

GI 101 – Ratemaking and Reserving

Nov 2025/Mar 2026/Jul 2026

This Course Strategy Guide provides an overview of GI 101, to help the candidate understand the essence of this course and to provide a guide for how to prepare for the examination of this course. However, while this Guide can be a valuable aid in preparation, the material in this Guide will not be tested.

I. Purpose of this Course

The purpose of GI 101 is to provide candidates with the foundational knowledge needed for general insurance actuaries, including:

- The key considerations for and key concepts underlying general insurance actuarial work,
- Preparing claims and exposure data for general insurance actuarial work,
- Calculating and evaluating projected ultimate values,
- Financial reporting of the provision for unpaid unallocated claims adjustment expenses,
- Trending procedures as applied to ultimate claims, exposures and premiums, and
- Fundamental ratemaking techniques of general insurance.

GI 101 should be taken prior to GI 201, GI 301, and GI 302.

II. Exam Syllabus Learning Objectives and Learning Outcomes

GI 101 focuses on seven topics:

- 1. Introduction and Key Considerations
- 2. Preparing Claims and Exposure Data for Actuarial Work
- 3. Projecting Ultimate Claims
- 4. Financial Reporting
- 5. Trending
- 6. Ratemaking
- 7. Analyze and evaluate real-life scenarios

Details of the learning objectives, learning outcomes and syllabus study materials associated with the learning outcomes for each of the seven topics are summarized in Appendix A.

These topics are chosen to provide an understanding of the foundational knowledge needed for general insurance actuaries.

<u>GI 101 – Ratemaking and Reserving</u> Nov 2025/Mar 2026/Jul 2026

In addition, the first part of each chapter in the Friedland textbook describe detailed learning objectives that are the basis for the key learnings for that chapter. It is useful to read these statements prior to reading the contents of each chapter, but they are a good reference after the chapter has been read as well.

Topic 1 provides important background information. A solid understanding of this topic is key to provide context for the rest of the syllabus.

Topic 2 covers foundational information on claims and exposures (premiums) that are essential for understanding the remaining topics of this syllabus. This topic should be well understood before proceeding to the remaining topics, and candidates may need to refer to the chapters in this topic while working through other topics. For example, adjusting premiums for past rate changes is an important part of the expected method in Topic 3 and GI ratemaking in Topic 6.

Topic 3 covers the estimation of ultimate claims. This topic needs to be well understood as it is the key building block for estimating claim liabilities for financial reporting (Course GI 201) and for GI ratemaking (Topic 6). Candidates need to understand how to calculate ultimate claims, and how various internal and external changes can affect the ultimate claims estimates for the various methods. Selecting ultimate claims is an important part of the GI actuary's role for both reserving and ratemaking purposes.

Topic 4 covers the unpaid unallocated claims adjustment expense provision needed for financial reporting purposes.

Topic 5 covers trending for claims and exposures. This topic is important information that's related to Topic 3 and Topic 6.

Topic 6 covers basic GI ratemaking, including the expense, profit, contingencies, catastrophe and large claims components. This topic relies on concepts from Topic 3 and Topic 5, so candidates should have a good understanding of those topics prior to Topic 6.

Topic 7 does not cover anything that isn't already covered in Topics 1 through 6. This topic focuses on the various lines of business examples provided in Appendices A through F in the Friedland textbook. These examples serve as a means for candidates to follow along with the descriptive details in the various chapters, and a great way to work through the various calculations in Topics 1 through 6 to help reinforce knowledge.

<u>GI 101 – Ratemaking and Reserving</u> Nov 2025/Mar 2026/Jul 2026

Topic 1: Introduction and Key Considerations

Topic 1 provides key foundational information for the rest of the syllabus. While the exam committee generally does not create items that are solely based on this topic, many items use important relationships and concepts in building items that focus on other topics of the syllabus. For example, the formulas presented in section 3.1.3 of the textbook are required for many of items that are based on topics 3 and 4 of the syllabus.

The Topic 1 syllabus readings include Chapter 2 (from Part 1) and Part 2 in the Friedland text as well as the Actuarial Standards of Practice No. 25, Credibility Procedures. It is recommended that candidates approach this topic in chapter order in the Friedland textbook. In addition, the Part 1 Introduction and Part 2 Introduction sections of the textbook provide the important introductions to the contents of each part and should be understood as background information by the candidates. These chapters in the Friedland textbook cover the detailed explanation of ultimate claims, claims data, qualitative information required for actuarial work, background information judgment that are relevant to actuarial work.

It is recommended that candidates understand Topic 1 before proceeding to the other six topics, in particular, Topic 2.

Topic 2: Preparing Claims and Exposure Data for Actuarial Work

Topic 2 covers the two primary sources of data used in actuarial work, claims and exposures. This topic is foundational for the rest of the syllabus, as it is necessary to know how development triangles for claims and counts are constructed. In addition, it is necessary to understand how premiums and exposures are earned, as well as adjustments that may be required when relying on historical premiums and exposures when determining ultimate claims and when conducting a ratemaking exercise.

It is recommended that candidates understand Topics 1 and 2 before proceeding to the remaining 5 topics. Furthermore, reading about Topic 3 should follow understanding Topics 1 and 2.

Topic 3: Projecting Ultimate Claims

Topic 3 contains detailed descriptions and numerous examples of the most frequently used, basic methods for estimating ultimate claims for GI. Chapters 15 through 19 in the Friedland textbook describe in detail the five projection methods. Each of these methods rely on patterns

<u>GI 101 – Ratemaking and Reserving</u> Nov 2025/Mar 2026/Jul 2026

and relationships in historical claims, counts and/or exposures to predict future claims, and as a result, the fundamental understanding of Topics 1 and 2 is necessary for this Topic.

Chapters 20 and 21 include material on how internal and external changes can affect the various methods for estimating ultimate claims, and how actuaries adjust and/or account for such changes. The importance of this material is to understand how the various methods for estimating ultimate claims perform under varying conditions to be able to recommend appropriate methods to select in certain circumstances.

Chapter 22 focuses on evaluating and selecting ultimate claims, and therefore requires a comprehensive understanding of chapters 15 through 21.

In addition to chapters 15 through 21, this topic also relies on the various examples provided in Appendices A, B, C, and F of the Friedland textbook. These examples provide a great source for reinforcing the candidate's understanding of Topic 3 and can be used a supplement when reading each chapter in this topic.

It is recommended that candidates understand Topic 3 before proceeding to Topics 4 and 6.

Topic 4: Financial Reporting

Topic 4 covers the estimation of unpaid unallocated loss adjustment expenses (ULAE) (chapter 23 in the Friedland textbook). The importance of this topic is to understand the methods used to determine the unpaid ULAE. Unlike claims, ULAE are not typically projected to an ultimate value for financial reporting purposes and are instead estimated directly as a liability. Candidates need to understand the various provisions that are included in the total claim liability carried on an insurer's financial statements.

It is recommended that candidates understand Topic 3 before proceeding to Topic 4.

Topic 5: Trending

Topic 5 covers trending procedures and calculating trend factors for claims (chapter 26 in the Friedland textbook) and exposures (chapter 27 in the Friedland textbook). Candidates should review chapter 7 in the Friedland textbook as an introduction to the subject of trend.

Claims trend is included with the various methods used in estimating ultimate claims discussed in Topic 3, so candidates might want to review those methods where claims trend is used. In Topic 6, trending procedures will be discussed in the context of expenses (chapter 30), and loadings for large claims (chapter 31).

<u>GI 101 – Ratemaking and Reserving</u> Nov 2025/Mar 2026/Jul 2026

Chapter 26 can be covered either in parallel or following Topic 3. Chapter 27 should be covered prior to Topic 6. In addition, Appendices A through F of the Friedland textbook provide examples of the application of the claims and exposure trends in this Topic.

Topic 6: Ratemaking

Topic 6 covers the basic ratemaking topics for GI pricing. Chapters 30 through 32 from Part 7 of the Friedland textbook are covered in this Topic. Candidates are reminded that the introduction to Part 7 is part of the required reading, and also serves as good background information to provide context for chapters 30 through 32.

Chapter 30 covers the expenses and profit and contingencies component of GI ratemaking. Candidates need to understand how the various expenses are determined, as well as any trending procedures that may be needed.

Chapter 31 covers the catastrophes and large claims component of GI ratemaking. Candidates need to understand how these various provisions are determined, as well as any trending procedures that may be needed.

Chapter 32 covers the basic GI ratemaking approaches used to price GI products. Candidates need to understand how ultimate claims are determined (Topic 3), how to apply trend (Topic 5), as well as the provisions for expenses and profit and contingencies, and provisions for catastrophes and large claims covered in chapters 30 and 31. Candidates may also need to review the exposures and premiums concepts from chapters 12 and 13 with chapter 32.

It is recommended that candidates understand the concepts from Topics 1, 2, 3, and 5 before reading the syllabus for Topic 6.

Topic 7: Analyze and evaluate real-life scenarios

Topic 7 covers examples provided in the Appendices of the Friedland textbook. These examples provide a great source for reinforcing the candidate's understanding of Topics 3 through 6. They can be used a supplement when reading each chapter in this topic. Alternatively, they can also be reviewed to confirm the knowledge learned in Topics 3 through 6.

Topic 7 should be covered either in parallel or following Topics 3 through 6.

<u>GI 101 – Ratemaking and Reserving</u> Nov 2025/Mar 2026/Jul 2026

III. Recommended Approach in Preparing for the Course Assessment

Our recommended study approach is to first read the descriptions of the Learning Objectives and Learning Outcomes and then read the syllabus study materials in the order presented for each topic section. The recommended order is purposeful.

Keep in mind that each exam question is based on one, or a combination, of the Learning Objectives and Learning Outcomes. The candidate should be very familiar with the Learning Outcome statements as described in the syllabus and repeated in this document. These Learning Outcome statements were the first ingredient in developing the syllabus and guide the examination committee when writing questions (items). The Learning Objectives set out the cognitive level needed to pass this exam and will also provide an indication of what the candidates are expected to get out of the readings.

The syllabus readings build the candidate's knowledge, and each reading was selected to explain or illustrate one or more Learning Objectives. While studying the syllabus material candidates may want to consider both the organizational approach provided by this document and to refer to the Learning Objectives to remain focused on the educational goals being tested by this exam.