions.

Author Abraham Weishaus:
Formerly financial reporting actuary for Guardian Life Insurance Company. Served on the SOA's Education and Examination Committee for 11 years. Taught exam preparation courses for the Actuarial Society of Greater New York (ASNY) for 15 years and for CAMAR for 6 years. Currently is an adjunct professor at Columbia University and teaches exam preparation courses at St. Johns University.

Also available for SOA Exam P

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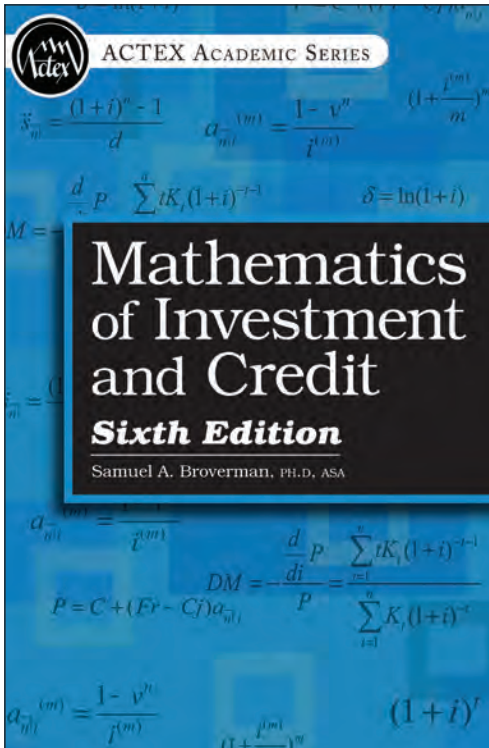See www.ActexMadRiver.com for Details.

Mathematics of Investment and Credit

6ᵗʰ Edition | An Official Reference for SOA Exam FM and EA-1

Samuel A. Broverman, Ph.D, ASA

*"The **Mathematics of Investment and Credit** book is an excellent textbook. The minute I started reading it, I knew it was exactly what I needed for my mathematics of finance class which I usually teach at American University in Cairo. Broverman's book suits a purely actuarial audience as well as non-specialists. Many of the exercises at the end of every chapter are versatile and comprise both theory and computations. This book is clearly written and concise and offers much more information than I expected. Thank you, Samuel, for a job well done and I am looking forward to using your book again."*

580 pages, 6" x 9"
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Solutions Manual:
978-1-62542-486-0

Mathematics of Investment and Credit is a leading textbook covering the topic of interest theory. It is the required or recommended text in many college and university courses on this topic, as well as for Exam FM. This text provides a thorough treatment of the theory of interest, and its application to a wide variety of financial instruments. It emphasizes a direct-calculation approach to reaching numerical results, and uses a gentle, thorough pedagogic style. This text includes detailed treatments of the term structure of interest rates, forward contracts of various types, interest rate swaps, financial options, and option strategies. Key formulas and definitions are highlighted. Real world current events are included to demonstrate key concepts. The text contains a large number of worked examples and end-of-chapter exercises.

"Thank you for writing a quality textbook that covered the material for Exam FM/2. I was able to study independently for, and pass the second exam without any foreknowledge of financial mathematics due to the quality of your textbook. Many thanks for the time and effort you put into writing it."
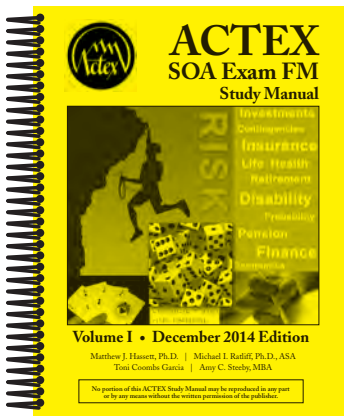
ACTEX
FM Study Manual*

December 2014 Edition, 2 Volumes

New Spring 2017 Edition Coming in January 2017

Matthew J. Hassett, Ph.D. | **Michael I. Ratliff, Ph.D., ASA**
Toni Coombs Garcia | **Amy C. Steeby, MBA, MEd**

765 pages, 9" x 11"
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This manual is comprehensive and written in an easy-to-understand style. Concepts are introduced in a clear way so that students can quickly understand new topics. It goes beyond an outline and thoroughly explains the more difficult topics. Among the many features of this manual are detailed review examples and exercises embedded into the text, additional practice problems at the end of each unit, a key formulas summary and calculator assistance. The manual concludes with **eleven sample practice exams.** The authors have also created more detailed solutions to the sample financial economics questions posted on the SOA website.

In this guide, the traditional interest theory material is covered in Modules 1 - 7 and the financial mathematics material is covered in Modules 8 - 15. Modules 8 - 15 contain lecture notes on the required chapters of the financial mathematics textbook, *Derivatives Markets*, and solutions to the odd-numbered homework problems in that text. Answers to the even-numbered problems are available in the student solution manual which can be purchased with the text. Also included are mid-term exams at the end of major topics and a presentation of the financial mathematics material that is less dependent on the textbook than in past editions. It is published in two separate spiral bound volumes.

The final exams are written in increasing difficulty. The first few exams are easier and should be considered a warm-up. The last few exams are more difficult. By doing all **eleven exams,** students should be well prepared for their exam. Detailed solutions to these exams are included.

Includes a bonus formula card!

* **Effective with the June 2017 administration of exam FM there are significant syllabus changes.** Students preparing for the June 2017 exam sitting or later should use the Spring 2017 Edition of the ACTEX FM Manual.

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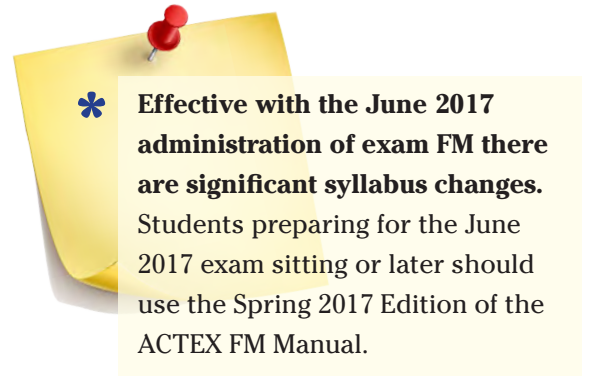
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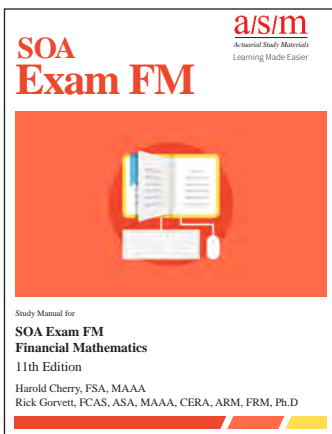
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750 pages
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Study Manual for
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Financial Mathematics
11th Edition

Harold Cherry, FSA, MAAA
Rick Gorvett, FCAS, ASA, MAAA, CERA, ARM, FRM, Ph.D

SOA
Exam FM

The 11th edition of this manual has the following improvements: (1) About 50 ADAPT questions have been added as in-section examples; (2) Additional questions on duration, convexity and immunization have been added to the original practice exams because of student feedback that there have been a surprising number of questions on these topics in recent exams; (3) a 6th original practice exam has been added; (4) a new set of Calculator Notes on the Cash Flow worksheet (NPV and IRR) has been added; (5) editorial improvements and corrections of all known errata have been made.

This manual gives a comprehensive treatment of **all subjects on the syllabus.*** The concepts are explained in plain English, in a manner that appeals to your intuition and common sense. The manual points out tricks and shortcuts for certain types of problems, warns you about common traps that students fall into and shows you how to avoid them. There is a summary of key concepts and formulas after each topic, followed by problems, with solutions, from all available past SOA and CAS exams dating from the early 1980s. (This does not include past exams that are readily available on the SOA and CAS web sites.) Six original full-length practice exams consisting of 35 questions each are included. Also included are 9 sets of Calculator Notes giving detailed instructions for using the BA II Plus calculator. Over 750 pages, and over **1,000 problems with solutions**.

"Very good resource. You are well prepared for the exam after you've thoroughly gone through this 600-page study manual."

"Excellent source for the FM Exam. Very thorough and plenty of practice. Also, bought the P manual."

"This manual was perfect for me. I had no experience with the material but the manual went at the right pace and provided tons of practice problems at the end of each chapter. I recently passed FM."
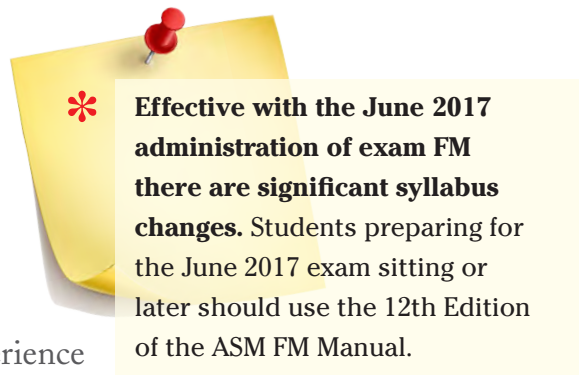
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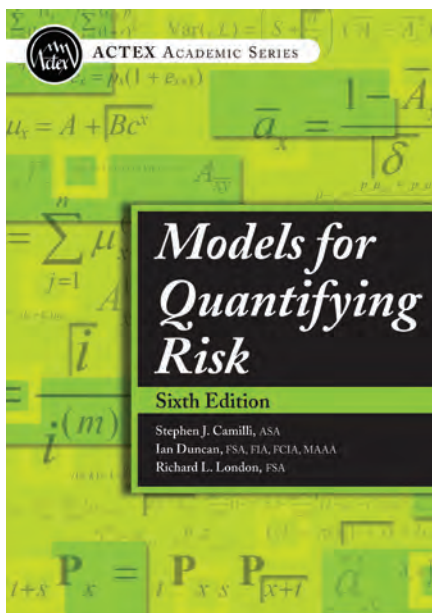
Models for Quantifying Risk

6th Edition

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Ian Duncan, FSA, FIA, FCIA, MAAA
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An Official Reference for **EA-1** and addresses all the Learning Objectives for **SOA Exam MLC**

There are several areas of expanded content in the Sixth Edition, due to the revised format of SOA Exam MLC. The **additional written-answer examples** will better prepare students for this question format. Additional treatment of multi-state models, Thiele's Equation, profit testing, and Universal Life Insurance has been added. New supplemental materials available in 2017 expand treatment of Euler's Method and the Projected Unit Credit cost method. This book is specifically focused on the North American market and actuarial profession. The **notation and terminology fully conform to that being used on Exam MLC,** thus offering a seamless transition from textbook study to exam day.

The textbook presents a variety of stochastic models for the actuary to use in undertaking the analysis of risk. It is designed to be appropriate for use in a two or three semester university course in basic actuarial science. Specifically written with SOA Exam MLC in mind, models are evaluated in a generic form with life contingencies included as one of many applications of the science. **Students will find this book to be a valuable reference due to its easy-to-understand explanations and end-of-chapter exercises.**

"I found that the exposition of the material is thorough while the concepts are readily accessible and well illustrated with examples. The book was an invaluable source of practice problems when I was preparing for the Exam MLC. Studying from it enabled me to pass this exam."

— Dmitry Glotov, Math Department, University of Connecticut

"I selected Models for Quantifying Risk as the text for my class. Given that the syllabus had changed quite dramatically from prior years, I was looking for a text that would cover all the material in the new syllabus in a way that was rigorous, easy to understand, and would prepare students for the MLC exam. To me, the text with the accompanying solutions manual does precisely that."

— Jay Vadiveloo, Ph.D., FSA, MAAA, CFA, Math Department, University of Connecticut
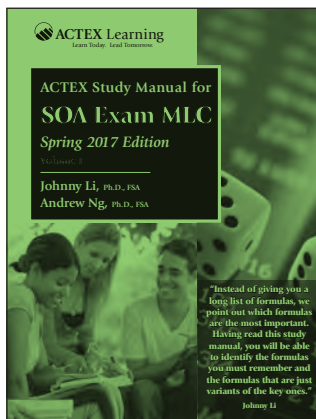
ACTEX
MLC Study Manual

Spring 2017 Edition, 3 Volumes

Johnny Li, Ph.D, FSA & Andrew Ng, Ph.D, FSA

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The ACTEX MLC Manual focuses on providing the understanding that is required to solve practical problems in an exam setting. Theoretical concepts are introduced through motivating examples to make learning as direct as possible.

Published in three spiral-bound volumes, this manual covers all topics in the SOA Exam MLC syllabus. Old exam problems are integrated into the text as an additional teaching opportunity. Each chapter concludes with practice problems. At the end of the manual there are complete sample exams offering additional practice.

This manual reflects the change to written answer questions for the SOA MLC exam, and includes

- **150 written-answer questions. Eight mock exams,** written in exactly the same format as that announced in SOA's Exam MLC Introductory Note, are also provided. Many of the written-answer questions in our mock exams are highly challenging!

- Full solutions to the April and October 2015 Exams.

- In this study manual, the authors teach (and drill) readers on how to prove or derive important formulas. This is in stark contrast to some other exam prep products in which proofs and derivations are downplayed, if not omitted.

- The authors have paid special attention to the topics that are newly introduced in the recent two syllabus updates. Seven full-length chapters and two sections are devoted to these topics.

- The chapter on participating insurance has been significantly expanded; questions that are similar in style to the actual exam questions are added.

- Excellent explanations of the calculations of "gain by sources", particularly under a multiple decrement set-up.

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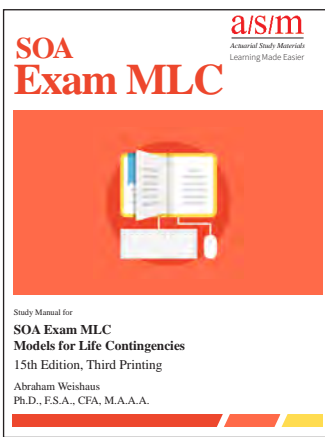
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MLC Study Manual

15th Edition, Third Printing, 1 Volume

Abraham Weishaus, Ph.D., FSA, CFA, MAAA

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The ASM Exam MLC manual offers comprehensive coverage of the syllabus for SOA Exam MLC. In its 70 lessons, the following topics are reviewed:

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- Insurances
- Annuities
- Premiums
- Reserves
- Markov chain models

- Models for multiple decrements
- Models for multiple lives
- Pension mathematics
- Interest rate risk
- Profit tests
- Universal life

The 15th edition of the manual has over 1800 pages and over **1600 end-of-lesson exercises,** including over **625 original** and **975 old exam questions,** plus over **300 examples** and **90 in-lesson exercises.** In addition to these exercises, there are **thirteen practice exams,** all having 20 multiple choice and 6-7 written answer questions, just like the real exam. An appendix has a cross reference to help you track down lessons corresponding to the SOA's 318 sample questions and questions from released exams 2000 and later. An easy to use index is also included. Many students have found this manual adequate by itself for exam preparation, but the textbook for the exam is referenced in each lesson if you wish to use it.

New for Spring 2017: Includes solutions to the Fall 2016 Exam MLC, and incorporates corrections to all known errata.

Author Abraham Weishaus:
Formerly financial reporting actuary for Guardian Life Insurance Company. Served on the SOA's Education and Examination Committee for 11 years. Taught exam preparation courses for the Actuarial Society of Greater New York (ASNY) for 15 years and for CAMAR for 6 years. Currently is an adjunct professor at Columbia University and teaches exam preparation courses at St. Johns University.

Also available for SOA Exam MLC

ASM Flashcards

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"The ASM Manual by Abraham Weishaus is the main reason I was able to pass MLC."
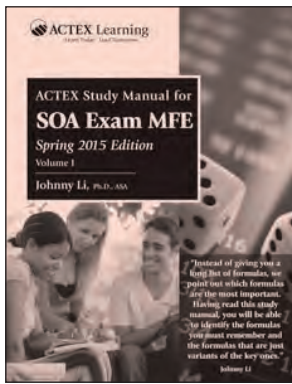
ACTEX
MFE Study Manual*

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Johnny Li, Ph.D, FSA

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We are proud to bring you our highly popular ACTEX MFE Study Manual.* This study manual was designed to help students focus on understanding through application and minimizes the need for memorization. There is complete coverage of all of the exam syllabus learning objectives.

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- Covers all SOA Learning Objectives*

- Learning Objectives & Formulas are highlighted

- Focuses on Understanding by Doing with Limited Memorization

- Practice Problems Mimic the Difficulty & Format of the Real Thing

- Includes Complete Step-by-Step Solutions to all Exercises and Problems

- Concludes with **TEN Mock Exams** with notes regarding the relative difficulty of each question

- Includes quizzes at the end of each module.

Includes a bonus formula card!

"Instead of giving you a long list of formulas, we point out which formulas are the most important. Having read this study manual, you will be able to identify the formulas you must remember and the formulas that are just variants of the key ones." - **Johnny Li**

* **Effective with the July 2017 administration of exam MFE there are significant syllabus changes.** Students preparing for the July 2017 exam sitting or later should use the Spring 2017 Edition of the ACTEX MFE Manual.

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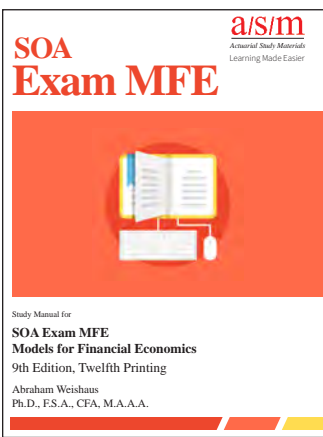## Additional Materials for SOA Exam MFE

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Review Questions, P. Murdza, FCAS
Calculus Review, S. Broverman, PH.D., ASA

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MFE Study Manual*

9th Edition, Twelfth Printing, 1 Volume
New 10th Edition Coming in January 2017

Abraham Weishaus, Ph.D., FSA, CFA, MAAA

SOA
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Study Manual for
SOA Exam MFE
Models for Financial Economics
9th Edition, Twelfth Printing

Abraham Weishaus
Ph.D., F.S.A., CFA, M.A.A.A.

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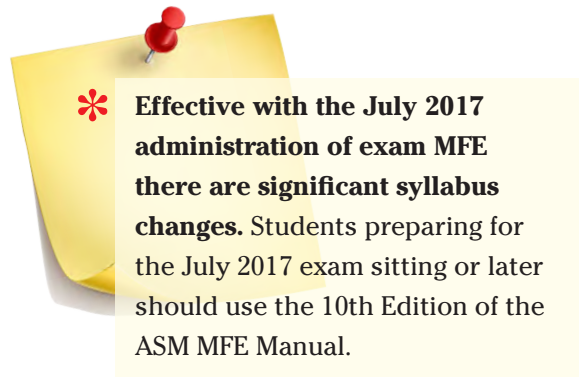ISBN: 978-1-62542-859-2

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This manual offers comprehensive coverage of the syllabus for Exam MFE.* In its 26 lessons, the following topics are reviewed:

- Put-call parity
- Binomial trees
- Modeling stock prices with the lognormal distribution
- The Black-Scholes formula
- Exotic options
- Monte Carlo valuation
- Brownian motion and Ito's lemma
- Interest rate models, including the Black-Derman-Toy model

* **Effective with the July 2017 administration of exam MFE there are significant syllabus changes.** Students preparing for the July 2017 exam sitting or later should use the 10th Edition of the ASM MFE Manual.

The 9th edition – 12th Printing* has over 800 pages, about **120 examples,** 90 in-lesson exercises, and about **450 end-of-lesson exercises**, all with complete solutions. Also, the manual has **11 original 30-question practice exams** (an additional 330 questions), with detailed solutions. While this manual will be adequate for Exam MFE, the McDonald textbook is referenced in each lesson if you wish to use it. This printing incorporates corrections to all errata known at the date of publication.

Author Abraham Weishaus:
Formerly financial reporting actuary for Guardian Life Insurance Company. Served on the SOA's Education and Examination Committee for 11 years. Taught exam preparation courses for the Actuarial Society of Greater New York (ASNY) for 15 years and for CAMAR for 6 years. Currently is an adjunct professor at Columbia University and teaches exam preparation courses at St. Johns University.

"Thank you for a well-written manual, Dr. Weishaus. You were instrumental in my success on this exam!"

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ASM Flashcards

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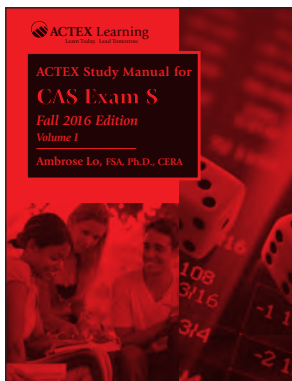
ACTEX
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Ambrose Lo, Ph.D, FSA, CERA

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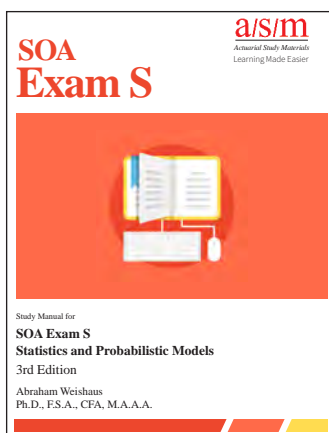**Available in Digital Download & Bundled Formats!**

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The ACTEX CAS Exam S Study Manual helps students efficiently and effectively grasp the material in Exam S, and pass it with considerable ease. Here are some of the valuable features of the study manual for achieving this all-important goal:

- Each chapter and section starts by explicitly stating which learning outcomes and knowledge statements of the exam syllabus we are going to cover, to let you that we are on track and hitting the right target.

- The knowledge statements of the syllabus are demystified by precise and concise expositions in the main text of the manual, helping you acquire a deep understanding of the subject matter.

- Intuitions and mnemonics are emphasized, so are highlights of important exam items and common mistakes committed by students.

- Formulae and results of utmost importance are boxed for easy identification and memorization.

- The expositions are complemented by more than 550 in-text examples and 550 end-of-chapter problems, which are original or taken from required textbooks and relevant past exams, all with step-by-step solutions and problem-solving remarks, to give you a sense of what you can expect to see in the real exam. As you read this manual, skills are honed and confidence is built.

- Two full-length practice exams conclude this study manual giving you a holistic review of the syllabus material.

- Old SOA/CAS exam questions before 2000 are included, as appropriate. Despite their seniority, these old exam questions, which are not easily available nowadays, do illustrate some less commonly tested concepts and have considerable value.

- The subtle connections between seemingly disparate topics in the syllabus are unraveled. For example, knowledge of order statistics (Section B of the syllabus) leads to significant shortcuts for calculating the expected lifetime of a system with uniformly distributed components (Section A of the syllabus).

* There will be a new Spring 2017 edition available in January with minor revisions and updates.

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Exam S

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SOA Exam S
Statistics and Probabilistic Models
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Abraham Weishaus
Ph.D., F.S.A., CFA, M.A.A.A.

a/s/m
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3rd Edition, Second Printing, 1 Volume

Abraham Weishaus, Ph.D., FSA, CFA, MAAA

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This manual provides complete coverage of the syllabus for CAS Exam S. It includes the following topics:

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- Estimator quality
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- Hypothesis testing
- Confidence intervals
- Chi square tests
- Student's t and Fishers F
- Bayesian estimation
- Conjugate priors
- Order statistics
- Nonparametric methods
- Generalized linear model
- Time series

The manual also includes 6 full-length practice exams on the entire Exam S syllabus consisting of original questions only.

New for the 3rd edition, Second Printing:
The GLM portion was completely rewritten in accordance with the notation and topics of the new textbook. [Note, use of the GLM part of the 2nd edition is not recommended.] For times series, dropped topics (exponential smoothing) were removed and added topics (time series regression) were added.

Solutions to Fall 2016 S were added. Errata were incorporated.

These books address all Learning Objectives for SOA Exam C
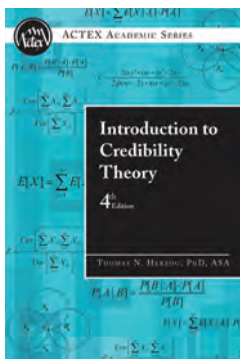
Introduction to Credibility Theory, 4th Edition

Thomas N. Herzog, Ph.D, ASA

Study Preparation for SOA Exam C

337 pages, 6" x 9",
$85.00 SOFTCOVER
$75.00 EBOOK
ISBN: 978-1-56698-764-6
Solutions Manual:
978-1-56698-765-3
Sample available on website

This text presents a wide variety of credibility models in an easy-to-read style and, in so doing, traces the historical development of the subject. Because the Bayesian approach is emphasized, the book can serve as a useful foundation for practicing actuaries desiring to become proficient in applying Markov chain Monte Carlo methods to solve real-world problems.

The text concentrates on basic statistical concepts, leaving both practical issues and more sophisticated theoretical concepts for a more advanced treatment elsewhere. It contains worked examples, a large number of end-of-chapter exercises and an extensive bibliography.
In the rapidly evolving healthcare environment, facility in the application of state-of-the-art analytic methods is more important than ever. The Fourth Edition includes three case studies relating to healthcare issues.
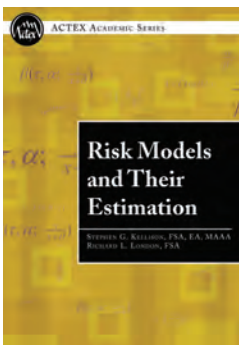
Risk Models and Their Estimation

Stephen G. Kellison, FSA, EA, MAAA | Richard L. London, FSA

This text has been adopted by a number of universities for the courses preparing students for SOA Exam C.

560 pages, 7" x 10",
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Solutions Manual:
978-1-56698-771-4
Sample available on website

Much of actuarial science deals with the analysis and management of financial risk. In this text we address the topic of loss models, traditionally called risk theory by actuaries, including the estimation of such models from sample data. The theory of survival models is addressed in other texts, including the ACTEX work entitled *Models for Quantifying Risk* which might be considered a companion text to this one. In *Risk Models and Their Estimation* we consider as well the estimation of survival models, in both tabular and parametric form, from sample data.
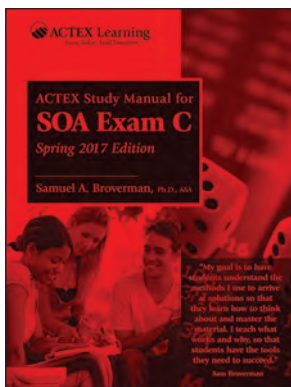
ACTEX
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Spring 2017 Edition, 2 Volumes
Samuel A. Broverman, Ph.D., ASA

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The ACTEX C Study Manual is the ideal study tool to help in the preparation for SOA Exam C. It provides thorough coverage of all the syllabus topics of modeling, model estimation, construction and selection, credibility, simulation and risk measures in its two spiral-bound volumes. The material is divided into small units, allowing students to more easily organize study time. Topic reviews reflect the author's teaching experience in university and exam preparation classes, incorporating insights, shortcuts, examples and explanations.

A crucial aspect of exam success is the ability to solve problems quickly. Working through many problems and examples is a good way to build up that speed. By completing the over **1600 problems** and sample exam questions (all with detailed solutions) in this manual, students can approach this exam with confidence.

VOLUME I contains comprehensive review notes and practice problems for the Modeling and Model Estimation topics. The Modeling section is broken down into 21 units and the Model Estimation section contains 15 units. All examples and problems sets include detailed solutions with explanations.

VOLUME II contains coverage of the Simulation topic and 7 units addressing the Credibility topic. It also contains 14 practice exams of 35 questions each, also with detailed solutions. The practice exams all contain completely original questions.

ACTEX Online Course for SOA Exam C Preparation

The ACTEX Online Course for SOA Exam C provides students all of the necessary instruction, materials and support needed to pass Exam C. Students will have access to a variety of practice problems, video solutions to practice problems, timed practice tests, lecture videos, and much more. In addition, students will have one-on-one support from our skillful instructor Richard Owens, FSA, MAAA for 180 days from the date of purchase. Dates are continually being added to the schedule, see website for updates.

Additional Materials for SOA Exam C
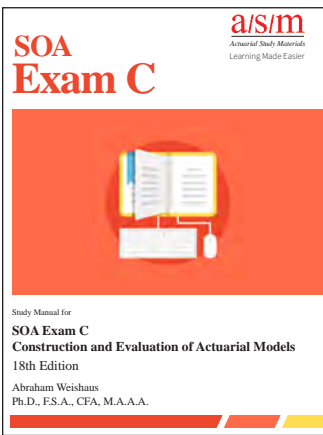
Flashcards, S. Broverman, PH.D., ASA

ACTEX C Two Practice Exams, S. Broverman, PH.D., ASA

Review Questions, P. Murdza, FCAS

ACTEX Mathematical Statistics Review Study Manuals. Broverman, PH.D., ASA

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Abraham Weishaus, Ph.D., FSA, CFA, MAAA

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This manual offers comprehensive coverage of the syllabus for SOA Exam C. In its 65 lessons, the following topics are reviewed:

- Parametric distributions
- Risk measures
- Coverage modifications, including deductibles, claims limits, coinsurance, and inflation
- Discrete distributions
- Compound models
- Aggregate deductibles
- Empirical estimators, including ogives, product-limit and Nelson-Aalen
- Kernel smoothing
- Mortality table construction

- Parametric estimation, including method of moments, percentile matching, and maximum likelihood
- Hypothesis testing
- Limited fluctuation credibility
- Bayesian credibility
- Buhlmann credibility
- Empirical Bayes methods
- Simulation
- Bootstrap approximation

The manual has about 1500 pages, 250 examples, 72 in-lesson exercises, and **1400 end-of-lesson exercises,** including both original and old exam questions, many of them taken from pre-2000 exams, which are not easily available, all with detailed solutions. In addition to these exercises, there are **13 full-length (35-question) practice exams.** An appendix has a cross reference to help you track down lessons corresponding to published 2000 and later exam questions, and there is an index. Many students have found this manual adequate by itself for exam preparation, but the Klugman textbook and the study notes required for the exam are referenced in each lesson if you wish to use them.

New for Spring 2017: The minor syllabus change made starting with the October 2016 exam has been incorporated. All known errata have been corrected.

Also available for SOA Exam C

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Applied Statistics

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John Perry, Ph.D.

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Required software included in the price of this course if applicable.

Course Dates:
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Instructor:
John Perry, Ph.D.

Hardcover: $609.00
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Required Textbook: *Introduction to Econometrics,* 3rd Edition Update, Stock & Watson

Required software included in the price of this course if applicable.

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June 7 - July 18, 2017 | **Examination: July 25, 2017**

This exciting online course is comparable to an upper-level under-graduate course. Dr. John Perry's engaging style and comprehensive, student-centered course materials make completing the Regression Analysis VEE component not only efficient but enjoyable. The emphasis of the class is learning how to apply regression techniques in real-world contexts and understanding and interpreting the results and limitations of those applications. The course consists of comprehensive lecture notes, video lectures, live discussion forums and real-time chat sessions.

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John Perry

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Microeconomics

Instructor:
John Perry, Ph.D.

$455.00
Required materials included

Required Materials
Sapling Subscription & Economics (ebook), Krugman & Wells

Course Dates:
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August 9 - October 3 2017 | **Examination: October 10, 2017**
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This online course will provide a foundation in microeconomics terminology, models and analysis. The depth of this course is comparable to a one-semester, undergraduate course in Microeconomics and is partitioned into 8 weekly units. Each unit will consist of assigned readings, instructor notes, video lectures, suggested practice problems with full solutions, graded homework assignments, office hours, and a discussion forum.

Macroeconomics

Instructor:
John Perry, Ph.D.

$455.00
Required materials included

Required Materials
Sapling Subscription & Economics (ebook), Krugman & Wells

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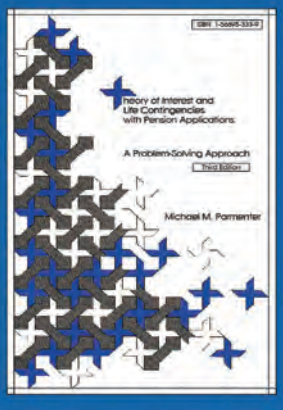
Theory of Interest and Life Contingencies,

with Pension Applications: A Problem-Solving Approach

3rd Edition | Michael M. Parmenter, Ph.D., ASA

This text is listed in the Course of Reading for the EA-1 Examination. It has also been adopted as the required text for introductory actuarial science courses at a number of colleges and universities.

This is an introductory treatment of compound interest and basic aspects of life contingencies. It is the perfect book for colleges and universities that are supportive of actuarial education, but do not have formal actuarial science programs. The theory is illustrated by worked examples and reinforced through numerous exercises.

A knowledge of algebra is required. A familiarity with introductory calculus and probability is useful, but not essential.

This popular textbook is even more useful due to the inclusion of the following topics: approaches to reaching numerical results using calculators; basic concepts in finance, such as the real rate of return; investment duration; and an introduction to simple contingent insurance functions.

Students will find this text to be valuable supplementary reading in preparing for the Exam FM of the Society of Actuaries.
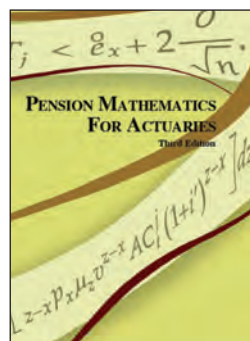
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Pension Mathematics For Actuaries,

3rd Edition | Arthur W. Anderson, ASA, FCA, EA

This text has been the principal reference for the pension mathematics topic on the SOA examination program for more than 20 years. It is currently listed in the Course of Reading for the EA-2F Examination and SOA Fellowship study in the Retirement Benefits Track in Canada.

This comprehensive text is addressed to beginners in pension mathematics who have a firm grounding in basic actuarial mathematics, particularly life contingencies. It also presumes a reasonable background in general college-level mathematics, including calculus and probability, and familiarity with international actuarial notation.

It contains extensive exercises of several types. Some ask the reader to complete mathematical developments in the text, others are numerical examples, others are used to develop related material, and several serve to expand the reader's intellectual horizons to deeper mathematical or philosophical questions.

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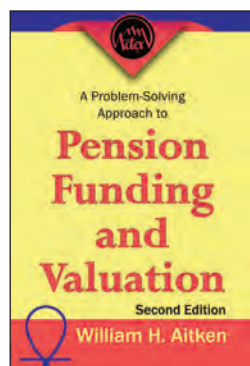
A Problem-Solving Approach to Pension Funding and Valuation

2nd Edition | William H. Aitken, FSA, FCIA, EA

This text is listed in the Course of Reading for the EA-2F Examination.

This work differs from other texts on pension mathematics by presenting the topic through a very large number of worked examples, rather than in a conceptual, formula-oriented approach.

This text contains **169 worked examples,** discussion questions intended to stimulate further understanding of the subject, and numerical end-of-chapter exercises. Most of the examples and exercises are taken from examinations of the Joint Board for the Enrollment of Actuaries.

The text is intended for several audiences, including university students, pension practitioners and candidates for various pension actuarial exams.
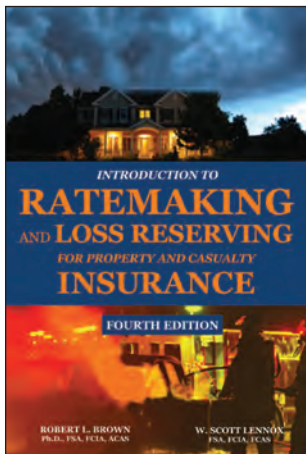
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Introduction to Ratemaking and Loss Reserving for Property and Casualty Insurance

4th Edition

Robert L. Brown, Ph.D., FSA, FCIA, ACAS

W. Scott Lennox, FSA, FCIA, FCAS

This text is listed in the Course of Reading for the Fundamentals of Actuarial Practice Course of the SOA.

This text provides a basic foundation of knowledge concerning two fundamental building blocks of property/casualty actuarial work: ratemaking and loss reserving. Although the material is of property/casualty origins, the methods presented have potential application in other insurance areas including health insurance and risk management. The text contains a **number of worked examples and end-of-chapter exercises.**

The fourth edition reverses the order of chapters three and four from previous editions. The estimation of the ultimate claim payments is a necessary first step in both the loss reserving process and ratemaking process. Determining the ultimate losses is more comprehensively covered in the loss reserving chapter, and the ratemaking process often relies on the estimates of ultimate losses determined in the loss reserving process. As a result, the loss reserving chapter now comes before the ratemaking chapter.

The frequency and severity section of the loss reserving chapter has been revised to more fully demonstrate the closure method of estimating ultimate losses.

The chapter on intermediate topics has been updated to include deductible pricing, as this alternative approach to the ratemaking in chapter four is typically used for pricing various deductible options.

Finally, the fourth edition has been updated to reflect industry changes and includes **additional exercises** to improve students' comprehension..

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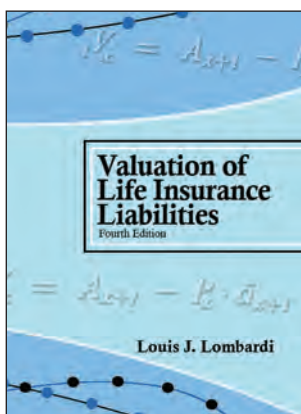
Valuation of Life Insurance Liabilities

4th Edition

Louis J. Lombardi, FSA, MAAA

This text is listed in the Course of Reading for SOA Fellowship study in the Individual Life & Annuities Track and the Life and Health Qualifications Seminar of the American Academy of Actuaries.

This text covers basic principles of statutory life insurance and annuity valuation with primary emphasis on U.S. practice and secondary emphasis on Canadian practice. This book is a concise treatment of valuation for practicing valuation actuaries and those considering a career change into valuation.

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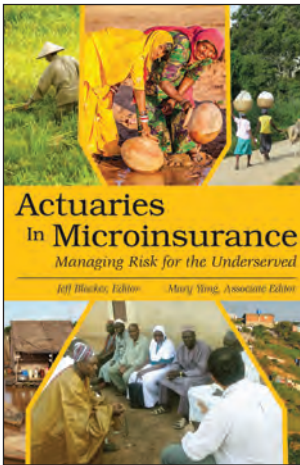
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Actuaries In Microinsurance, Managing Risk for the Underserved

Jeff Blacker, EDITOR

Mary Yang, ASSOCIATE EDITOR

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"One of the constraints inhibiting the expansion of better insurance services for more low-income households is sufficient technical expertise. The contributors to this valuable publication represent the burgeoning nucleus of this expert cadre, and hopefully their thoughts and experiences will inspire many more actuaries around the world to apply their technical skills to achieve development objectives."

– Craig Churchill, Team Leader, ILO Impact Insurance Facility, and former Chair of the Microinsurance Network
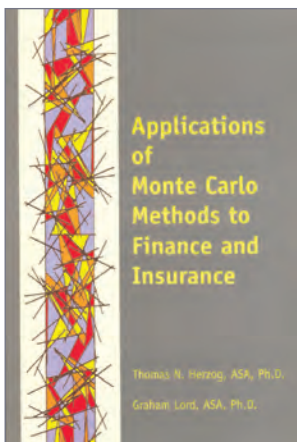
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Thomas N. Herzog, Ph.D., ASA

Graham Lord, Ph.D., ASA

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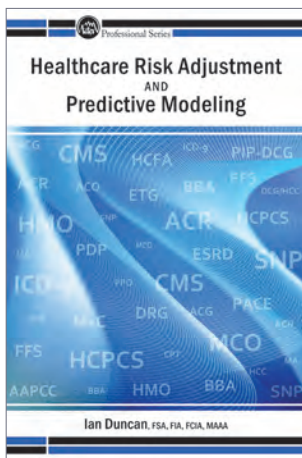
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Ian Duncan, FSA, FIA, FCIA, MAAA

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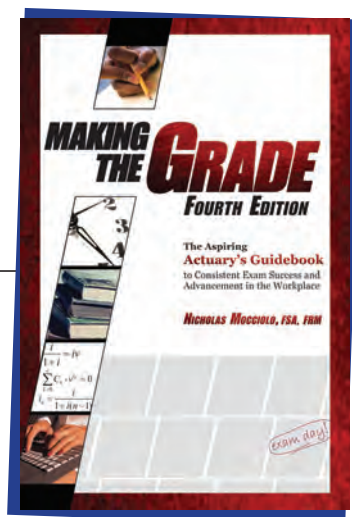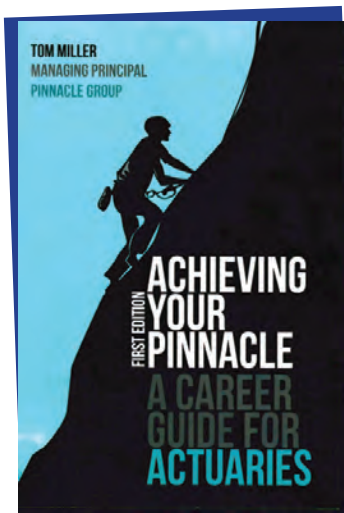## Achieving Your Pinnacle:

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