

# COURSE STRATEGY GUIDE

## CP 321 – Disability, Long-Term Care, and Long-Duration Health Contracts

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This Course Strategy Guide provides an overview of CP 321 – Disability, Long-Term Care, and Long-Duration Health Contracts, a cross-practice course covering long-duration health contracts including but not limited to disability insurance and long-term care insurance. It is intended to help the candidate understand the objectives of this course and to provide a guide for how to prepare for the course assessment. Please note that while this Guide can be a valuable aid in preparation, the material in this Guide will not be tested.

### I. Purpose of this Course

This course covers the design, rate development, valuation, reporting, and risk management of a variety of long duration contracts. These include disability income, long-term care, retiree medical, and a variety of medical coverages where the insurer is obligated to keep the contract in force as long as the policyholder pays the required premium and remains alive. These types of contracts may cross practice areas. This course is suitable for actuaries working on individual disability income, long-term care insurance, group disability insurance, Medicare Supplement (in the US), critical illness type products, or retiree group medical and life benefits.

The key theme of this course is that long duration projections frequently require collaboration of multiple subject matter experts and that awareness of the pitfalls of these types of contracts should be considered before undertaking any actuarial work as it may be decades before the ultimate contract liabilities are fully determined.

### II. Recommended Approach in Preparing for the Course Assessment

The recommended study approach is to first read the complete Course Strategy Guide. Then read the descriptions of the learning objectives and learning outcomes, found in the course syllabus, to get an overview of what you are expected to learn as you work through the syllabus materials. Finally, read the syllabus study materials in the order described in this document.

The preferred study style will vary for each candidate; but it will be helpful to read through the whole syllabus (and perhaps take notes) prior to focusing on summarizations of the material and prior to working practice problems. The topics are related and observing the broader perspective will help you understand the material as a whole and help you spot connections between the syllabus items. **Yellow** highlighting in this Guide indicates more challenging items where candidates should spend additional time after the initial read-through of the course material to ensure they master the key concepts and calculations presented in these items.

### III. Exam Syllabus Learning Objectives and Learning Outcomes

This course provides an overview of long-duration group and health contracts. These contracts include long-term care insurance, disability income insurance, retiree medical benefits, and certain forms of supplemental medical coverage. Candidates will study the types of contracts and how rates are determined. Candidates will then review reserving methods and financial reporting standards. There is a section on asset adequacy and the importance of aligning the duration of assets and liabilities. Finally, the course concludes with a section on retiree group benefits which is intended to help candidates understand liability determination and reporting processes for a plan sponsor's retiree benefits program.

Six topics are covered in this course:

1. Plan and Product Provisions
2. Manual Rates
3. Reserving
4. Insurer Financial Statements
5. Asset Adequacy
6. Retiree Group Benefits

Details of the learning objectives, learning outcomes, and study materials associated with the learning outcomes are provided in the course syllabus. The syllabus also notes the learning outcomes supported by each reading. You should focus on the learning outcomes as you review each topic. In addition, this Guide provides additional context on the purpose and interrelationships of the readings. The topic titles in the syllabus also indicate the approximate portion of exam points selected from each topic.

#### **Topic 1 - Plan and Product Provisions & Topic 2 – Manual Rates**

Topics 1 and 2 should be read in an integrated fashion. Topic 1 describes the plan and product provisions while topic 2 is the manual rating of them. This is core material; candidates who took the GH 101: Benefits and Pricing and GH 201: Valuation and Regulation courses will note parallel concepts and approaches between this course and those foundational GH courses for short duration contracts. The approach suggested in this Guide is organized by product, and candidates should note that issues in pricing or experience monitoring for one product are often applicable to all long duration products.

First read,

- *Individual Health Insurance*, Leida, Hans, 3<sup>rd</sup> Edition, 2026
  - Ch. 2: The Products (Sections 2.7-2.9)

This reading provides an overview of individual products for disability income, business protection coverage, and long-term care (LTC) insurance.

Second read in the order below,

- *Group Insurance*, Skwire, Daniel D., 8<sup>th</sup> Edition, 2021

- Ch. 9: Government Health Plans in the United States, pp. 149-153
- Ch. 12: Group Disability Income Benefits
- Ch. 25: Estimating Disability Claim Costs
- Ch. 29: Group Insurance Underwriting, pp. 509-510
- CP321-100-25: Issues to Consider in Self-Funding Long-Term Disability Insurance
- CP321-102-25: Short Term Disability Example
- Issues In Applying Credibility to Group Long-Term Disability Insurance, 2013, pp. 5-15

These readings cover disability income which is frequently split between Short-Term Disability (STD) and Long-Term Disability (LTD). There are material differences in claim frequency and consequently credibility between short and long duration products. Chapter 9 covers Social Security disability which is integrated with private plans in the US. Chapters 12 and 25 then describe the basic plan provisions and manual rate setting. Chapter 29 and the “Issues to Consider in Self-Funding” note each have a couple of pages on underwriting and funding methods.

The “Short Term Disability Example” provides examples of setting manual rates and experience rating for disability income (DI). You should skim the first time and plan to come back and understand how to complete the examples as you may be expected to replicate them in an assessment setting. The “Issues in Applying Credibility to Group Long-Term Disability Insurance” article further supplements with issues in credibility for LTD.

Third read in order below,

- Group Life Waiver Study Based on 2009 – 2015 Canadian Group LTD Termination Experience Report, CIA Study, Jan 2020, pp. 4-25, Appendix G (background only)
- Best Estimate Assumptions for Expenses, CIA Educational Note, Nov 2006, pp. 19-39

The “Group Life Waiver Study” provides an example of an industry experience study. You are not expected to memorize the results of the study but should understand issues and considerations when conducting one. This serves as an example of an industry study across all products in this course. Similarly, the CIA note on expenses describes how to do an expense study and considerations which are applicable across all products.

*Note: The “Best Estimate Assumptions for Expenses” note has been designated by the CIA as “Archived” but it is the current version candidates should study.*

Fourth read in order,

- *Insuring Long-Term Care*, Eaton, Robert, et al., 2<sup>nd</sup> Edition, 2024
  - Ch. 2: History of Long-Term Care Products
  - Ch. 4: Hybrid Life and Long-Term Care Products
  - Ch. 9: Long-Term Care Insurance Experience Monitoring
  - Ch. 10: Long-Term Care Insurance Premium Rate Increases
- ASOP 18: Long-Term Care Insurance (excluding Appendices)
- CP321-103-26: Long-Term Care Insurance Multistate Rate Review Framework, NAIC, Dec 2025, Sections V - VI

The *Insuring Long-Term Care* textbook is the basis for the LTC material and the chapters should be read in order. It describes LTC products, how they have evolved over time, how experience is reviewed and used to support rate increases, and the current regulatory approach to premium rate changes. The ASOP addresses professional standards and expectations for actuaries working on LTC insurance. The NAIC LTCI Multistate Rate Review Framework describes a regulatory structure that introduces additional controls on LTC rates and rate changes. Given the potential for changes to guidance, candidates should focus on the overarching formulas and concepts and note that in general, assessment grading will consider both syllabus materials and current actuarial practice in determining the quality of a candidate's response.

Fifth read in any order,

- Critical Illness Turns 40!, Health Watch, Sep 2023
- CP321-101-25: Pricing Medicare Supplement Benefits, 2020, Sections II, IV, V, Appendix

These readings describe two additional long duration products. Critical illness is sold to supplement underlying medical coverage and is used as an example of similar products such as cancer coverage. Medicare Supplemental is US specific and is sold to members covered by Medicare. Each article describes the product and pricing.

Sixth read,

- *Individual Health Insurance*, Leida, Hans, 3<sup>rd</sup> Edition, 2026
  - Ch. 4: Managing Antiselection, Sections 4.1-4.5

This chapter discusses the underwriting processes and antiselection considerations for contracts issued to individuals. In particular, candidates should be aware that individuals have information about their health status, lifestyles, hobbies, etc. that impact the likelihood that the individual will file a claim for disability or LTC coverage. In order to appropriately price for these known risks, insurers conduct an underwriting process prior to issuing coverage and may adjust the coverage or rates based on this information. There are similarities to the underwriting process for individual life insurance, but the specific levers and impacts will reflect the impact of this information on anticipated claim costs for the specific insurance contract being reviewed. Section 4.4 and 4.5 have some complexity and you will want to return in your second pass to study in more detail.

Seventh read,

- ASOP 23: Data Quality (excluding Appendices)
- ASOP 41: Actuarial Communications (excluding Appendices)

Topic 2 concludes with the applicable Actuarial Standards of Practice (ASOPs). These are included to highlight the considerations and critical analyses actuaries are expected to bring to the profession. While the ASOPs may be specific to actuarial practice in the United States, actuaries world-wide are expected to bring similar levels of professionalism, rigor, and critical thinking to the work they undertake. Similar standards of practice exist in other countries and would emphasize similar practices and considerations as the ASOPs.

ASOP 23 and 41 are included here and may be used for questions on any part of the assessment in relation to any syllabus material. Actuaries need to always consider data quality and communications in their work.

### **Topic 3 – Reserving**

Valuation of insurance liabilities is a key actuarial competency. This section of the syllabus reviews techniques that may be used to develop estimates of insurance liabilities for long-duration contracts. This includes both non-claim and claim reserves. Candidates should be mindful of applicable standards of practice as they review this section and considerations specific to long-duration contracts. For candidates who have taken the group and health practice area courses, this is similar to Topic 1 in GH 201 but for long duration contracts.

First read,

- *Group Insurance*, Skwire, Daniel D., 8<sup>th</sup> Edition, 2021
  - Ch. 40: Claim Reserves for Long-Term Benefits

This chapter provides a good overview of the basics of long-term claim reserves. It is necessary to understand the considerations when establishing these reserves and when each reserving technique is preferred, which is the focus of this chapter.

Second read,

- *Individual Health Insurance*, Leida, Hans, 3<sup>rd</sup> Edition, 2026
  - Ch. 6: Reserves and Liabilities

There is some overlap between this chapter and the *Group Insurance* chapter but this provides greater detail on unearned premium reserves, policy reserves, and claim reserves. You will want to return on a second pass to work through the math examples.

Third read,

- *Insuring Long-Term Care*, Eaton, Robert, et al., 2<sup>nd</sup> Edition, 2024
  - Ch. 8: Long-Term Care Insurance Valuation

This chapter focuses on long term care reserving.

Fourth read,

- CP321-104-25: Practices for Preparing Health Contract Reserves
- CP321-105-25: Supplemental Comments (March 2022) for CP321-104-25

Candidates should then review the guidance on the regulatory and financial reporting considerations for health contract reserves. The second study note comments on what has changed with ASU 2018-12 which was adopted after the American Academy of Actuaries study note was written.

## **Topic 4 – Insurer Financial Statements**

Topic 4 on financial statements is closely tied to the reserving topic. The primary reason actuaries develop estimates of insurance liabilities (or reserve estimates) is for incorporation into the insurer’s financial statements. There are varying considerations and guidance on how to develop these estimates depending on the purpose of the financial statements. In general, statutory statements are used by regulators to ensure insurer solvency and that policyholder claims will be paid as promised. Statements prepared under US GAAP or IFRS, by comparison, are typically used for disclosure to investors and creditors, and are intended to present a fair picture of the emergence of company earnings over time.

Actuaries also develop projections for company management. These estimates may deviate from public guidance and may be conducted more frequently to inform internal decisions.

The goals of this section are for the candidate to understand how to interpret financial statements, understand key differences depending on the audience, and apply this knowledge to business cases – which may include inferences around potential stakeholder actions and concerns. For candidates who have taken the group and health practice area courses, this is similar to Topic 2 in GH 201 but for long duration contracts.

First read,

- CP321-107-25: Health Insurance Accounting Basics for Actuaries, Sections 4-7
- CP321-106-25- Excerpt from AAA Application of ASU 2018-12 to the Accounting for Long Duration Contracts under U.S. GAAP (Section IV only)

“Health Insurance Accounting Basics for Actuaries” serves as the basic text for this topic. Financial concepts of date-of-service vs financial statement, and management reporting vs tax reporting are discussed. GAAP vs STAT accounting are then described. The same material except for section 7, which discusses IFRS, is also included in the GH 201U syllabus as it is applicable to both short and long duration contracts.

After CP321-107-25 was written in 2018, the American Academy of Actuaries (AAA) issued an exposure draft of a Practice Note, “Application of ASU 2018-12 to the Accounting for Long-Duration Contracts under U.S. GAAP” in 2022. To the extent any conflicts exist between the ASU 2018-12 material in Health Insurance Accounting study note and the material in the AAA study note, please consider the AAA study note to be more accurate.

Second read,

- **IFRS 17 Insurance Contract Examples**

This document is an Excel model demonstrating how the basics of IFRS 17 are applied to a simple insurance product (renewable Term 10 product) using the General Measurement Model (GMM) approach. Candidates should be prepared to replicate the mechanics of IFRS 17 using this spreadsheet in an assessment setting.

## **Topic 5 – Asset Adequacy**

Long duration contracts involve commitments to policyholders that span decades. Given the long time horizon, it is critical insurers appropriately plan for funding these benefits in the future. The goal of this section is to ensure candidates are aware of the key financial and operational considerations with these contracts, especially as they pertain to matching the duration of assets and liabilities.

First read,

- CP321-108-25: ALM for Life, Annuities, and Pensions, Sections 2, 5, and 6

This study note on Asset Liability Matching was custom written for the QFI track and we are using sections 2, 5, and 6 here to provide the basics of ALM. Throughout the note, you will see references to R code. You are NOT expected to know how to use R or apply those examples. However, you are expected to be able to interpret and perhaps replicate in an assessment environment the formulas embedded in the study note. Depending on your prior courses, this may be your first time using duration and convexity in the FSA exams and you will definitely want to dedicate some time to understanding in a second pass.

Second read,

- CP321-109-25: Chapter 3 of Modelling in Life Insurance – A Management Perspective, 2016

This study note provides supplemental information to the ALM note on cash flow modeling as part of required asset adequacy testing.

Third read,

- ASOP 22: Statements of Actuarial Opinion Based on Asset Adequacy Analysis for Life Insurance, Annuity, or Health Insurance Reserves and Other Liabilities (excluding Appendices)

This ASOP provides guidance to actuaries when performing actuarial services with respect to providing a statement of actuarial opinion relating to asset adequacy analysis for life insurance, annuity, or health insurance reserves and other liabilities.

## **Topic 6 – Retiree Group Benefits**

Retiree group benefits can include medical, dental, vision, and pharmaceutical benefits in addition to life and disability coverage issued on a group basis. The intent of the final topic is for candidates to develop an understanding of why retiree group benefits are provided, how these benefits may be valued, the impact of changes in benefits or valuations on plan sponsor financial statements, and key assumptions involved in valuing these benefits.

First read,

- CP321-110-25: Ch. 24 of *Morneau Shepell Handbook of Canadian Pension & Benefit Plans*, 17<sup>th</sup> Edition, 2020

This provides an overview of post-retirement and post-employment benefits as a base for the more detailed material.

Second read in order,

- CP321-113-25: IAS 19: A Primer on Non-Pension Benefit Accounting for Valuation Actuaries
- CP321-111-25: IAS19

The “Primer on Non-Pension Benefit Accounting for Valuation Actuaries” study note was custom written for the course syllabus. It describes actuarial valuation methods, assumptions, benefit cost, and determination of financial entries. It is intended that the candidate read this study note prior to the IAS 19 standard. Throughout this study note, references will be made to corresponding IAS 19 paragraphs discussing the same material. The study note can then be used as a reference guide when reviewing the more detailed standards of IAS 19. You will want to return to this study note on a second pass to study the mathematical examples in more detail, interpret the results, and may be asked to replicate in an assessment setting.

Third read in order,

- Health Care Trend Rate, pp. 4-17, CIA Educational Note, May 2012
- Setting the Accounting Discount Rate Assumption for Pension and Post-Employment Benefit Plans, CIA Educational Note, Dec 2020

These CIA educational notes provide additional detail on selecting trend and discount rate assumptions. You will need to synthesize this additional guidance with the basics presented in the primer, and how selection of these assumptions can impact the overall projected benefit liability.

Fourth read,

- Practice-Specific Standards for Non-Pension Employee Future Benefit Plans, CIA Standards of Practice, Dec 2023

Next, review the Canadian standards of practice for post-employment benefits. These are included to highlight the considerations and critical analysis actuaries are expected to bring to the profession. While the CSOPs may be specific to actuarial practice in Canada, actuaries world-wide are expected to bring similar levels of professionalism, rigor, and critical thinking to the work they undertake. Similar standards of practice exist in other countries and would emphasize similar practices and considerations as the CSOPs.

Fifth read in any order,

- CP321-114-25: New Approaches Needed to Save Retiree Benefits

- CP321-115-25: Mercer Quick Poll: 2022 Post-Retirement Benefit Trends – Supporting a Challenging Labour Environment
- CP321-116-25: Retiree Health Benefits: Going, Going, Nearly Gone?

These articles discuss the challenges and current state of retiree benefits. Candidates should be mindful of how these challenges may interact with selection of assumptions and the corresponding valuation of retiree group benefits.

#### **IV. Guidance for Assessment**

In general, questions on the course assessment will consider a scenario or project that actuaries may encounter. The questions will have multiple parts; it is common for early parts to be relatively straight-forward and help develop the context for latter parts. Latter parts of questions frequently require the candidate to perform an analysis or make a recommendation given a particular business context. Note that a solution to a problem presented within the study materials is appropriate for the context used within those study materials but may not be appropriate for the context of the assessment. Since the assessment is focused on the demonstration of critical thinking, the candidate must learn how to take the learnings from one situation and apply them to a different situation. Candidates are expected to apply the techniques and insights that they learn from the syllabus study materials to new real-world problems. The candidate uses the study material as a tool to gain insights about the learning objectives and learning outcomes. These insights are expressed in a solution to tasks that require the demonstration of critical thinking.

The supplemental materials for this course include guided examples and past exam problems that have examined similar topics. The candidate is wise to review these questions and treat them as examples of the types of questions that will appear on the course assessment.

It also is important to note that in practice, actuarial problems typically have a level of uncertainty. As such, there may not be a single correct answer to the questions posed by the assessment. In these cases, the work and assumptions that candidates provide to illustrate their reasoning is at least as important as the final answer or recommendation provided to the question.

#### **V. Syllabus Updates**

New Readings:

- IFRS17 Insurance Contract Examples has been added to provide a numerical illustration of how IFRS17 accounting functions in practice

Updated Readings:

- The NAIC's LTCI Multistate Rate Review Framework has been updated to incorporate the NAIC's final recommendations as of December 2025

- Readings from *Individual Health Insurance* have been updated to use the 3<sup>rd</sup> Edition of the text

Removed Readings:

- Comparison of IAS 19, Rev 2011 with FASB ASC 715 has been removed given overlap with the IAS 19 Primer