

Individual Life and Annuity Company/Sponsor Perspective – U.S. Spring 2011

Important Exam Information:

Exam Date and Time	A read-through time will be given prior to the start of the exam—15 minutes in the morning session and 15 minutes in the afternoon session.
Exam Registration	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.
Introductory Study Note	The Introductory Study Note has a complete listing of all study notes as well as errata and other important information.
Case Study	C"ecug"uwf { 'y km'pqv'dg'wugf 'hqt "j g"Ur tkpi "4233"ugaukqp0
Past Exams	Past Exams from 2000-present are available on SOA web site.
Updates	Candidates should be sure to check the Updates page on the exam home page periodically for additional corrections or notices.

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Exam: ILA - CSP	TOPIC: Financial Reporting
Learning Objectives	
1. The candidate will understand basic financial statements and reports of U.S. life insurance companies and be able to analyze the data in them.	
Learning Outcomes	
<p>The candidate will be able to:</p> <p>A. Construct the basic financial statements for a life insurance company under U.S. GAAP and Statutory accounting methods and principles.</p> <p>B. Describe the structure of the U.S. Annual Statement and explain the purpose of its major exhibits and schedules.</p> <p>C. Compute the basic taxable income of a life insurance company.</p> <p>D. Explain the appropriate accounting treatments for such items as but not limited to:</p> <ul style="list-style-type: none"> i) Separate Accounts ii) Embedded options iii) Derivatives iv) Secondary guarantees <p>E. Describe and critique the framework and principles used in the calculation of reserves under a Fair Value approach.</p> <p>F. Describe emerging developments impacting U.S. GAAP and International Reporting frameworks, and assess their impact on the valuation of reserves.</p> <p>G. Describe and critique the fundamental approaches of financial economics to valuation of liabilities.</p> <p>H. Develop, use and recommend methods for performing actuarial reviews of reserves.</p>	
Syllabus Resources	
<ul style="list-style-type: none"> • <i>US GAAP For Life Insurers</i>, Second Edition, 2006 <ul style="list-style-type: none"> Chapter 1 GAAP Objectives and Their Implications to Life Insurers (exclude 1.7 and 1.8) Chapter 2 Authorities (exclude 2.3) Chapter 13 Investment Accounting (exclude 13.7) Chapter 14 Shadow Adjustments (SFAS 115) Chapter 18 (exclude 18.4) Other Topics Chapter 19 Financial Statement Presentations • <i>Valuation of Life Insurance Liabilities</i>, Fourth Edition, 2006 <ul style="list-style-type: none"> Chapter 1, Overview of Valuation Requirements Chapter 2, NAIC Annual Statement • ILA-C100-07: Financial Reporting Developments Accounting for Derivative Instruments and Hedging Activities: A Comprehensive Analysis of FAS 133. Overview and Appendix C only. • ILA-C102-09: Actuarial Review of Reserves and Other Annual Statement Liabilities, Ed Robbins 	

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- ILA-C127-11: Insurance Contracts, July 2010 Exposure Draft - IASB, pages 19 to 84 only
- ILA-C800-07: IASA: Chapter 12 Federal Income Taxation, (up to page 15 and pages 32-33 only)
- ILA-C809-09: Emerging Financial Reporting Issues, E&Y, (exclude pp.10-20)
- SOP 05-1: Financial Reporter Article 03/06: AICPA Releases SOP 05-1- Accounting by Insurance Enterprises for Deferred Acquisition Costs in Connection with Modifications or Exchanges of Insurance Contracts
<http://www.soa.org/library/newsletters/financial-reporter/2006/march/frn0603.pdf>
- An Approach to Fair Valuation of Insurance Liabilities Using the Firm's Cost of Capital, NAAJ, Apr 2002, p. 18-23
http://www.soa.org/library/journals/north-american-actuarial-journal/2002/april/naaj0204_3.pdf
- Fair Value of Liabilities: The Financial Economic Perspective, NAAJ Jan 2002
http://www.soa.org/library/journals/north-american-actuarial-journal/2002/january/naaj0201_2.pdf
- SFAS 157 Fair Value Measurements, paragraphs 1-30
<http://72.3.243.42/pdf/fas157.pdf>
- SOA Research Project on Financial Reporting for Insurance Contracts under Possible Future International Standards, pp. 6-43, 67-70, 74-81
<http://www.soa.org/files/pdf/research-2008-ifs-report.pdf>
- ASOP 10 "Methods and Assumptions for Use in Life Insurance Company Financial Statements Prepared in Accordance With GAAP (excluding Transmittal Memo and Appendices)
http://www.actuarialstandardsboard.org/pdf/asops/asop010_068.pdf

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Exam: ILA – CSP	TOPIC: <u>Principles of Valuation</u>
Learning Objectives	
2. The candidate will be able to understand and apply valuation principles of individual life insurance and annuity products issued by U.S. life insurance companies.	
Learning Outcomes	
<p>The candidate will be able to:</p> <p>A. Describe and differentiate between valuation methods under the following standards:</p> <ol style="list-style-type: none"> i) U.S. statutory ii) U.S. GAAP iii) U.S. tax iv) Fair value accounting <p>B. Recommend appropriate valuation assumptions under the following standards:</p> <ol style="list-style-type: none"> i) U.S. statutory ii) U.S. GAAP iii) U.S. tax iv) Fair value accounting <p>C. Calculate liabilities under U.S. statutory, U.S. tax, U.S. GAAP, and DAC assets under U.S. GAAP for the following products:</p> <ol style="list-style-type: none"> i) Traditional life insurance ii) Term life insurance iii) Universal life insurance iv) Universal life insurance with secondary guarantees v) Deferred annuity vi) Payout annuity vii) Variable annuity with guaranteed minimum death benefits viii) Variable annuity with guaranteed living benefits ix) Equity-indexed annuities x) Equity-indexed life insurance xi) Variable life insurance with guaranteed minimum death benefits xii) Riders <p>D. Describe and calculate Investment Maintenance and Asset Valuation Reserves</p> <p>E. Describe and assess the impact of emerging U.S. principle-based reserve regulation on the valuation of reserves</p>	
Syllabus Resources	
<ul style="list-style-type: none"> • <i>US GAAP For Life Insurers</i>, Second Edition, 2006 <ul style="list-style-type: none"> Chapter 3 Expenses and Capitalization (exclude 3.11) Chapter 4 Traditional Life Insurance (SFAS 60 & 97) Chapter 6 Universal Life Insurance Chapter 7 Deferred Annuities Chapter 8 Variable and Equity-Based Products Chapter 9 Annuities in Payment Status • <i>Valuation of Life Insurance Liabilities</i>, Fourth Edition, 2006 <ul style="list-style-type: none"> Chapter 1 Overview of Valuation Requirements Chapter 4 Valuation Assumptions Chapter 5 Valuation Methodologies and Approximations 	

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Chapter 6 Whole Life
Chapter 7 Term Life Insurance
Chapter 8 Universal Life Insurance
Chapter 9 Variable Life Insurance
Chapter 10 Deferred Annuities
Chapter 11 Immediate Annuities
Chapter 12 Miscellaneous Reserves

- ILA-C800-07:IASA : Chapter 8, pages 12-16
- ILA-C802-07: *U. S. Tax Reserves for Life Insurers*:
Chapter 2 Tax-Basis Reserves Generally
Chapter 7 section 807(f) and Changes in the Computation of Reserves
- ILA-C803-07 NAIC Standard Valuation Law
- ILA-C807-09: Market Value Margins for Insurance Liabilities in Financial Reporting and Solvency
Applications, E&Y, October 2007, pages 1-65
- ILA-C808-11: Fundamentals of the Principle Based Approach to Statutory Reserves and Risk Based Capital
- ILA-C810-10: AAA Practice Note on FAS 157 and 159
- ILA-C811-10: Actuarial Guideline XXXV
- ILA-C812-10: A Discussion of Actuarial Guideline 43 for Variable Annuities, Milliman Research Report, April 2009

- An Approach for Measurement of the Fair Value of Insurance Contracts, Gutterman, et al., Actuarial Practice Forum, May 2007
http://www.soa.org/library/journals/actuarial-practice-forum/2007/may/APF0705_04.pdf
- Fair Value Accounting: Trouble-maker or Life-saver? Financial Reporter, April 2009
<http://www.soa.org/library/newsletters/financial-reporter/2009/april/frn-2009-iss76.pdf>
- FAS 157 Staff Position Paper, pp. 1-8
http://www.fasb.org/cs/ContentServer?c=Document_C&pagename=FASB%2FDocument_C%2FDocumentPage&cid=1176154545450

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Exam: ILA - CSP	TOPIC: <u>Reinsurance</u>
Learning Objectives	
<p>3. The candidate will be able to evaluate various forms of reinsurance, what the financial impact is of each form, and describe the circumstances that would make each type of reinsurance appropriate.</p>	
Learning Outcomes	
<p>The candidate will be able to:</p> <p>A. For traditional and financial reinsurance, explain the consequences and evaluate the effect on both ceding and assuming companies with respect to:</p> <ol style="list-style-type: none"> i) risk transfer ii) cash flow, iii) financial statement presentation iv) tax impact, and v) reserve credit requirements <p>B. Describe the considerations and evaluate the appropriate reinsurance form from the ceding and assuming company perspectives.</p>	
Syllabus Resources	
<ul style="list-style-type: none"> • <i>Life and Health Reinsurance</i>, Third Edition, 2005 by Tiller: <ul style="list-style-type: none"> Chapter 4 Basic Methods of Reinsurance Chapter 5 Advanced Methods of Reinsurance Chapter 6 The Reinsurance Treaty Chapter 10 Reinsurance Regulations Chapter 12 Statutory Accounting for Reins. Chapter 13 GAAP Accounting for Reinsurance Chapter 14 Tax Effects on Reinsurance • ASOP #11: The Treatment of Reinsurance Transactions in Life and Health Insurance Company Financial Statements (excluding Transmittal Memo and Appendices) http://www.actuarialstandardsboard.org/pdf/asops/asop011_098.pdf 	

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Exam: ILA - CSP	TOPIC: <u>Financial and Capital Management</u>
Learning Objectives	
<p>4. The candidate will be able to explain and apply the basic methods, approaches and tools of financial management and value creation in a life insurance company context.</p>	
Learning Outcomes	
<p>The candidate will be able to:</p> <ul style="list-style-type: none"> A. Describe and calculate basic performance measures. B. Perform basic financial analysis on a product line or company. C. Explain and create a product line “gains by source” analysis. D. Apply methods of valuation to business and asset acquisitions and sales. E. Explain and apply the basic methods and approaches of surplus management and earnings management. F. Describe how securitization is used within capital management. G. Explain and apply the methods and principles of embedded value. H. Describe and apply the principles of how insurance companies create value from a financial economics perspective. 	
Syllabus Resources	
<ul style="list-style-type: none"> • <i>Life Insurance Products and Finance</i>, Atkinson and Dallas, 2000 Chapter 16 Financial Management • ILA-C106-07: <i>Mergers and Acquisitions</i>: Chapter 4 (Sections 4.1-4.6) • ILA-C107-07: Securitization of Life Insurance Assets and Liabilities • ILA-C110-07: The Economics of Insurance: How Insurers Create Value for Shareholders • Strategic Management of Life Insurance Company Surplus, TSA XXXVIII (pages 105-116) http://www.soa.org/library/research/transactions-of-society-of-actuaries/1986/january/tsa86v387.pdf • 1996 Val Act Symposium (pages 143-168) http://www.soa.org/library/proceedings/valuation-actuary-symposium-proceedings/1985-99/1996/january/vasp965.pdf • Embedded Value: Practice and Theory, SOA, Actuarial Practice Forum, March 2009 http://www.soa.org/library/journals/actuarial-practice-forum/2009/march/apf-2009-03-frasca-lasorella.pdf 	

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Exam: ILA - CSP	TOPIC: <u>Financial and Capital Management</u>
Learning Objectives	
5. The candidate will understand the Risk Based Capital (RBC) regulatory framework and the principles underlying the determination of Regulatory RBC and Economic Capital	
Learning Outcomes	
<p>The candidate will be able to:</p> <p>A. Describe the US Risk Based Capital (RBC) regulatory framework and the principles underlying the determination of Regulatory RBC</p> <p>B. Compute RBC for a life insurance company, including:</p> <ol style="list-style-type: none"> i) Identification of significant risk components ii) Identification of specialized product RBC requirements iii) Interpreting results from a regulatory perspective <p>C. Explain and apply the concepts, approaches and methods for determining Economic Capital.</p>	
Syllabus Resources	
<ul style="list-style-type: none"> • <i>Valuation of Liabilities</i>, Lombardi, Fourth Edition, 2006 Chapter 1 Overview of Valuation Requirements Chapter 16 Risk-Based • ILA-C121-08: Economic Capital Modeling: Practical Considerations, Milliman White Paper • ILA-C808-11: Fundamentals of the Principle Based Approach to Statutory Reserves and Risk Based Capital • Economic Capital for Life Insurance Companies, SOA Research paper, Feb 2008, Chapters 1 and 3-6 http://www.soa.org/files/pdf/research-ec-report.pdf • Economic Capital: The Controversy at the Water Cooler, Financial Reporter, Fall 2006 http://www.soa.org/library/newsletters/risk-management-newsletter/2006/december/RMN0612.pdf • Transitioning to RBC C3 Phase III, Financial Reporter, March 2010 http://www.soa.org/library/newsletters/financial-reporter/2010/march/frn-2010-iss80.pdf • A Multi-Stakeholder Approach to Capital Adequacy, Conning Research (exclude appendix) http://www.soa.org/library/journals/actuarial-practice-forum/2007/may/APF0705_01.pdf 	

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Exam: ILA - CSP	TOPIC: <u>Model Office and Asset/Liability Modeling</u>
Learning Objectives	
6. The candidate will be able to integrate data from various sources into model office and asset/liability models	
Learning Outcomes	
<p>The candidate will be able to:</p> <p>A. For an ALM model:</p> <ol style="list-style-type: none"> i) Select appropriate assumptions and scenarios ii) Model dynamic behavior of both assets and liabilities iii) Model and explain various strategies, including hedging iv) Analyze and evaluate results v) Recommend appropriate strategies <p>B. Apply a model office process and make appropriate recommendations.</p> <p>C. Analyze and explain actual vs. projected differences.</p> <p>D. Explain limitations of models and possible sources of error</p> <ol style="list-style-type: none"> i) Quality of data ii) Granularity of the model 	
Syllabus Resources	
<ul style="list-style-type: none"> • <i>Life Insurance Products and Finance</i>, by Atkinson and Dallas, 2000: Chapter 14 Financial Modeling Chapter 15 Stochastic Modeling, pp.785-831 and 856-858 • <i>Valuation of Life Insurance Liabilities</i>, Lombardi, 4th Edition, 2006 Chapter 13 • ILA-C112-07: ALM for Insurers • ILA-C113-07: Chapter 22 of <i>Life Insurance Accounting</i>, Asset/Liability Management • ILA-C114-07: Life Insurance Forecasting and Liability Models (exclude appendices) • ILA-C804-07: Actuarial Opinion and Memorandum Model Regulation (NAIC) • ASOP #7 Analysis of Life, Health or Property and Casualty Insurer Cash Flows (excluding Transmittal Memo and Appendices) http://www.actuarialstandardsboard.org/pdf/asops/asop007_089.pdf • ASOP #22 Statement of Opinion based on Asset Adequacy Analysis (excluding Transmittal Memo and Appendices http://www.actuarialstandardsboard.org/pdf/asops/asop022_083.pdf) • ASOP #23 Data Quality (excluding Transmittal Memo and Appendices) http://www.actuarialstandardsboard.org/pdf/asops/asop023_097.pdf • Asset Adequacy Analysis Practice Note, Dec. 2004 Exclude Sections B, I and K http://www.actuary.org/pdf/practnotes/life_asset.pdf 	

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Exam: ILA - CSP	TOPIC: <u>Risk Management And Mitigation</u>
Learning Objectives	
<p>7. The candidate will be able to evaluate risks faced by a Company by virtue of the Company’s products, assets, and management strategies and practices, and be able to evaluate the appropriateness of various methods of risk mitigation.</p>	
Learning Outcomes	
<p>The candidate will be able to:</p> <ul style="list-style-type: none"> A. Identify, categorize and evaluate potential sources of risk in products including but not limited to mortality, morbidity and lapse. B. Identify, categorize and evaluate potential sources of risk in investments including but not limited to credit risk, liquidity and asset-liability matching. C. Describe and evaluate the other risks an insurance company faces including operational, marketplace and expense risks. D. Describe how risks (e.g. product, investments and operational) and opportunities interact and how they influence firm strategy. E. Describe and apply methods of risk mitigation and hedging and to understand the limitations of such methods. F. Evaluate methods for measuring and controlling equity-based exposure associated with embedded options. G. Describe the roles of rating agencies, analysts and regulators together with their methods and impact on insurance companies. 	
Syllabus Resources	
<ul style="list-style-type: none"> • ILA-C116-07: Mapping of Life Insurance Risks, AAA Report to NAIC • ILA-C124-10: S&P’s Insurance Criteria: Refining the Focus of Insurer ERM Criteria, June 2006 (exclude pp. 20-26 (Property/Casualty (Nonlife) Insurance Risk) • ILA-C125-10: Insurance Risk Management Response to the Financial Crisis, CRO Forum, April 2009 • ERM Specialty Guide, May 2006, Chapters 1-6 http://www.soa.org/library/professional-actuarial-specialty-guides/enterprise-risk-management/2005/august/spg0605erm.pdf • Stochastic Analysis of Long Term Multiple-Decrement Contracts, Clark and Runchey, Jan 2008 (Exclude Appendices) http://www.soa.org/files/pdf/research-stochastic.pdf 	

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Exam: ILA - CSP	TOPIC: Professional Considerations
Learning Objectives	
8. The candidate will understand the professional standards addressing financial reporting and valuation.	
Learning Outcomes	
<p>The candidate will be able to:</p> <p>A. Explain the role and responsibilities of the appointed / valuation actuary.</p> <p>B. Identify and apply relevant professional actuarial qualification standards.</p> <p>C. Identify and apply actuarial standards of practice relevant to financial reporting and valuation.</p> <p>D. Explain the actuary’s professional responsibilities to stakeholders including obligations under Sarbanes-Oxley.</p>	
Syllabus Resources	
<ul style="list-style-type: none"> • <i>Valuation of Life Insurance Liabilities</i>, Lombardi, Fourth Edition, 2006 Chapter 3, Valuation Process Chapter 15 The Valuation Actuary in the US • ILA-C119-07: “Management Reports and Reports to Regulatory Bodies”, Ch. 19 of <i>Life and Accident and Health Insurance Accounting</i> • ILA-C126-10: SEC Guidance on Internal Control Over Financial Reporting • Actuarial Aspects of SOX 404, Financial Reporter, Dec 2004 http://www.soa.org/library/newsletters/financial-reporter/2004/december/frn0412.pdf • Responsibilities of the Actuary for Communicating Sarbanes-Oxley control: Effectiveness in Accordance with Actuarial Standards of Practice, Financial Reporter, Dec 2004 http://www.soa.org/library/newsletters/financial-reporter/2004/december/frn0412.pdf • ASOP 41 - Actuarial Communication (excluding Transmittal Memo and Appendices) http://www.actuarialstandardsboard.org/pdf/asops/asop041_086.pdf • ASOP 21 - Responding to the Auditor (excluding Transmittal Memo and Appendices) http://www.actuarialstandardsboard.org/pdf/asops/asop021_095.pdf 	