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Preface

A critical point in an actuary’s education is the transition from understanding the mathematical underpinnings of actuarial science to putting them into practice. The problems become less well-defined and the solutions less clear-cut. This is not only a challenge for candidates who are making the transition but also a challenge for those who are guiding their learning and assessing their performance. In 2003 the Society of Actuaries Board of Governors took the inspired step of moving a candidate’s education in this transition from a self-study reading of textbooks followed by a proctored exam to delivery of the candidate's education through a supported e-Learning environment. Starting in 2006, candidates for the ASA designation began taking the Fundamentals of Actuarial Practice Course (FAP).

The FAP Course brought several new features to the education and assessment process. Among them were:

- Self-paced learning through online modules. The modules were designed to guide candidates through the material. This would be done through readings (both online and offline), review questions, case studies, activities, and exercises.
- Rather than organize the course by function or practice area, the course was organized around the control cycle. This is a framework for problem solving and decision making that begins with defining the problem, continues with designing the solution and concludes with monitoring the results. Candidates are made aware that external forces affect the process and that the work must be completed in a professional manner.
- Formal assessments evolved to become take-home open book problems that often required making judgments and recommendations to be communicated to the intended audiences, usually in the form of memos.

Fortunately, a suitable text was available (Bellis, et. al., 2003) covering the application of the control cycle to solving actuarial problems. In order to supplement the overview provided by this text, course candidates were asked to purchase several additional texts covering risk management, property and casualty insurance, investments, retirement benefits, health insurance, and life insurance and annuities. Because these texts were written for other purposes, disjoint sections of each text were used for FAP. This was both inconvenient and expensive for candidates. In 2010 a project was undertaken to create a text that would be purpose-written for FAP candidates with coverage of finance, life insurance and annuities, retirement benefits and health insurance.

Four authors with extensive experience were recruited to write the sections. Biographical information about each appears elsewhere in this book. They were asked to ensure that all the information on their subject that is covered in FAP appears in their section. However, while the FAP Course makes reference to readings in this text, the text itself does not reference other aspects of the FAP Course. Thus, this text also provides a stand-alone introduction to actuarial practice in each area.
Preface

The text begins with an introductory section that has a brief review of the actuarial profession, some comments on what it means to be a professional and a discussion of the Actuarial Control Cycle. It is designed to provide context for FAP candidates and for the rest of this book. Each of the four practice area sections of this book are self-contained and can be studied in any order. FAP candidates will skip from some parts of this book to others as their study in FAP is organized by the Actuarial Control Cycle and not by practice area.

As you read this book there will be references to "online resources." There is a dedicated webpage for this text. At it, you can download additional readings, spreadsheets that support various examples and exercises, and solutions to the book's exercises. These resources can be found at www.soa.org/FAP.

To both FAP candidates and those who want an introduction to how actuarial science is practiced in the four areas covered, I hope this book is both illuminating and enjoyable.

Stuart Klugman, FSA, CERA

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