

# GI 101 – Ratemaking and Reserving

Nov 2025/Mar 2026/Jul 2026

# Important Course Information:

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.
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.
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	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: INTRODUCTION AND KEY CONSIDERATIONS (0% - 6%)

## Learning Objectives

The candidate will understand the key considerations for and key concepts underlying general insurance actuarial work.

## **Learning Outcomes**

- a) Identify sources of professionalism requirements and good practice
- b) Demonstrate knowledge of good practice related to actuarial work
- c) Use the actuarial control cycle to frame actuarial work
- d) Understand the components of ultimate values
- e) Explain how estimates of ultimate values are used
- f) Demonstrate the importance of understanding key terminology and interrelationships
- g) Identify different types of data used for actuarial work
- h) Explain the responsibilities of the actuary related to data
- i) Describe how and why data are segregated and aggregated
- j) Describe qualitative information required for actuarial work
- k) Understand the sources of data and information for actuarial work
- I) Understand credibility as used for actuarial work
- m) Explain the application of trend adjustments in actuarial work
- n) Illustrate the types of trend that influence the future cost of claims, expenses, and premiums
- o) Identify the actuary's responsibilities with regards to documentation for actuarial work
- p) Describe the role of professional judgment in actuarial work

Resources	Learning Outcomes
Fundamentals of General Insurance Actuarial Analysis, J. Friedland, 2 <sup>nd</sup> Edition, 2022	1a-p
Chapter 2	
Part 2: Key Concepts (excluding Chapter 10)	
Actuarial Standards of Practice, Actuarial Standards Board of the American Academy of Actuaries, <u>No. 25,</u> <u>Credibility Procedures, 2013</u>	11

## 2. Topic: PREPARING CLAIMS AND EXPOSURE DATA FOR ACTUARIAL WORK (8% - 18%)

### **Learning Objectives**

The candidate will demonstrate the ability to prepare claims and exposure data for general insurance actuarial work.

#### **Learning Outcomes**

- a) Create development triangles of claims and counts from detailed claim transaction data
- b) Describe the different types of exposures used for conducting actuarial work
- c) Calculate written, earned, in-force and unearned premiums for portfolios of policies with various policy terms and earnings patterns
- d) Adjust historical earned premiums to current rate levels
- e) Understand types of changes influencing average premium levels
- f) Describe adjustments needed to estimate ultimate premiums

Resources	Learning Outcomes
Fundamentals of General Insurance Actuarial Analysis, J. Friedland, 2 <sup>nd</sup> Edition, 2022	2a-f
• Part 3: Preparing the Data (excluding 12.6.4 and 12.6.6)	
<ul> <li>Appendices A through C and F (excluding Sections A.3.6, A.5)</li> </ul>	

## 3. Topic: PROJECTING ULTIMATE CLAIMS (42% - 56%)

#### Learning Objectives

The candidate will know how to calculate and evaluate projected ultimate values.

#### Learning Outcomes

- a) Identify considerations for selecting methods for estimating ultimate claims
- b) Identify and describe good practice related to projecting ultimate claims with regard to required data, large claims, reinsurance recoverables, and comparison of current to prior actuarial work
- c) Identify the types of development triangles that can be used for investigative testing
- d) Analyze development triangles for investigative testing
- e) Describe the key assumptions underlying the following projection methods: development method, frequencyseverity methods, expected method, Bornhuetter Ferguson method, Benktander method, Cape Cod method, Generalized Cape Cod, and Berquist-Sherman adjustments to the development method
- f) Demonstrate knowledge of good practice related to projecting ultimate values
- g) Estimate ultimate values using the methods cited in (e)
- h) Explain the effect of changing conditions on the projection methods cited in (e)
- i) Assess the appropriateness of the projection methods cited in (e) in varying circumstances
- j) Evaluate and justify selections of ultimate values based on the methods cited in (e)

Resource	25	Learning Outcomes
Fund	lamentals of General Insurance Actuarial Analysis, J. Friedland, 2 <sup>nd</sup> Edition, 2022	За-ј
	<ul> <li>Part 4: Basic Methods for Estimating Ultimate Claims (excluding 15.8, 16.6, 16.7, 17.8, 18.8, 19.6, 20.6, 21.3.5, and 21.3.6)</li> </ul>	
	<ul> <li>Appendices A through C and F (excluding A.3.6 and A.5)</li> </ul>	

## 4. Topic: FINANCIAL REPORTING (4% - 12%)

## Learning Objectives

The candidate will understand financial reporting of claim liabilities with respect to unpaid unallocated loss adjustment expenses.

## Learning Outcomes

- a) Describe the key assumptions underlying ratio and count-based methods for estimating unpaid unallocated loss adjustment expenses
- b) Estimate unpaid unallocated loss adjustment expenses using ratio and count-based methods
- c) Evaluate and justify selections of unpaid unallocated loss adjustment expenses based on ratio and count-based methods

Resources	Learning Outcomes
<ul> <li>Fundamentals of General Insurance Actuarial Analysis, J. Friedland, 2<sup>nd</sup> Edition, 2022</li> <li>Chapter 23 (excluding section 23.4)</li> </ul>	

## 5. Topic: TRENDING (6% - 16%)

#### **Learning Objectives**

The candidate will understand trending procedures as applied to ultimate claims, exposures and premiums.

#### Learning Outcomes

- a) Identify and describe the influences of portfolio changes on claim frequency and severity
- b) Identify the time periods associated with trending procedures
- c) Analyze and evaluate trend for claims (including frequency, severity, and pure premium) and exposures (including inflation-sensitive exposures and premiums)
- d) Choose trend rates for claims (frequency, severity, and pure premium) and exposures
- e) Calculate trend factors for claims and exposures

Resources	Learning Outcomes
Fundamentals of General Insurance Actuarial Analysis, J. Friedland, 2 <sup>nd</sup> Edition, 2022	5а-е
Part 6: Trending Procedures	
• Appendices A through C, and F (excluding A.3.6, A.5)	

## 6. Topic: RATEMAKING (10% - 22%)

## Learning Objectives

The candidate will understand how to apply the fundamental ratemaking techniques of general insurance.

#### Learning Outcomes

- a) Quantify different types of expenses required for ratemaking including expense trending procedures
- b) Incorporate underwriting profit and contingency margins in ratemaking
- c) Explain the requirements for loadings for catastrophes and large claims in ratemaking
- d) Calculate loadings for catastrophes and large claims
- e) Apply loadings for catastrophes and large claims in ratemaking
- f) Describe the claim ratio and pure premium methods of ratemaking
- g) Calculate indicated rates and rate changes using the claim ratio and pure premium methods
- h) Demonstrate the use of credibility in ratemaking

Resources		Learning Outcomes
Fundan	nentals of General Insurance Actuarial Analysis, J. Friedland, 2 <sup>nd</sup> Edition, 2022	6a-h
•	Part 7: Ratemaking (Chapters 30 through 32)	
•	Appendices A through C, and F (excluding A.3.6, A.5)	

# 7. Topic: ANALYZE AND EVALUATE REAL-LIFE SCENARIOS (included in Topics 2, 3, 5, and 6)

## **Learning Objectives**

The candidate will be able to define an approach for actuarial analyses supporting financial reporting and ratemaking analyses under various real-life scenarios. The candidates will be able to define funding requirements for self-insurers.

## Learning Outcomes

- a) Identify data and information requirements
- b) Conduct investigative testing
- c) Choose projection methods to estimate ultimate values
- d) Estimate ultimate values
- e) Justify selections of ultimate values
- f) Develop reserves for financial reporting

Resources	Learning Outcomes
<ul> <li>Fundamentals of General Insurance Actuarial Analysis, J. Friedland, 2<sup>nd</sup> Edition, 2022</li> <li>Appendices A through C, and F (excluding A.3.6, A.5)</li> </ul>	