

ILA 101 – Pricing and Introduction to Valuation and Risk Management

Nov 2025/Mar 2026/Jul 2026

Important Course Information:

<u>Exam Registration</u> Candidates may register online or with an application.

Order Study Notes Study notes are part of the required syllabus and are not available

electronically but may be purchased through the online store.

Syllabus Resources Resources listed in this syllabus may include study notes, online

readings, textbooks, videos and module content. Candidates are responsible for all materials in their entirety, including sections such as Appendices, unless it is stated otherwise in the syllabus.

Topic Weight Ranges These have been provided to indicate the relative emphasis on each

topic. The ranges of weights shown are intended to apply broadly over multiple sittings; however, the weights of topics on any individual exam could fall outside the published range. Candidates should also recognize

that some questions will cover multiple learning objectives.

Learning Outcomes Each resource listed indicates the specific learning outcome(s) it

aligns with under that particular topic. Resources are listed in the recommended order of study to best master the overall topic and learning objective. For additional guidance, please see the course

strategy guide.

<u>Introductory Study Note</u>

The Introductory Study Note has a complete listing of all study notes as

well as errata and other important information.

Case Study A case study will not be provided for this examination.

Past Exams Past Exams from Fall 2020-present are available on SOA website.

<u>Updates</u> Candidates should be sure to check for updates on the course homepage

periodically for additional corrections or notices to the current syllabus.

1. Topic: Individual Life and Annuity Product Design and Pricing (15% - 25%)

Learning Objectives

The candidate will understand the designs of the common Life and Annuity products and their associated features and inherent risks, and the methods to design and price these products.

Learning Outcomes

- a) Describe and compare various life insurance and annuity product designs
- b) Evaluate and apply pricing practices for life and annuity products
- c) Describe and apply the common profit metrics (IRR, Value of New Business, Embedded Value, ROE) used in pricing insurance products
- d) Explain and apply nonforfeiture calculation techniques

Resources	Learning Outcomes
ILA101-100-25: Life Products and Features	1a, 1b
ILA101-101-25: Annuity Products and Features	1a, 1b
Structured Settlement Annuities, SOA Research Institute, Mar 2022	1a, 1b
Pension Risk Transfer in Canada and the U.S., SOA Research Institute, Feb 2022	1a, 1b
Registered Index-Linked Annuities, SOA Research Institute, Aug 2022	1a, 1b
<u>Life Insurance Acceleration Riders</u> , SOA Reinsurance News, Jul 2013, pp. 35-38	1a, 1b
ILA101-102-25: Understanding Profitability in Life Insurance	1c
ILA101-103-25: Ch. 9 of Life Insurance Products and Finance, Atkinson and Dallas	1c
ILA101-104-25: Ch. 11, pp. 499-512 of <i>Life Insurance Products and Finance</i> , Atkinson and Dallas	1c
ILA101-105-25: Life Insurance and Annuity Non-forfeiture Practices	1d

2. Topic: Assumption Development and Experience Studies (15% - 25%)

Learning Objectives

The candidate will understand different types of actuarial assumptions and how experience studies are designed and used for evaluating past experience and for setting assumptions.

Learning Outcomes

- a) Describe types of actuarial assumptions commonly used for life insurance and annuity actuarial functions
- b) Describe and evaluate mortality, lapse, premium persistency, term conversions and utilization assumptions used for various purposes, and apply methods and techniques for their development
- c) Explain and apply actuarial credibility methods
- d) Describe and apply the framework, process, and significant considerations for creating modern mortality tables used by life insurance companies
- e) Describe the process and apply techniques for experience studies

Resources	Learning Outcomes
ILA101-106-25: Experience Assumptions for Individual Life Insurance and Annuities	2a
ILA101-107-25: Lapse Supported Insurance Analysis	2b
CIA Educational Note: Selective Lapsation for Renewable Term Insurance Products, Feb 2017	2b
Report on Premium Persistency Assumptions Study of Flexible Premium Universal Life Products, May 2012, pp. 9-15	2b
Variable Annuity Guaranteed Living Benefits Utilization, SOA LIMRA Research, 2018, Executive Summary only (pp. 19-32)	2b
Term Conversions: Pricing and Reserving, Product Matters, Mar 2017	2b
Predictive Models on Conversion Studies for the Level Term Premium Plans, SOA, Mar 2017	2b
 Credibility Methods Applied to Life, Health, and Pensions, SOA, Feb 2019 (pp. 1-25 only) Credibility Methods Companion Excel Files 	2c
Table Development, Feb 2018 (excluding Appendices C, D, F, G & H)	2d
Experience Study Calculations, SOA, Oct 2016 (revised Mar 2024), sections 2-4, 11, 12, 15, 17 & 18 (excluding 18.2, 18.8 & 18.9)	2e

3. Topic: Product Management (15% - 25%)

Learning Objectives

The candidate will understand common issues and practices related to Product Management.

Learning Outcomes

- a) Describe and assess insurance and annuity distribution approaches and underwriting approaches
- b) Describe and apply the significant US and Canadian tax regulations relating to the taxation of individual life and annuity insurance products
- c) Recommend and justify changes to non-guaranteed elements
- d) Describe and evaluate the challenges insurers face in a rising interest rate environment

Resources	Learning Outcomes
Life Insurance for the Digital Age: An End-to-End View, Product Matters, Nov 2017	За
 The Art and Science of Life Insurance Distribution, Bennett, Douglas J., and Zultowski, Walter H., 2014 Ch. 3: The Primary Life Insurance Distribution Channels Ch. 4: The Functions of Distribution in the Life Insurance Business Ch. 6: Distribution Compensation Ch. 7: The Economics of Life Insurance Distribution Ch. 10: The Future of Life Insurance Distribution 	3a
ILA101-108-25: Chapters 1 and 2 of <i>Life Insurance and Modified Endowments Under IRC §7702 and §7702A,</i> Desrochers, 2nd Edition	3b
ILA101-116-25: Ch. 10, The Taxation of Life Insurance Policies of <i>Canadian Insurance Taxation</i> , Swales, et. al.	3b
Overview of Non-guaranteed Elements (NGEs), SOA Research Institute, Nov 2022	3с
Market Trends and Product Designs: Considerations when Interest Rates are Rising, Product Matters, Nov 2021	3d

4. Topic: Introduction to Life and Annuity Valuation Concepts (15% - 25%)

Learning Objectives

The candidate will understand common valuation and capital techniques used in US, Canadian, and international regulatory frameworks.

Learning Outcomes

- a) Describe the US statutory actuarial framework, including the principles-based reserves and calculate basic life insurance reserves
- b) Describe the US GAAP actuarial framework and calculate term insurance reserves and deferred acquisition cost
- c) Describe the IFRS actuarial framework, including the basic calculation of reserves
- d) Explain and apply methods in capital management across various jurisdictions

Resources	Learning Outcomes
Statutory Valuation of Individual Life and Annuity Contracts, Volume I, Claire, D., Lombardi, L. and Summers, S., 5th Edition, 2018	4a
 Chapter 1: Overview of Valuation Concepts (excluding 1.1-1.9) 	
 Chapter 11: Valuation Methodologies (excluding 11.3.9-11.3.11) 	
ILA101-110-25: Fundamentals of the Principle-Based Approach to Statutory Reserves for Life Insurance	4a
US GAAP for Insurers, Freedman, M., and Frasca, R., 3 rd Edition, 2024	4b
 Chapter 1: US GAAP Objectives and their Implications to Insurers 	
Chapter 5: Nonparticipating Traditional Life Insurance	
ILA101-111-25: Insurance Contracts First Impressions: 2020 Edition IFRS 17, KPMG, July 2020 (only Sections 1.1-1.2, 3.1, 5.1-5.3, 6.1-6.4, 14.1-14.2, 15.1-15.2, 17.1-17.3, 20.1)	4с
Regulatory Capital Adequacy for Life Insurance Companies: A Comparison of Four Jurisdictions, SOA Research Institute, Jul 2023	4d
Companion Excel Spreadsheet: <u>Comparison of Jurisdictions Tool</u>	

5. Topic: Introduction to Assets and Risk Management (15% - 25%)

Learning Objectives

The candidate will understand various techniques for addressing the mitigation of risk within a life insurance and annuity context.

Learning Outcomes

- a) Describe and evaluate approaches for integrating ALM into an enterprise's risk and financial management framework
- b) Describe and apply the basic concepts of cash flow matching, immunization, duration/convexity matching, segmentation
- c) Describe how common insurance guarantees generate embedded options and calculate the value of these options
- d) Explain the function and attributes of common assets used to support life insurance and annuity liabilities
- e) Describe basic terms, concepts, and types of life insurance reinsurance arrangements

Resources	Learning Outcomes
ILA101-112-25: Revisiting the Role of Insurance Company ALM w/in a RM Framework	5a
ILA101-113-25: Ch. 7 (sections 7.2-7.5 & 7A) of <i>Derivatives Markets</i> , McDonald, 3rd Edition	5b
ILA101-114-25: Ch. 16 of ALM Management of Financial Institutions, Tilman, 2003	5c
 An Introduction to Computational Risk Management of Equity-Linked Insurance, Feng, Runhuan, 2018 Ch. 1: Modeling of Equity-linked Insurance Ch. 4: Pricing and Valuation (excluding Section 4.7) 	5c
ILA101-115-25: Simulation of a Guaranteed Minimum Annuity Benefit, Freedman, 2019; • Excel Model - Stochastic Simulation of a GMAB Option (Accompanies Simulation of a GMAB)	5c
ILA-117-25: Ch. 10, pp. 235-262, excluding exhibits 10-1 & 10-2, and Ch. 21 of Handbook of Fixed Income Securities, Fabozzi, F.J.	5d
 Life, Health & Annuity Reinsurance, Tiller, John E. and Tiller, Denise, 4th Edition, 2015 Ch. 1: Basic Terms and Concepts (pp. 3-16 & 22) Ch. 4: Basic Methods of Reinsurance Ch. 5: Advanced Methods and Structures of Reinsurance 	5e