

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

## Important Information

The examination for this course will be given on Friday, May 9<sup>th</sup> 8:30am–11:45am and 1:30pm–4:45pm and will consist of six hours of written-answer questions. 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. Information regarding registering for exams is available on the [Exam Registration](#) page.

Study notes are part of the required Course of Reading and are not available electronically. Candidates must order the study notes from the Society of Actuaries using the [Study Note Order Form](#). Past exams are available on the Exam Archives page of the SOA web site under [Multiple Choice/Essay Examinations](#).

Candidates should be sure to check the [Updates](#) page of the web site periodically for additional corrections or notices.

The candidate should be very familiar with the Learning Objectives as described in the Basic Education Catalog. These Learning Objectives are the first ingredient in developing the syllabus and also guide the examination committee when writing questions. The Learning Objectives set out the cognitive level needed to pass this exam. You will notice that the candidates are expected to “analyze,” “explain,” “calculate,” “describe,” “apply,” etc. While studying the syllabus material, candidates may want to refer back to the Learning Objectives to remain focused on the goals of the exam.

Exam: ILA - CSP	TOPIC: <b>Financial Reporting</b>
Learning Objectives	
<b>1. The candidate will understand the preparation of financial statements and reports of U.S. life insurance companies and be able to analyze the data in them.</b>	
Learning Outcomes	
The candidate will be able to:	
<ul style="list-style-type: none"> <li>A. Prepare the basic financial statements for a life insurance company under U.S. GAAP, U.S Statutory and U.S. Tax methods and regulations</li> <li>B. Describe the structure of the U.S. Annual Statement and explain the purpose of its statements, key exhibits and schedules</li> <li>C. Describe how to compute the taxable income of a life insurance company</li> <li>D. Explain fair value accounting principles</li> <li>E. Explain the appropriate accounting treatments for:               <ul style="list-style-type: none"> <li>i) Separate Accounts</li> <li>ii) Embedded options (FAS 133)</li> <li>iii) Derivatives</li> <li>iv) Secondary guarantees (AG 38, SOP 03-1)</li> <li>v) Internal Replacements (SOP 05-1)</li> </ul> </li> <li>F. Describe international accounting standards</li> </ul>	
Syllabus Resources	
<ul style="list-style-type: none"> <li>• <i>Valuation of Life Insurance Liabilities</i>: I, Lombardi, Fourth Edition, 2006, Chapters 1, 2 and 6</li> <li>• <i>US GAAP For Life Insurers</i>, Second Edition, Herget et. al, Chapters 1, 2, 13 (exclude 13.7), 18 (exclude 18.4) and 19.</li> <li>• ILA-C800-07, <i>IASA</i>, 2001, Chapter 12 (pp. 1– 15 and pages 32–33 only) Federal Income Taxation</li> <li>• ILA-C801-07 (formerly 343-23-96) State and Local Taxation of Life Insurance Companies in the United States</li> <li>• ILA-C100-07 (formerly 8FE-412-05) Financial Reporting Developments -Accounting for Derivative Instruments and Hedging Activities: A Comprehensive Analysis of FAS 133 as Amended and Interpreted (Overview and Appendix C only)</li> <li>• ILA-C101-07 Ernst and Young - IASB IFRS 4 and IAS 39 - Insurance and Investment Contracts: Assessing the</li> </ul>	

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<p>Implications of Phase 1 for Insurers ( p. 9-20 only)</p> <ul style="list-style-type: none"> <li>• SFAS 157 Fair Value Measurements, paragraphs 1-30, <a href="http://72.3.243.42/pdf/fas157.pdf">http://72.3.243.42/pdf/fas157.pdf</a></li> <li>• SFAS 159, The Fair Value Option for Financial Assets and Financial Liabilities, paragraphs 1-15, <a href="http://72.3.243.42/pdf/fas159.pdf">http://72.3.243.42/pdf/fas159.pdf</a></li> <li>• ILA-C805-08, NAIC Actuarial Guideline 38</li> <li>• ILA-C806-08, SOP 03-1 Accounting and Reporting by Insurance Enterprises for Certain Nontraditional Long-Duration Contracts and for Separate Accounts</li> <li>• 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, <a href="http://www.soa.org/library/newsletters/financial-reporter/2006/march/frn0603.pdf">http://www.soa.org/library/newsletters/financial-reporter/2006/march/frn0603.pdf</a></li> <li>• “An Approach to Fair Valuation of Insurance Liabilities Using the Firm’s Cost of Capital”, NAAJ, Apr 2002, <a href="http://www.soa.org/library/journals/north-american-actuarial-journal/2002/april/naaj0204_3.pdf">http://www.soa.org/library/journals/north-american-actuarial-journal/2002/april/naaj0204_3.pdf</a></li> <li>• “Fair Value of Liabilities: The Financial Economic Perspective”, NAAJ Jan 2002 , <a href="http://www.soa.org/library/journals/north-american-actuarial-journal/2002/january/naaj0201_2.pdf">http://www.soa.org/library/journals/north-american-actuarial-journal/2002/january/naaj0201_2.pdf</a></li> <li>• ASOP 10 “Methods and Assumptions for Use in Life Insurance Company Financial Statements Prepared in Accordance With GAAP” <a href="http://www.actuarialstandardsboard.org/pdf/asops/asop010_068.pdf">http://www.actuarialstandardsboard.org/pdf/asops/asop010_068.pdf</a></li> </ul>
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Exam: ILA – CSP	TOPIC: <b><u>Principles of Valuation</u></b>
Learning Objectives	
<b>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.</b>	
Learning Outcomes	
The candidate will be able to:	
A. Describe, compare, and contrast valuation methods under the following standards:	
<ul style="list-style-type: none"> <li>i) U.S. statutory</li> <li>ii) U.S. GAAP</li> <li>iii) U.S. tax</li> <li>iv) Fair value accounting</li> </ul>	
B. Select appropriate valuation assumptions under the following standards:	
<ul style="list-style-type: none"> <li>i) U.S. statutory</li> <li>ii) U.S. GAAP</li> <li>iii) U.S. tax</li> <li>iv) Fair value accounting</li> </ul>	
C. Compute liabilities under U.S. statutory, U.S. tax, U.S. GAAP, and DAC assets under U.S. GAAP for the following products:	
<ul style="list-style-type: none"> <li>i) Traditional life insurance</li> <li>ii) Term life insurance</li> <li>iii) Universal life insurance</li> <li>iv) Universal life insurance with secondary guarantees</li> <li>v) Deferred annuity</li> <li>vi) Payout annuity</li> <li>vii) Variable annuity with guaranteed minimum death benefits</li> <li>viii) Variable annuity with guaranteed living benefits</li> <li>ix) Equity-indexed annuities</li> <li>x) Equity-indexed life insurance</li> <li>xi) Variable life insurance with guaranteed minimum death benefits</li> <li>xii) Riders</li> </ul>	
D. Devise and use reserve audit methods	

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E. Describe and calculate Investment Maintenance and Asset Valuation Reserves
F. Describe concepts underlying SVL II (principle-based reserves)
<b>Syllabus Resources</b>
<ul style="list-style-type: none"> <li>• <i>US GAAP For Life Insurers</i>, Herget, Second Edition, 2006, Chapters 3–9 and 14 :</li> <li>• ILA-C802-07, <i>U. S. Tax Reserves for Life Insurers</i>, Robbins and Bush, 2006, Chapters 2 and 7</li> <li>• <i>Valuation of Life Insurance Liabilities</i>, Lombardi, Fourth Edition, 2006, Chapters 1 and 4–12</li> <li>• ILA-C800-07 IASA, Chapter 8, pages 12-16 only</li> <li>• ILA-C803-07, NAIC, Standard Valuation Law</li> <li>• ILA-C102-07 (formerly 8I-303-00), Actuarial Review of Reserves and Other Annual Statement Liabilities</li> <li>• ILA-C104-07 (formerly 8IC-310-04), Valuation of Living and Death Benefit Guarantees for Variable Annuities</li> <li>• “SVL II – Connect the Dots”, by Shao, SoA Financial Reporter,  <a href="http://www.soa.org/library/newsletters/financial-reporter/2005/june/frn0506.pdf">http://www.soa.org/library/newsletters/financial-reporter/2005/june/frn0506.pdf</a> </li> </ul>

Exam: ILA - CSP	TOPIC: <b><u>Reinsurance</u></b>
<b>Learning Objectives</b>	
<b>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.</b>	
<b>Learning Outcomes</b>	
The candidate will be able to:	
A. For traditional and financial reinsurance, explain the consequences and calculate the effect on both ceding and assuming companies with respect to:	
<ul style="list-style-type: none"> <li>i) risk transfer</li> <li>ii) cash flow</li> <li>iii) financial statements</li> <li>iv) tax, and</li> <li>v) reserve credit requirements</li> </ul>	
B. Describe what considerations would be examined to determine the appropriate reinsurance form from the ceding and assuming company perspectives	
<b>Syllabus Resources</b>	
<ul style="list-style-type: none"> <li>• <i>Life and Health &amp; Annuity Reinsurance</i>, Tiller, Third Edition, 2005, Chapters 4, 5, 6, 10, 11, 12, 14</li> <li>• ASOP #11: The Treatment of Reinsurance Transactions in Life and Health Insurance Company Financial Statements, <a href="http://www.actuarialstandardsboard.org/pdf/asops/asop011_098.pdf">http://www.actuarialstandardsboard.org/pdf/asops/asop011_098.pdf</a></li> </ul>	

Exam: ILA - CSP	TOPIC: <b><u>Financial and Capital Management</u></b>
<b>Learning Objectives</b>	
<b>4. The candidate will be able to explain and apply the basic methods, approaches and tools of financial management in a life insurance company context.</b>	
<b>Learning Outcomes</b>	
The candidate will be able to:	
A. Describe and calculate basic performance measures	
B. Perform basic financial analysis by product line and total company	
C. Explain and create a product line “gains by source” analysis	

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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 and apply the methods of capital allocation and investment decision analysis under a financial economics options pricing perspective
G. Describe how securitization is used within capital management
<b>Syllabus Resources</b>
<ul style="list-style-type: none"> <li>• <i>Real Options</i>, Trigeorgis , 1996, Chapters 1 (exclude section 1.3), 2, 4 (sections 4.1-4.5 only), 5 (sections 5.1, 5.2 and 5.5 only)</li> <li>• <i>Life Insurance Products and Finance</i>, Atkinson &amp; Dallas, 2000, Chapter 16</li> <li>• ILA-C105-07 (formerly 8IU-304-00), Value- Based Financial Management</li> <li>• ILA-C106-07 <i>Mergers and Acquisitions</i>, Toole &amp; Herget, Chapter 4 (Sections 4.1-4.6 only)</li> <li>• ILA-C107-07 (formerly 8FE-414-05), Securitization of Life Insurance Assets and Liabilities</li> <li>• “Strategic Management of Life Insurance Company Surplus,” TSA XXXVIII (pages 105-116), <a href="http://www.soa.org/library/research/transactions-of-society-of-actuaries/1986/january/tsa86v387.pdf">http://www.soa.org/library/research/transactions-of-society-of-actuaries/1986/january/tsa86v387.pdf</a></li> <li>• Sources of Profit Statements, 1996 Val Act Symposium pages 143-168 <a href="http://www.soa.org/library/proceedings/valuation-actuary-symposium-proceedings/1985-99/1996/january/vasp965.pdf">http://www.soa.org/library/proceedings/valuation-actuary-symposium-proceedings/1985-99/1996/january/vasp965.pdf</a></li> </ul>

Exam: ILA - CSP	TOPIC: <b><u>Financial and Capital Management</u></b>
<b>Learning Objectives</b>	
<b>5. The candidate will understand the Risk Based Capital (RBC) regulatory framework and the principles underlying the determination of Regulatory RBC.</b>	
<b>Learning Outcomes</b>	
The candidate will be able to:	
A. Describe the US Risk Based Capital (RBC) regulatory framework and the principles underlying the determination of Regulatory RBC	
B. Compute RBC for a life insurance company, including:	
i) Identification of significant risk components	
ii) Identification of specialized product RBC requirements	
iii) Interpreting results from a regulatory perspective	
<b>Syllabus Resources</b>	
<ul style="list-style-type: none"> <li>• <i>Valuation of Life Insurance Liabilities</i>, Lombardi ,Fourth Edition, 2006, Chapters 1 and 16</li> </ul>	

Exam: ILA - CSP	TOPIC: <b><u>Financial and Capital Management</u></b>
<b>Learning Objectives</b>	
<b>6. The candidate will understand the principles underlying the determination of Economic Capital.</b>	
<b>Learning Outcomes</b>	
A. The candidate will be able to explain and apply the concepts, approaches and methods for determining Economic Capital	
<b>Syllabus Resources</b>	
<ul style="list-style-type: none"> <li>• ILA-C108-07, <i>The New Corporate Finance: Where Theory Meets Practice</i>, Chew, Third Edition, 2001, Chapter</li> </ul>	

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- ILA-C109-07 (formerly 8E-706-04), Specialty Guide on Economic Capital (exclude appendix)
- ILA-C121-08, Economic Capital Modeling: Practical Considerations, Milliman , Inc., December 2006
- Economic Capital: The Controversy at the Watercooler, Risk Management Newsletter, December 2006  
<http://www.soa.org/library/newsletters/risk-management-newsletter/2006/december/RMN0612.pdf>

Exam: ILA - CSP	TOPIC: <b><u>Embedded Value, and Value Creation</u></b>
Learning Objectives	
<b>7. The candidate will understand embedded value, and value creation conceptual frameworks.</b>	
Learning Outcomes	
The candidate will be able to:	
A. Explain and apply the methods and principles of embedded value	
B. Describe and apply the principles of how insurance companies create value from a financial economics perspective	
Syllabus Resources	
<ul style="list-style-type: none"> <li>• ILA-C105-07 (formerly 8IU-304-00) Value-Based Financial Management</li> <li>• ILA-C110-07, The Economics of Insurance: How Insurers Create Value for Shareholders, Swiss Re</li> </ul>	

Exam: ILA - CSP	TOPIC: <b><u>Model Office and Asset/Liability Modeling</u></b>
Learning Objectives	
<b>8. The candidate will be able to integrate data from various sources into model office and asset/liability models</b>	
Learning Outcomes	
The candidate will be able to:	
A. For an ALM model:	
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	
B. Apply a model office process and make appropriate recommendations	
C. Analyze and explain actual vs. projected differences	
D. Explain limitations of models and possible sources of error	
i) Quality of data	
ii) Granularity of the model	
Syllabus Resources	
<ul style="list-style-type: none"> <li>• <i>Life Insurance Products and Finance</i>, by Atkinson and Dallas, 2000, Chapters 14 and 15</li> <li>• ILA-C111-07 (formerly 8V-303-00), Asset Liability Management For A Going Concern”</li> <li>• ILA-C112-07 (formerly 8V-316-02), Asset-Liability Management for Insurers</li> <li>• ILA-C113-07 (formerly 8FE-316-03) Chapter 22 of <i>Life Insurance Accounting</i>, Asset/Liability Management for Insurers</li> <li>• ILA-C114-07 (formerly 7P-43-04), Life Insurance Forecasting and Liability Models: An Examination of the Trade-offs Involved with Certain Modeling Decisions</li> <li>• ILA-C804-07 NAIC: Actuarial Opinion and Memorandum Model Regulation</li> <li>• ASOP #7 Analysis of Life, Health or Property and Casualty Insurer Cash Flows,  <a href="http://www.actuarialstandardsboard.org/pdf/asops/asop007_089.pdf">http://www.actuarialstandardsboard.org/pdf/asops/asop007_089.pdf</a></li> </ul>	

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- ASOP #22 Statement of Opinion Based on Asset Adequacy Analysis, [http://www.actuarialstandardsboard.org/pdf/asops/asop022\\_083.pdf](http://www.actuarialstandardsboard.org/pdf/asops/asop022_083.pdf)
- ASOP #23 Data Quality, [http://www.actuarialstandardsboard.org/pdf/asops/asop023\\_097.pdf](http://www.actuarialstandardsboard.org/pdf/asops/asop023_097.pdf)

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Exam: ILA - CSP	TOPIC: <u>Risk Management And Mitigation</u>
Learning Objectives	
<b>9. The candidate will understand the sources of risk faced by the enterprise and evaluate the mitigation thereof.</b>	
Learning Outcomes	
<p>The candidate will be able to:</p> <p>A. Identify, categorize and evaluate potential sources of risk in products including but not limited to mortality, morbidity and lapse</p> <p>B. Identify, categorize and evaluate potential sources of risk in investments including but not limited to credit risk, liquidity and asset-liability matching</p> <p>C. Describe and evaluate the other risks an insurance company faces including operational, marketplace and expense risks</p> <p>D. Describe how risks (e.g. product, investments and operational) and opportunities interact and how they influence firm strategy</p> <p>E. Describe and apply methods of risk mitigation and hedging and to understand the limitations of such methods</p> <p>F. Evaluate methods for measuring and controlling equity-based exposure associated with embedded options</p> <p>G. Describe the roles of rating agencies, analysts and regulators together with their methods and impact on insurance companies</p>	
Syllabus Resources	
<ul style="list-style-type: none"> <li>• ILA-C104-07 (formerly 8IU-310-04), Valuation of Living and Death Benefit Guarantees for Variable Annuities</li> <li>• ILA-C115-07, <i>The New Corporate Finance: Where Theory Meets Practice</i>, Chew, Third Edition, 2001, Chapter 29</li> <li>• ILA-C116-07 (formerly 8E-704-04), Mapping of Life Insurance Risks</li> <li>• ILA-C117-07 (formerly 8E-705-04) – Moody’s Looks At Risk Management and the New Life Insurance Risks</li> <li>• ILA-C118-07 (formerly 8IC-308-00) Regulators’ Perspective on Actuarial Opinions and Valuations</li> <li>• Specialty Guide on ERM, <a href="http://www.soa.org/library/professional-actuarial-specialty-guides/enterprise-risk-management/2005/august/spg0605erm.pdf">http://www.soa.org/library/professional-actuarial-specialty-guides/enterprise-risk-management/2005/august/spg0605erm.pdf</a></li> <li>• “Standard &amp; Poor’s Enterprise Risk Management Evaluation of Insurers”, Ingram, Risk Management, March 2006, <a href="http://www.soa.org/library/newsletters/risk-management-newsletter/2006/march/rmn0603.pdf">http://www.soa.org/library/newsletters/risk-management-newsletter/2006/march/rmn0603.pdf</a></li> </ul>	

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Exam: ILA - CSP	TOPIC: Professional Considerations
Learning Objectives	
<b>10. The candidate will understand the professional standards addressing financial reporting and valuation.</b>	
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"> <li>• <i>Valuation of Life Insurance Liabilities</i>, Lombardi, Fourth Edition, 2006, Chapter 15</li> <li>• ILA-C119-07 (formerly 8I-309-01), Chapter 19 of <i>Life and Accident and Health Insurance Accounting</i>, Management Reports and Reports to Regulatory Bodies</li> <li>• ILA-C120-07 (formerly 8E-703-04), SEC Implements Internal Control Provisions at Sarbanes-Oxley Act; Adopts Investment Company R&amp;D Safe Harbor</li> <li>• "Actuarial Aspects of SOX 404", 12/04 Financial Reporter #59, <a href="http://www.soa.org/library/newsletters/financial-reporter/2004/december/frn0412.pdf">http://www.soa.org/library/newsletters/financial-reporter/2004/december/frn0412.pdf</a></li> <li>• “Responsibilities of the Actuary for Communicating Sarbanes-Oxley Control: Effectiveness in Accordance with Actuarial Standards of Practice”, 12/04 Financial Reporter #59, <a href="http://www.soa.org/library/newsletters/financial-reporter/2004/december/frn0412.pdf">http://www.soa.org/library/newsletters/financial-reporter/2004/december/frn0412.pdf</a></li> <li>• ASOP 41, Actuarial Communications, <a href="http://www.actuarialstandardsboard.org/pdf/asops/asop041_086.pdf">http://www.actuarialstandardsboard.org/pdf/asops/asop041_086.pdf</a></li> <li>• ASOP 21 Responding to Or Assisting Auditors or Examiners In Connection with Financial Statements for All Practice Areas, <a href="http://www.actuarialstandardsboard.org/pdf/asops/asop021_095.pdf">http://www.actuarialstandardsboard.org/pdf/asops/asop021_095.pdf</a></li> </ul>	