

MS4241: LIFE INSURANCE

Effective Term

Semester A 2022/23

Part I Course Overview

Course Title

Life Insurance

Subject Code

MS - Management Sciences

Course Number

4241

Academic Unit

Management Sciences (MS)

College/School

College of Business (CB)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

CB2200 Business Statistics, CB2201 Operations Management [or equivalent]

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course aims to

- Provide students with knowledge of life insurance both in principle and in practice.
- Enhance students' ability to identify, formulate and evaluate problems in the area of life insurance using statistical and/or quantitative techniques.
- Develop students' ability to design workable solutions to problems in the field of life insurance

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Demonstrate a basic knowledge of life insurance both in principle and in practice	20	x	x	
2	Identify and formulate problems in the area of life insurance using statistical and/or quantitative techniques	20		x	
3	Examine and determine statistical and/or quantitative techniques for modeling life insurance data	20		x	
4	Evaluate the use of statistical and/or quantitative techniques when attempting to solve life insurance problems	20		x	x
5	Assess theoretical knowledge of life insurance to support and enhance the organizations in which the students may be employed	20		x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Teaching and Learning Activities (TLAs)

TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Interactive Lectures	concepts and specific subject knowledge are explained students listen to lectures and respond to specific problems interactively (in large or small groups)	1, 2, 3, 4

2	Tutorial exercises and activities	students brainstorm ideas and/or discuss the answers to questions arising from case studies / problem sets with the teacher acting as a facilitator, the students work on assigned problem sets to consolidate their understanding of the concepts and methods students are required to employ the problem-solving techniques learned in the course to design feasible solutions for the cases they encounter	2, 3, 4	
3	Group discussions	students take part in discussions on major issues in class, critique case studies and/or report back to the class after brief small group discussions the instructor provides instant feedback and support for students' queries	1, 5	
4	Reading assignments	students read relevant chapters/papers from the reference reading list to categorise and distinguish life annuity and life insurance products students conduct a critical evaluation and/or identification of key issues related to life insurance	1, 5	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Case study / other tasks	1, 5	20	
2	Mid-term test	2, 3, 4	30	

Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

2

Assessment Rubrics (AR)

Assessment Task

Case Study / Other Tasks

Criterion

ABILITY to TACKLE analytic problems, ASSESS contemporary life insurance topics and/or EVALUATE real/hypothetical financial planning scenarios

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

Mid-Term Test

Criterion

ABILITY to APPLY the quantitative techniques to ANALYSE and SOLVE related problems

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

Written Examination

Criterion

DEMONSTRATED professional KNOWLEDGE of life insurance and the ABILITY to APPLY the statistical and/or quantitative techniques to FORMULATE and EVALUATE life insurance problems

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

Introduction to Life Insurance

Nature, scope and terminology of life insurance. Nature and management of risk. Basic types of life and health insurance policies.

Life Insurance Management

The Hong Kong life insurance market: some facts. Underwriting principles. Product design and modification. Economic and social importance of life insurance industry.

The Insurance Company

Types of insurance and marketing systems. Insurance company operations. Functions and organization of insurers. Insurance pricing.

Insurance Regulation

Government Regulation. Industry self-regulation. Other legal regulation. Ethical and other related issues.

Life Insurance and Annuities

Fundamentals of life insurance. Types of life insurance. Life insurance policy provisions. Applications of life insurance. Choosing life insurance. Annuities and individual retirement accounts.

Health Insurance

Individual health insurance. Disability insurance.

Pricing of Life Insurance and Annuity

Accumulated value and present values. Mortality tables and life annuity. Life insurance: net single premiums and annual premium.

Life Insurance and Annuity Reserves

Terminal reserves. The retrospective method and prospective method.

Reading List

Compulsory Readings

Title	
1	Rejda G E, Principles of Risk and Insurance, Addison-Wesley, latest edition.
2	Parmenter M M, Theory of Interest and Life Contingencies, with Pension Applications: A Problem-Solving Approach, ACTEX Publications, latest edition.

Additional Readings

Title	
1	Insurance Intermediaries Quality Assurance Examination Scheme Study Notes 1: Principal and Practice, Office of Insurance Commissioner, Hong Kong, latest edition.
2	Insurance Intermediaries Quality Assurance Examination Scheme Study Notes 2: Long-term Insurance, Office of Insurance Commissioner, Hong Kong, latest edition.
3	Bowers N L, Gerber H U, Hickman J C, Jones D A and Nesbitt C J, Actuarial Mathematics, Society of Actuaries, latest edition.
4	Williams C A, Smith M L and Young P C, Risk Management and Insurance, Irwin McGraw-Hill, latest edition.
5	Harrington S E, Niehaus G R, Risk Management and Insurance, Irwin McGraw-Hill, latest edition.
6	Vaughan, E J, Risk Management, John Wiley & Sons Inc., latest edition.
7	Office of the Commissioner of Insurance http://www.oci.gov.hk/
8	Hong Kong Federation of Insurers http://www.hkfi.org.hk/en_home.htm
9	Insurance Claims Complaints Bureau http://www.iccb.org.hk/en_introduction.htm
10	Society of Actuary http://www.soa.org/ccm/content/
11	Life Office Management Association http://www.loma.org/
12	Mandatory Provident Fund Schemes Authority http://www.mpfahk.org/eindex.asp