

財務及保險學系 Department of Finance and Insurance

Course Syllabus (2nd Term, 2017-2018)

Course Title	:	Reinsurance
Course Code	:	RIM3352
Recommended Study Year	:	3
No. of Credits/Term	:	3
Mode of Tuition	:	Sectional Approach
<b>Class Contact Hours</b>	:	3 hours per week
Category in Major Programme	:	Required course – BBA (Hons) Risk and Insurance Management Programme
Prerequisite	:	RIM2201 Principles of Insurance

## **Brief Course Description**

This course aims to provide students with knowledge in business, legal, and financial principles related to reinsurance arrangements and in the practice of analyzing reinsurance portfolios. Contents include: reinsurance needs, nature and functions of reinsurance, methods and types of reinsurance arrangements, analysis of reinsurance portfolio, design of reinsurance programs, reinsurance markets, reinsurance pricing, legal aspects of reinsurance, reinsurance industry, etc. This course is designated as a stream elective for RIM minors and majors.

## <u>Aims</u>

This course is designed to expose the students to the theory and practice of risk management for insurance companies and to understand the Business to Business model in the insurance industry.

## Learning Outcomes (LOs)

On completion of this course, students are expected to:

- 1. Understand the needs and reasons for direct insurance companies to make reinsurance arrangement.
- 2. Understand the nature and the degree of risk being ceded under different types of reinsurance policies.
- 3. Understand the pros and cons of each type of reinsurance policies and arrangement methods.
- 4. Understand the legal and economic implications of key clauses and provisions commonly imposed on reinsurance policies, and appreciate the design of a direct insurance company's portfolio of reinsurance policies.
- 5. Understand Alternative Risk Transfer (ART) and design features of various forms of ART instruments, such as captives, catastrophe bonds, insurance-linked securities (ILS), alternative reinsurance capital.



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- 6. Be able to recognize and identify important new development in the reinsurance industry and its relation with the development of direct insurance markets.
- Be able to comment on the new reinsurance market development using the 7. knowledge that they have learned from the course.

## **Indicative Contents**

# Legal Principles of reinsurance

Nature of reinsurance contract. Subject matter of reinsurance. Insurable interest and other principles in reinsurance. Formation of reinsurance contract. Insolvency of reinsurer and reinsured.

### Environment of Reinsurance

History and development of various types of reinsurance. Lloyd and the London reinsurance market. International reinsurance environment and trends. Business and financial principles. OCI's guidelines for reinsurance arrangement in Hong Kong.

### Analysis of Reinsurance Portfolio and Needs

Geographical distribution of business. Identification and measurement of exposures to large risks. Accumulation of losses out of one event and in a year. Reserve and Possibility of Ruin.

### Design and Arrangement of Reinsurance Programs

Factors influencing the level of retention. Fixing of retention. Acceptable probability of ruin. Scope of reinsurance treaties. Reciprocity and negotiating terms. Treaty wordings. Clauses common to proportional and non-proportional wordings. Stability and international currency clauses.

#### Methods of Reinsurance

Reinsurance pools. Retrocession. Facultative reinsurance. Treaty reinsurance. Proportional reinsurance: quota share and surplus reinsurance. Facultative obligatory reinsurance. Non-proportional: excess of loss, top and drop cover. Risk excess. Stop loss. Buffer excess of loss. Risk distribution of an insurer's portfolio with different reinsurance arrangements. Pros and cons of different reinsurance arrangements.

#### Alternative Risk Transfer

Origins and background of Alternative Risk Transfer. Products and market convergence. Background and function of captive. Forms of Captive. Benefits and costs of captive. Overview of insurance securitization. Benefits and costs of insurance-linked security. Structural features of insurance linked security. Function of catastrophe bond and other insurance-linked security in managing insurance risks (e.g. natural catastrophes, longevity /mortality risk).

## **Teaching Method/Class Activities**

Class activities include lectures, in-class short quizzes for refreshing lecture 1 contents, Q & A and short discussion sessions on material taught, open discussion on current global and local news, issues, and development related to the reinsurance industry. Class participation and the answering of questions raised in class are highly encouraged.



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2. Group presentations are made by students. Student presentations on the current development and new issues in the reinsurance market and its relation with the development of direct insurance markets are used to stimulate students to learn from their peers. Students are encouraged to ask questions to the presenting groups who are responsible for clarifying any unclear issues related to their presentations. The lecturer's comments will be made to students in case any ambiguity remains.

## **Group Presentation**

- 1. Students are required to form teams (each with three students). The presentation should be conducted using PowerPoint or similar programs.
- 2. One to three articles from insurance trade magazine(s) (e.g., from American Underwriter, www.oci.gov.hk, Standard & Poor's Ratings Services/Global Reinsurance Highlight, Reinsurance Association of America, insurance linked securities market reports from www.artmeis.bm,etc) on a particular reinsurance issue happened in Hong Kong or around the world may be selected by each group. A presentation should last for approximately 20 minutes.
- 3. Assessment is based on the clarity of presentation, the significance of the issue, the ability to relate the issue to the materials learned in the course, and the ability to make logical comments.

## **Measurement of Learning Outcomes**

- 1. In-class quizzes and/or mid-term examination will be used to constantly test whether the materials taught in lectures are fully understood by students. Answers to the quizzes and mid-term examination will be delivered to students in a timely fashion to make sure that they learn from their mistakes. (LO1-LO5)
- 2. The final examination is cumulative and covers all the materials taught during the entire term. It may include multiple choice questions that allow a broad coverage of the materials taught in class and comprehensive questions, possibly conceptual or in case format, that test whether the materials taught are effectively learned and appreciated by students. (LO1-LO7)
- 3. Students are required to form individual groups. Each group is responsible for making a term presentation on materials related to reinsurance that they draw from insurance and reinsurance trade magazines and news. Their presentations will be assessed based on whether they can identify important current development and issues in the reinsurance markets in Hong Kong and around the world, how well they comprehend the materials, and whether they are able to make critical comments using the knowledge they have learned in the course. (LO1-LO7)

Assessment	
Attendance and discussion	5%
Quizzes	10%
Midterm Examination	20%
Presentation	15%
Final Examination	50%
Total	100%



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# **Required/Essential Reading**

Note: Given the subject area is developing quickly, it is likely that no single textbook will cover all the material. The lecture notes will draw upon different sources and will not rigidly follow any single one of the textbooks.

## **Recommended/ Supplementary Readings**

Elliott, M.W., B.L. Webb, H.N. Anderson, P.R. Kensicki, *Principles of Reinsurance*, latest edition, Insurance Institute of America.

Erik Banks, Alternative Risk Transfer, Integrated Risk Management through Insurance, Reinsurance and the Capital Markets, Wiley, 2004.

Carter R.L., *Reinsurance* 3rd ed., (Mercantile & General Reinsurance), Reactions Publishing Group, 1995. (Chapters 3, 4, and 5)

*Principles of Reinsurance*, CII Tuition Service, 1998 (Students who are planning to take the CII examination on reinsurance are highly encouraged to read this text for their own good.)

P05 Insurance Law, 2014 Study Text, Diploma in Insurance, CII.

P97 Reinsurance, 2014 Study Text, Diploma in Insurance, CII.

Note: Given the subject area is developing quickly, no single textbook is fully suitable. The lecture notes draw upon different sources.

## **Important Notes**

- (1) Students are expected to spend a total of 6 hours (i.e. 3 hours of class contact and 3 hours of personal study) per week to achieve the course learning outcomes.
- (2) Students shall be aware of the University regulations about dishonest practice in course work, tests and examinations, and the possible consequences as stipulated in the Regulations Governing University Examinations. In particular, plagiarism, being a kind of dishonest practice, is "the presentation of another person's work without proper acknowledgement of the source, including exact phrases, or summarized ideas, or even footnotes/citations, whether protected by copyright or not, as the student's own work". Students are required to strictly follow university regulations governing academic integrity and honesty.
- (3) Students are required to submit writing assignment(s) using Turnitin.
- (4) To enhance students' understanding of plagiarism, a mini-course "Online Tutorial on Plagiarism Awareness" is available on <u>https://pla.ln.edu.hk/</u>.