

Course 3B General Insurance Syllabus

Item	Unit/Key Performance Objective/Learning Objective
0	General Insurance Overview
1	General Insurance Pricing
1.1	Understand and apply an appropriate actuarial pricing approach for any general insurance class of business or group of risks.
1.1.1	Define and calculate the components of a technical premium, including <ul style="list-style-type: none">▶ Risk premium;▶ Expense loading(s);▶ Reinsurance costs;▶ Profit margin; and▶ Contingency margin (if needed).
1.1.2	Explain the practical considerations that relate to insurance pricing
1.1.3	Recognise the need to price for different levels of risk and the consequences for portfolio performance if no risk based pricing is employed.
1.1.4	Describe the concept of “Sound Rating” and perform Sound Rating calculations, including forecasting the components of technical premiums.
1.1.5	Recognise the difference between “short tail” and “long tail” business for pricing purposes, and to construct practical examples of risk/class breakdown for different types of business.
1.1.6	Explain and contrast the usage of different pricing techniques including: <ul style="list-style-type: none">▶ Simple tabular analysis;▶ Generalised Linear Models (GLMs);▶ Credibility theory; and▶ Data mining / non-parametric approaches. Evaluate the appropriateness and limitations of various pricing techniques for a given scenario, product or set of data.
1.1.7	Evaluate the appropriateness and limitations of various pricing techniques for a given scenario, product or set of data.

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1.1.8	<p>Evaluate GLM analysis, including:</p> <ul style="list-style-type: none"> ▶ How GLM models can be practically used in pricing analysis; ▶ Selection of appropriate error structures and link functions; ▶ Interpretation of residual charts, parameter estimates and other GLM model outputs; and ▶ Identification and correction of errors for given GLM model outputs.
1.1.9	<p>Perform calculations relating to a range of pricing matters, including:</p> <ul style="list-style-type: none"> ▶ Application of experience rating (no claim discounts/claims experience discounts/burner terms/experience rating); ▶ Allowance for excesses and deductibles; ▶ Treatment of granular rating factors, such as geography, vehicle characteristics and occupation; and ▶ Treatment of natural hazards and catastrophes.
1.1.10	<p>Recognise and allow for the key features that relate to long tailed business pricing, including:</p> <ul style="list-style-type: none"> ▶ Linkage with outstanding claim analysis; ▶ Exposure analysis; ▶ Setting and application of economic assumptions; ▶ Rate filing and legislative impacts on compulsory bodily injury products; and ▶ Other product specific features (including public liability insurance, medical defence insurance and claims made policies).
1.1.11	<p>Identify and understand the implications and usage of non-risk considerations in the premium setting process, including:</p> <ul style="list-style-type: none"> ▶ Incorporating competitor information; ▶ Incorporating quote conversion and renewal information; ▶ Incorporating elasticity and optimisation techniques; ▶ Awareness of regulatory restrictions; ▶ Conducting a pricing impact analysis; and ▶ Awareness of other commercial pricing considerations.
1.1.12	<p>Describe the techniques used by reinsurers to price and rate various reinsurance risks and be able to perform basic reinsurance pricing calculations.</p>

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2	Capital Management
2.2	Construct appropriate capital targets for General Insurers including the calculation of regulatory capital requirements and describe the linkages between capital management and an institution's risk management framework.
2.2.1	<p>Describe the key components of an ICAAP:</p> <ul style="list-style-type: none"> ▶ Describe the considerations to be taken into account when setting capital targets; ▶ Demonstrate how an institution may internally assess its capital needs including the linkage between capital and risk management frameworks; and ▶ Describe the reporting requirements relating to an ICAAP including the ICAAP Summary Statement and ICAAP report.
2.2.2	<p>Determine the Prescribed Capital Requirement for a general insurer:</p> <ul style="list-style-type: none"> ▶ Describe the components of the Prescribed Capital Requirement; and ▶ Calculate the components of the Standard Method and determine the Prescribed Capital Amount.
2.2.3	<p>Compare alternative options for capital efficiency including but not limited:</p> <ul style="list-style-type: none"> ▶ Analyse reinsurance structures and apply useful metrics to evaluate alternatives; and ▶ Assess investment strategies and their impact on risk and capital.
2.2.4	<p>Outline the considerations for using the Internal Model-based Method (IMB) to calculate the Prescribed Capital Amount:</p> <ul style="list-style-type: none"> ▶ Describe the key risks of a General Insurer and demonstrate how these can be modelled and aggregated; ▶ Describe the key sources of data used to analyse each major risk faced by a general insurer; ▶ Explain the common limitations of capital models; and ▶ Discuss the regulatory requirements of a Regulatory Capital Model.

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2.2.5	<p data-bbox="332 275 1404 342">Describe the key components of catastrophe modelling and evaluate catastrophe model outputs:</p> <ul style="list-style-type: none"> <li data-bbox="332 369 1141 396">▶ Define commonly used terminology in catastrophe models; <li data-bbox="332 411 1365 478">▶ Outline the main types of natural perils and sources of sources of non-natural perils accumulations; <li data-bbox="332 493 1170 520">▶ Describe sources of data for analysing catastrophe exposure; <li data-bbox="332 535 1336 602">▶ Discuss the main approaches to cat modelling used in vendor models and internal models; <li data-bbox="332 617 1243 644">▶ Outline how catastrophe models can be used by a general insurer; <li data-bbox="332 659 1425 726">▶ Validate the outputs of a catastrophe model and describe potential adjustments for model limitations; and <li data-bbox="332 741 987 768">▶ Calculate insurance concentration risk charge.
2.2.6	Outline the key capital considerations for Injury Schemes including different funding options.
3	Financial Condition Reporting
3.3	Describe general insurance actuarial management techniques used to create appropriate and comprehensive reporting on financial condition.
3.3.1	Outline the requirements of a Financial Condition Report and how this fits into a broader financial condition reporting framework.
3.3.2	Explain the key sources of risk to a general insurer (including operational risk) and discuss common methods to measure and manage them.
3.3.3	Describe how to assess the suitability and adequacy of risk management frameworks.