

**THE UNIVERSITY OF HONG KONG**  
**FACULTY OF BUSINESS AND ECONOMICS**  
**FINA3382 – Structured Finance and Securitization**  
**Second Semester, 2021/2022**

<b>GENERAL INFORMATION</b>	
<p><b>Instructor:</b> Dr. Huiyan QIU            Email: <a href="mailto:hqiu@hku.hk">hqiu@hku.hk</a>            Office: Room 917 KKLLeung (2859-1046)  <b>Lecture:</b> Semester 2, Wednesday 9:30-12:20, KK101</p> <p>Pre-requisites: FINA2322 Derivatives or STAT3905 Introduction to financial derivatives <i>and</i> FINA2320 Investments and Portfolio Analysis or STAT3609 The Statistics of Investment Risk            Mutually exclusive: NA</p> <p>Tutor: TBD            Course Website: MOODLE via HKU portal</p>	
<b>COURSE DESCRIPTION</b>	
<p>Structured finance refers to more sophisticated, complex financial transaction. With securitization as the dominant form of transaction, structure finance is an important tool in today’s financial markets. Although there has been an ongoing post-recession decline in the U.S. securitization rate, many other international markets are growing. This course is designed to provide a broad, comprehensive introduction to structured finance and securitization. The following topics will be covered: (a) building blocks of structured finance, (b) mechanics of securitization and various securitized products, especially CDOs (collateralized debt obligations), (c) leasing, (d) project financing, and (e) fundamentals of structured finance modeling using Microsoft Excel.</p>	
<b>COURSE OBJECTIVES</b>	
<ol style="list-style-type: none"> <li>1. To help students develop a solid understanding of structured finance and securitization.</li> <li>2. To provide students with concepts and methods that are used in practice, for example, SPV, ABS, CDOs, CLNs, and synthetics.</li> <li>3. To help students understand the role of structured finance and securitization in the 2007-08 financial crisis.</li> </ol>	
<b>FACULTY LEARNING GOALS</b>	
<p><b>FLG1:</b> Acquisition and internalization of knowledge of the programme discipline  <b>FLG2:</b> Application and integration of knowledge  <b>FLG3:</b> Inculcating professionalism  <b>FLG4:</b> Developing global outlook  <b>FLG5:</b> Mastering communication skills  <b>FLG6:</b> Cultivating leadership</p>	
<b>COURSE LEARNING OUTCOMES</b>	
<b>Course Learning Outcomes (CLOs)</b>	<b>Aligned Faculty Learning Goals (FLGs)</b>

<b>CLO1.</b> Describe and interpret the features and characteristics of structured finance instruments.	FLG 1, 3, 5
<b>CLO2.</b> Understand the mechanics of a securitization transaction, including the roles of the major participants.	FLG 1, 3, 5, 6
<b>CLO3.</b> Identify the use of and the risks in structured finance instruments.	FLG 1, 2, 4, 5
<b>CLO4.</b> Use Microsoft Excel to model structured finance cash flows.	FLG 1, 2
<b>CLO5.</b> Be able to communicate with others on various issues of structured finance and securitization and discuss current market trends.	FLG 2, 3, 4, 5, 6

### COURSE TEACHING AND LEARNING ACTIVITIES

Course Teaching and Learning Activities	Expected study hour	Study Load (% of study)
T&L1. Lectures Instructor will give lectures on major concepts and issues. Class attendance and active participation in discussion are expected for all students.	36 hours	28.13%
T&L2. Tutorials The teaching assistant will offer several tutorial sessions. The main focus of the tutorial will be on problem solving rather than concept developing.	4 hours	3.13%
T&L3. Assignments There are three individual homework assignments which are designed to help students review basic concepts and to practice applying the concepts.	24 hours	18.75%
T&L4. Group project Students will work on a project in a group with 2 or 3 students. They are expected to apply what they learn in class to the real financial activities. Each group will do oral presentation and submit final report at the end of the semester. Students will be asked to do peer review at the end to reduce free-riding problem. Go to the course Moodle page for details.	24 hours	18.75%
T&L5. Self-study	40 hours	31.25%
<b>Total</b>	<b>128 hours</b>	<b>100%</b>

Assessment Methods	Weights	Aligned Course Learning Outcomes
A1. Attendance and Participation	5%	CLO 1, 2, 3, 4, 5
A2. Assignments	20%	CLO 1, 2, 3, 4, 5
A3. Group Project	20%	CLO 1, 2, 3, 4, 5
A4. Mid-term Examination	15%	CLO 1, 2, 3, 5
A5. Final Examination	40%	CLO 1, 2, 3, 4, 5
<b>Total</b>	<b>100%</b>	

**Coursework / Examination Ratio:** 45 % / 55 %

No late submission of assignment or group project will be accepted.

There will be a mid-term exam and a comprehensive final exam to test students' breadth and depth of the understanding of the major concepts covered in the course and students' ability to integrate and apply this knowledge. No make-up midterm examination will be given. Students missing the midterm exam will receive 0 unless they obtain approval from instructor with convincing reasons and evidence prior to the exam. Approved students who have missed the midterm will have 90% of their final exam score as the midterm exam score.

## STANDARDS FOR ASSESSMENT

### Course Grade Descriptors

A+, A, A-	Exhibited high level of understanding of the course materials through excellent performance in class discussion, assignments, group project and exams.
B+, B, B-	Exhibited reasonably high level of understanding of the course materials through good performance in class discussion, assignments, group project and exams.
C+, C, C-	Exhibited fair level of understanding of the course materials.
D+, D	Exhibited limited level of understanding of the course materials.
F	Exhibited low level of understanding of the course materials.

### Assessment Rubrics for Each Assessment

#### A1 In-Class and Tutorial Performance

A+ A A-	B+ B B-	C+ C C-	D+ D	F
Extremely well prepared for class discussion, very active in sharing views and attended almost all lectures and tutorials.	Partially prepared for class discussion, quite active in sharing views and attended most of the lectures and tutorials.	Not well prepared for class discussion, limited active in sharing views and attended many of the lectures and tutorials.	Not well prepared for class discussion, no sharing of views and attended some of the lectures and tutorials.	Poorly prepared for class discussion and no sharing of views and experience and rarely attended lectures and tutorials.

#### A2 Assignments: for numerical questions/homework

A+ A A-	B+ B B-	C+ C C-	D+ D	F
Submitted all homework with excellent accuracy.	Submitted well written homework with good accuracy.	Submitted homework with fair level accuracy.	Submitted homework with limited accuracy.	Poorly written homework or no submission.

#### A2 Assignments: for essay type problems and A3 Group Project

Grade	Depth and breadth of Coverage, critical elements, structure, language and conventions
A+,A, A-	<p>All aspects were addressed and researched in great depth.</p> <p>Demonstrated a clear understanding of and the ability to apply the theory, concepts and issues relating to the topic.</p> <p>Clearly identified the most critical aspects of the task and adopted a critical perspective.</p> <p>Developed excellent argument and offered a logically consistent and well-articulated analysis and insight into the subject.</p> <p>Drew widely from the academic literature and elsewhere whilst maintaining relevance.</p> <p>All aspects conformed to a high academic / professional standard.</p>
B+, B, B-	<p>Most aspects were addressed and researched in depth.</p> <p>Demonstrated a good understanding and some application of the theory and issues relating to the topic.</p> <p>Identified critical aspects of the task and adopted a critical perspective.</p> <p>Showed some evidence of analysis, supported by logical argument and insight into the subject.</p> <p>Drew on relevant academic and other material.</p>

	Most aspects conformed to a high academic / professional standard.
C+, C, C-	Most aspects were addressed and researched adequately. Demonstrated a good understanding of the theory, concepts and issues relating to the topic but limited application relating to the topic. Some presented argument showed some insight but not always consistent and logical. Drew upon an adequate range of academic and other material. Most aspects conformed to an acceptable academic / professional standard.
D+, D	Basic aspects were addressed and researched adequately. Demonstrated mainly description, showing basic understanding of the topic but no application. Showed little evidence of analysis but no clear and logical argument relating to the subject. Drew primarily upon course materials. Limited aspects conformed to academic / professional standards.
F	Basic aspects were superficial, inadequate or absent. Demonstrated limited understanding of the topic and drew conclusions unrelated to the topic. The written work was not of an academic / professional standard.

#### A4 and A5 Midterm and Final Exam

Midterm and final exam may include three types of questions: multiple choice, calculation problems, and essay questions. Multiple choice and calculation problems are graded according to the marks assigned to each question. Essay questions are graded according to the following criteria:

A+ A A-	B+ B B-	C+ C C-	D+ D	F
Idea development is insightful and sophisticated; Supporting evidence is convincing, accurate and detailed. Well written with clear focus.	Idea development is clear and thoughtful; Supporting evidence is sufficient and accurate. Well written.	Idea development is simplistic and lacking in relevance; Supporting evidence insufficient but accurate. Somewhat well written.	Idea development is superficial and ineffective; Supporting evidence is insufficient and inaccurate. Writing is unclear.	Idea development is absent; Supporting evidence is vague or missing. Poorly written.

### COURSE CONTENT AND TENTATIVE TEACHING SCHEDULE

The following topics will be covered:

- Introduction to structured finance
- Building blocks of structure finance
  - Interest rate derivatives
  - Credit derivatives
- Securitization: basic principles of securitization and securitization structure
- Collateralized debt obligations (CDOs)
  - Fundamentals of CDOs
  - Cash flow CDOs vs. Synthetic CDOs
- Mortgage-Backed Securities
- Credit-linked notes and structured notes
- Leasing fundamentals and leverage lease
- Project financing
- Model structured finance cash flows with Microsoft Excel

The tentative teaching outline will be available on the course Moodle page.

## REQUIRED/RECOMMENDED READINGS & ONLINE MATERIALS

1. **Lecture notes prepared by the instructor**, available on course Moodle page
2. **Video clips on Youtube and recommended reading articles**, links available on course Moodle page

The following two books are highly recommended but not required:

1. Fabozzi, Davis, and Choudhry, *Introduction to Structured Finance*, The Frank J. Fabozzi Series, Wiley Finance, ISBN 9780470045350
2. Tavakoli, Janet M., *Structured Finance & Collateralized Debt Obligations, New Developments in Cash & Synthetic Securitization*, Second Edition, Wiley Finance, ISBN 9780470288948

Other reference books:

1. Preinitz, William, *A Fast-Track to Structured Finance: Modeling, Monitoring, and Valuation*, Wiley Finance, ISBN 9780470398128
2. Allman, Keith A., *Modeling Structured Finance Cash Flows with Microsoft Excel, A Step-by-Step Guide*, Wiley Finance, ISBN 978047042908
3. Fabozzi, Bhattacharya, and Berliner, *Mortgage-Backed Securities: Products, Structuring, and Analytical Techniques*, The Frank J. Fabozzi Series, ISBN 978040047736

## MEANS/PROCESSES FOR STUDENT FEEDBACK ON COURSE

- Conducting the Student Evaluation of Teaching and Learning (SETL) around the end of the semester
- Using Discussion Forum in the course Moodle to seek for students' feedback throughout the semester

## COURSE POLICY

### Class Conduct

Students are required to attend all classes on time. If you miss a class, it is entirely your responsibility for what you have missed. In case you have to leave the class early, please inform the instructor beforehand and leave quietly.

No use of mobile phone or chatting is allowed when the class is in session. Remember to turn off or mute the phone before each session. The instructor has the discretion to give penalty in case of class misconduct.

Respect your instructors and your fellow students. Be considerate to others.

### Academic Dishonesty

The University Regulations on academic dishonesty will be strictly enforced! Please check the University Statement on plagiarism on the web: <http://www.hku.hk/plagiarism/>

Academic dishonesty is any act that misrepresents a person's own academic work or that compromises the academic work of another. It includes (but not limited to) cheating on assignments or examinations; plagiarizing, i.e., representing someone else's ideas as if they are one's own; sabotaging another's work.

If you are caught in an act of academic dishonesty or misconduct, you will receive an "F" grade for the subject. The relevant Board of Examiners may impose other penalty in relation to the seriousness of the offense.

## ADDITIONAL COURSE INFORMATION

- Announcements, assignments, and lecture slides will be posted on the course MOODLE website. Hard copy of lecture notes will not be provided.
- No late assignment submission will be accepted.