# EF4334: REGULATION AND MANAGEMENT OF FINANCIAL INSTITUTIONS

#### **Effective Term**

Semester A 2022/23

# Part I Course Overview

#### Course Title

Regulation and Management of Financial Institutions

#### **Subject Code**

EF - Economics and Finance

#### **Course Number**

4334

#### **Academic Unit**

Economics and Finance (EF)

#### 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**

CB3410 Financial Management or FB3410 Financial Management or EF3333 Financial Systems, Markets and Instruments AND

EF4420 Derivatives Analysis and Advanced Investment Strategies or EF4320 Advanced Security Analysis and Portfolio Management or EF4321 Derivatives and Risk Management

## Precursors

Nil

#### **Equivalent Courses**

Nil

#### **Exclusive Courses**

Nil

# **Part II Course Details**

#### **Abstract**

This course aims to highlight the important role that regulations come into play when managing the risks of financial institutions. In this regard, Basel Accords will be discussed in detail, with special attention to credit risk, market risk and capital adequacy under Basel II and Basel III. The course also looks at major regulations that are having an impact on the management of financial institutions in the USA and the world, such as the Patriot Act and Gramm-Leach-Bliley Act. An overview of relevant local ordinances, including the Banking Ordinance, Insurance Companies Ordinance, and the Securities and Futures Ordinance, will also be given. It is equally important that students have a sound understanding of tools that financial institutions use to manage various risks and their applications in the context of evolving regulations. Topics include duration, Value-at-Risk, credit derivatives, interest rate futures, caps/floors, options and swaps. The course also aims to develop students' creative and innovative abilities through various assessment tasks. The engaging lectures will develop students' discovery abilities through class discussions on course materials as well as current affairs in the financial market. Practical assignments and projects require students to discover and innovate through the use of information database and platform, and independent research.

#### Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Explore and explain the risks faced by modern financial institutions and relate them to the regulation of these various institutions, such as insurance companies and commercial banks.  Examples are Gramm-Leach-Bliley Act, Patriot Act, and Insurance Companies Ordinance, Securities and Futures Ordinance, and Banking Ordinance in Hong Kong	12.5	x	х	
2	Apply different financial models to assess and measure interest rate risk and credit risk in relation to the Basel framework. Students will obtain hands-on experience using information platforms (suggestions include Bloomberg and BankScope) to collect data and conduct analysis pertaining to interest rate risk and credit risk management, and in the process discover more about the risk management of financial institutions.	16.5		X	X
3	Apply the Value-at-Risk models to assess, measure credit and market risks, and set capital requirement in compliance with the Basel framework and discover how these models are used in practice.	16.5		х	x
4	Interpret and evaluate operational risk, foreign exchange risk, and liquidity risk, etc. faced by modern financial institutions in relation to Basel and regulatory requirements in Hong Kong.	16.5		Х	X
5	Explain how liquidity management, diversification, and capital adequacy requirement can be used to manage various risks faced by modern financial institutions.	16.5		X	X
6	Design strategies utilizing various financial derivative instruments, including futures, forward, options and swaps to manage various risks faced by modern financial institutions.	16.5		Х	x

7	Interpret the role of securitization in improving	5	X	X	
	the return-risk trade-off for financial institution,				
	and Sarbanes-Oxley Act.				

#### 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	Lectures	To provide key concepts and theoretical framework. The lecturer encourages students to think critically and logically by asking students to respond to questions and solve problems on management of financial institutions.	1, 2, 3, 4, 5, 6, 7	3 hours lecture per week
2	Projects	The project is designed to give students hands-on research experience on issues facing banking professionals. Through the use of financial information databases (suggested platforms include Bloomberg and BankScope), students are expected to acquire the necessary skills to handle basic tasks in the workplace on the management of financial institutions.	2, 4, 6	

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3	Written assignments on selected topics	To enhance students' understanding of certain lecture materials. With a focus on the risk management of financial institutions and new regulations, students are expected to apply the knowledge to the analysis of real world issues.	1, 2, 3, 5	
4	In-class discussion of journal/newspaper articles on related topics	To familiarize students with the most up- to-date issues in the management of financial institutions. In class, discussions are highly encouraged as it would enhance students' communication skills, critical thinking and develop students' creative and innovative abilities.	1, 2, 3, 4, 5, 6, 7	

## Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Case Study/Project	2, 4, 6	10	
2	Assignments	1, 2, 3, 5	20	
3	Contributions to inclass discussion and attendance	1, 2, 3, 4, 5, 6, 7	10	

## Continuous Assessment (%)

40

## Examination (%)

60

## **Examination Duration (Hours)**

2

## **Additional Information for ATs**

Students are required to pass both coursework and examination components in order to pass the course.

## Assessment Rubrics (AR)

## **Assessment Task**

Case Study/Project

## Criterion

Based on students' performance in the case study/project

#### Excellent (A+, A, A-)

Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

#### Good (B+, B, B-)

Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

#### Fair (C+, C, C-)

Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.

#### Marginal (D)

Sufficient familiarity with the subject matter to enable the student to progress without repeating the course.

## Failure (F)

Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited, or irrelevant use of literature.

#### **Assessment Task**

Assignments

#### Criterion

Based on the take-home problem sets

#### Excellent (A+, A, A-)

Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

#### Good (B+, B, B-)

Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

#### Fair (C+, C, C-)

Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.

## Marginal (D)

Sufficient familiarity with the subject matter to enable the student to progress without repeating the course.

#### Failure (F)

Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited, or irrelevant use of literature.

## **Assessment Task**

Contributions to in-class discussion and attendance

#### Criterion

Based on students' participation in class discussion

#### Excellent (A+, A, A-)

Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

#### Good (B+, B, B-)

Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

#### Fair (C+, C, C-)

Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.

#### Marginal (D)

Sufficient familiarity with the subject matter to enable the student to progress without repeating the course.

#### Failure (F)

Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited, or irrelevant use of literature.

#### **Assessment Task**

Final Examination

#### Criterion

Based on the 3-hour final exam

#### Excellent (A+, A, A-)

Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

#### Good (B+, B, B-)

Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

#### Fair (C+, C, C-)

Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.

#### Marginal (D)

Sufficient familiarity with the subject matter to enable the student to progress without repeating the course.

#### Failure (F)

Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited, or irrelevant use of literature.

# **Part III Other Information**

#### **Keyword Syllabus**

- 1. Financial services industry, functions and regulation of financial institutions, important aspects of USA's Gramm-Leach-Bliley Act and Patriot Act, Hong Kong's Banking Ordinance, Insurance Companies Ordinance and Securities and Futures Ordinance.
- 2. Risks of financial institutions and the role of Basel III and the Banking Ordinance in Hong Kong.

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- 3. Interest rate risk, repricing model, duration, requirements by the Hong Kong Monetary Authority for sound practices by authorized licenses banks, restricted licensed banks and deposit taking companies.
- 4. Bank accounting, accepted accounting principles for bank accounting, and performance evaluation.
- 5. Credit risk, return on a loan, default risk models, loan portfolio, Basel III compliance.
- 6. Market risk, Value-at-risk models, the RiskMetrics model, Basel III compliance.
- 7. Operational risk, foreign exchange risk, liquidity risk, Basel III compliance.
- 8. Liability and liquidity management, choice of liability structure.
- 9. Capital adequacy, insolvency risk, capital adequacy ratios, Basel III compliance.
- 10. Diversification, product diversification, geographic diversification.
- 11. Financial derivatives including credit derivatives, interest rate futures, caps/floors, options, swaps, hedging, regulations governing derivatives.
- 12. Securitization, asset-backed securitization, special purpose vehicles (SPV), importance of Sarbanes-Oxley Act in minimizing abuse of SPVs.

#### **Reading List**

## **Compulsory Readings**

	Title
1	Saunders, A. and M. M. Cornett, Financial Institutions Management: A Risk Management Approach, McGraw-Hill, ninth edition, 2018.

#### **Additional Readings**

	Title
1	Rose, P.S., Commercial Bank Management, McGraw-Hill, ninth edition, 2013.
2	Fabozzi, F. and F. Modigliani, Capital Markets: Institutions and Instruments, Prentice Hall, fourth edition, 2009.