

# Capital University of Economics and Business

## Overseas Chinese College

### Course Syllabus

<b>Year and Semester</b>	2024 Fall						
<b>Course Name</b>	Fixed Income Securities						
<b>Course Code</b>	CFA306						
<b>Course Type</b>	<input type="checkbox"/> General Education (Required) <input type="checkbox"/> General Education (Elective) <input type="checkbox"/> Basic Disciplinary Course <input type="checkbox"/> Professional Course (Required) <input checked="" type="checkbox"/> Professional Course (Elective) <input type="checkbox"/> Professional Course (Expanded) <input type="checkbox"/> Professional Course (Advanced)						
<b>Course Credits</b>	3						
<b>Course Hours</b>	Total Hours	Class	48	Lecture Hours	48	Experiment (Computer) Hours	0
<b>Applicable object</b>	<input type="checkbox"/> Freshman <input type="checkbox"/> Sophomore <input checked="" type="checkbox"/> Junior <input type="checkbox"/> Senior <input type="checkbox"/> Business Administration (Accounting) <input checked="" type="checkbox"/> Information Management and Information Systems (Finance)						
<b>Prerequisites</b>	Principal of Accounting						
<b>Instructor</b>	Qian Zhang						
<b>Contact Information</b>	Office: C204						
	Tele: 83951085						
	Email: zhangqian@cueb.edu.cn						
<b>Office Hour</b>	M/T: 8:00-9:35; W: 13:30-15:05						
<b>Learning Centre</b>	M: 13:30-15:05; TH: 18:00-20:00 (Online)						
<b>Grade/Section</b>	2022 CFA						
<b>Course Time/Place</b>	M : 9:55-12:20 (B113)						
<b>Textbook</b>	Schweser Notes, 2023 Level I CFA, KaplanInc.USA Book 4: Fixed Income						

#### Reference Book

1. CFA Institute, Equity and Fixed Income Investments , CFA Program Curriculum , Wiley Press , USA
2. Frank J. Fabozzi . Bond Markets , Analysis and Strategies ,9 th Edition , Renmin University Press , Beijing ,ISBN : 978-7-300-25225-4

#### Course Description

This course aims to equip students with the essential knowledge and skills of analysis and valuation of fixed income securities. It covers the fundamentals of fixed income investments. Key areas include introduction to defining elements of fixed-income securities, fixed income markets, fixed income valuation, asset-backed securities, fixed income risk and return, fundamentals of credit analysis for fixed income investments.

#### Student Learning Objectives

On successful completion of this course, students should be able to:

Knowledge	◆ Describe characteristics of fixed income securities;
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	<ul style="list-style-type: none"> <li>◆ Describe primary issuers, sectors and types of bonds;</li> <li>◆ Explain and apply market conventions for prices/yields calculation and quotation;</li> <li>◆ Explain Measures of risk for fixed income securities;</li> <li>◆ Explain the risk of asset-backed securities;</li> </ul>
Capability	<ul style="list-style-type: none"> <li>◆ Calculate and interpret prices, yields and spreads of fixed-income securities;</li> <li>◆ Calculate duration, convexity, and analyze interest rate risk;</li> <li>◆ Discuss securitization process and related risk;</li> <li>◆ Apply valuation models to evaluate fixed-income securities;</li> </ul>
Mindset	<ul style="list-style-type: none"> <li>◆ Act with integrity, respect, and in an ethical manner in the finance field;</li> <li>◆ Be independent and diligent in the investment process;</li> <li>◆ Strive to improve professional knowledge and competence;</li> <li>◆ Apply critical thinking in the process of decision making.</li> </ul>

### Website Source

1. [http:// www.sse.com.cn](http://www.sse.com.cn) Shanghai Stock Exchange
2. <http://www.szse.cn/> Shenzhen Stock Exchange
3. <https://www.hkex.com.hk/> Hong Kong Exchanges
4. <https://www.nyse.com/index> New York Stock Exchange
5. <http://www.csrc.gov.cn/pub/newsite/>  中国证券监督管理委员会  
China Securities Regulatory Commission
6. <https://finance.sina.com.cn/>  新浪财经

### Teaching Methods

This course contains lectures, class discussions, homework, quizzes, presentation, test and exam. Real case and practice questions will be delivered to students as a way to test their understanding of the knowledge. There will be various interactions and real case studies in the course. This will require individual or group assignment in or after class.

### Grade Criterion

Component	Weight	Description
Final Exam	20%	A cumulative final examination will be given based on all of the contents of the class. The exam paper may be composed of multiple-choice questions, short answer questions, essay questions, problems, and preparation of financial statements. Students should rely primarily on homework assignments to give them a sense of what they may see for material on exams.
Mid-Term Test	20%	A cumulative midterm test will be given based on all of the contents that have been taught in class. The test paper may be mainly composed of multiple-choice questions and it should be completed within 15 minutes in class.
Homework	15%	Most of the assigned homework is taken from the Exercises in the textbook. Assignments will be collected at the clearly stated date. Late assignments will not be accepted. The graded assignments will be kept by the tutor for reference and won't be returned to students.

Quizzes	15%	There will be at least 2 quizzes during the semester. Quizzes may or may not be announced in advance. It may also be used as a way to check the attendance. Quizzes will test your knowledge of both concepts and the application of those concepts.
Presentation	10%	The students will be divided into several groups to prepare a presentation. Each student is required to be involved in the presentation. The topics can be selected from the textbook or lectures. Each group need to finish a PPT related to the topic which is given and hand in the related resources to the teacher before the presentation.
Participation	10%	Individuals will be asked to participate individually in a question and answer at least 5 times during the semester. The performances should be counted in their participation.
Attendance	10%	Refer to attendance policy listed below
<b>Total</b>	<b>100%</b>	

### **Detailed Grade Computation**

	<b>Before Midterm</b>	<b>After Midterm</b>
Attendance	5%	5%
Participation	5%	5%
Homework	5%	10%
Quizzes	5%	10%
Presentation		10%
Mid-Term Test	20%	
Final exam		20%
Total	40%	60%

### **Assessment of Student Performance**

#### ***☞ Self-Study and Reading ability Practice***

Instructor will give out the chapters or the reference books to read and use class hours to have discussion; students should be able to show a proactive attitude and ability for self-study and reading. Knowledge and oral English will be elements of homework or presentation score.

#### ***☞ Homework***

Students should finish their homework by themselves. Copying from others will be treated as cheating and the homework scores will be lowered. Students should hand in all assignments on time. Late assignments will be accepted at the discretion of the instructor (i.e., when the student was ill or had an excused absence). Late assignments without reasonable proof will be reduced in score by 50%.

#### ***☞ Attendance***

Because the course covers a great deal of material, attending every class session is very important for performing well.

- ◆ Being late for 15 minutes or more is considered an absence.
- ◆ Five hours or above of unexcused absences will result in the lower level of the final grade by one grade band (e.g. from C – to D +). Any excused absence must be discussed directly with the teacher.

- ♦ Absence which is more than 1/3 of the total teaching hours will cause an F (a failing grade) directly. but students are welcome to continue attending classes.
- ♦ An incomplete grade (I) will be considered in case of medical or family emergencies.

### ☞ *Participation*

- ♦ Students should participate in classes actively. Half of participation grade is determined by their presentation in class. They are encouraged to ask questions relevant to the subject and express their own opinions. Every student should respect the ideas, opinions, and questions of their classmates.
- ♦ Students should also use office hours to ask questions or talk with the instructor for good communication and effective learning.
- ♦ Frequent visiting the instructor and chatting in English during office hours is highly recommended.
- ♦ Any misbehavior and non-class related activities in class will result in the lower level of the participation grade, including ringing cell phones.
- ♦ All above behaviors will be solely evaluated by the instructor for scoring.

### ☞ *Textbook*

Students must bring the textbook to class.

### Topical Course Outline

Week	Topics	Contents	Homework
1	<ul style="list-style-type: none"> <li>● Course introduction</li> <li>● Reading 42</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Syllabus</b></li> <li>● Course introduction</li> <li>● <b>Reading42 Fixed-income securities: defining elements</b></li> <li>a: Describe basic features of a fixed-income security</li> <li>b: Describe content of a bond indenture.</li> <li>c: Compare affirmative and negative covenants.</li> <li>d: Describe how legal, regulatory, and tax considerations affect the issuance and trading of fixed-income securities</li> </ul>	Reading 42 Exercise
2	<ul style="list-style-type: none"> <li>● Reading 42</li> </ul>	<ul style="list-style-type: none"> <li>e: Describe how cash flows of fixed-income securities are structured. Principal repayment structure and coupon payment structure</li> <li>f: Describe contingency provisions affecting the timing and/or nature of cash flows of fixed-income securities and identify whether such provisions benefit the borrower or the lender</li> </ul>	Reading 42 Exercise
3		<b>Mid-Autumn Day</b>	
4	<ul style="list-style-type: none"> <li>● Reading 43</li> </ul>	<ul style="list-style-type: none"> <li><b>Reading43 Fixed-income markets</b></li> <li>a: Describe classifications of global fixed-income markets. b: Describe the use of inter bank offered rates as reference rates in floating rate debt.</li> <li>c: Describe mechanisms available for issuing bonds in primary markets.</li> </ul>	Reading 43 Exercise
5	<ul style="list-style-type: none"> <li>● Reading 43</li> </ul>	<ul style="list-style-type: none"> <li>d: Describe secondary markets for bonds.</li> <li>e: Describe securities issued by sovereign governments.</li> <li>f: Describe securities issued by non-sovereign governments, quasi government entities, and supranational agencies.</li> <li>g: Describe types of debt issued by corporations.</li> <li>h: Describe structured financial instruments.</li> <li>i: Describe short-term funding alternatives available to banks.</li> </ul>	Reading 43 Exercise
6		<b>National Holiday</b>	

7	<ul style="list-style-type: none"> <li>● Quiz 1</li> <li>● Reading 44</li> </ul>	<ul style="list-style-type: none"> <li>● Quiz 1</li> <li>● Reading 44 Introduction to fixed-income valuation</li> </ul> <p>a: Calculate a bond's price given a market discount rate. b: Identify the relationships among a bond's price, coupon rate, maturity, and market discount rate (yield-to-maturity). c: Define spot rates and calculate the price of a bond using spot rates. d: Describe and calculate the flat price, accrued interest, and the full price of a bond.</p>	
8	<ul style="list-style-type: none"> <li>● Reading 44</li> </ul>	<ul style="list-style-type: none"> <li>● Reading 44 Introduction to fixed-income valuation</li> </ul> <p>e: Describe matrix pricing. f: Calculate and interpret yield measures for fixed-rate bonds, floating-rate notes, and money market instruments. g: Define and compare the spot curve, yield curve on coupon bonds, par curve, and forward curve</p>	Reading 44 Exercise
9		<ul style="list-style-type: none"> <li>● Revision</li> <li>● Midterm Test</li> </ul>	
10	<ul style="list-style-type: none"> <li>● Reading 45</li> </ul>	<p><b>Reading 45 Introduction to asset-backed securities</b></p> <p>a: Explain benefits of securitization for economies and financial markets b: Describe securitization, including the parties involved in the process and the roles they play. c: Describe typical structures of securitizations, including credit tranching and time tranching</p>	Reading 45 Exercise
11	<ul style="list-style-type: none"> <li>● Reading 45</li> </ul>	<p>d: Describe types and characteristics of residential mortgage loans that are typically securitized. e: Describe types and characteristics of residential mortgage-backed securities, including mortgage pass-through securities and collateralized mortgage obligations, and explain the cash flows and risks for each type. f: Define prepayment risk and describe the prepayment risk of mortgage backed securities.</p>	Reading 45 Exercise
12	<ul style="list-style-type: none"> <li>● Reading 46</li> </ul>	<p><b>Reading 46 Understanding fixed-income risk and return</b></p> <p>a: Calculate and interpret the sources of return from investing in a fixed-rate bond. b: Define, calculate, and interpret Macaulay, modified, and effective durations. c: Explain why effective duration is the most appropriate measure of interest rate risk for bonds with embedded options.</p>	Reading 46 Exercise
13	<ul style="list-style-type: none"> <li>● Reading 46</li> </ul>	<p>d: Define key rate duration and describe the use of key rate durations in measuring the sensitivity of bonds to changes in the shape of the benchmark yield curve. e: Explain how a bond's maturity, coupon, and yield level affect its interest rate risk. f: Calculate the duration of a portfolio and explain the limitations of portfolio duration.</p>	Reading 46 Exercise
14	<ul style="list-style-type: none"> <li>● Reading 46</li> </ul>	<ul style="list-style-type: none"> <li>● Quiz 2</li> </ul> <p>g: Calculate and interpret the money duration of a bond and price value of a basis point (PVBP). h: Calculate and interpret approximate convexity and distinguish between approximate and effective convexity. i: Estimate the percentage price change of a bond for a specified change in yield, given the bond's approximate duration and convexity. j: Describe how the term structure of yield volatility affects the interest rate risk of a bond.</p>	

15	● Reading 47	<b>Reading 47 Fundamentals of credit analysis</b> a: Describe credit risk and credit-related risks affecting corporate bonds. b: Describe default probability and its severity as components of credit risk. c: Describe seniority rankings of corporate debt and explain the potential violation of the priority of claims in a bankruptcy proceeding. d: Distinguish between corporate issuer credit ratings and issue credit ratings and describe the rating agency practice of "notching". e: Explain risks in relying on ratings from credit rating agencies	Reading 47 Exercise
16	● Presentation	● Presentation	
17	● Final Revision	● Presentation ● Final Revision	

*Note: During the semester, this course may be switched to on-line teaching; in the case of on-line teaching, Tencent Meeting and WeChat group will be used as main teaching methods. WeChat group will be mainly used to inform students of daily study activities and tasks. Tencent Meeting will be used as main platform to organize study activities.*

*A review in Chinese may be held during L.C. and O.H. in the semester.*

### Teacher's Office Hour

- ◆ The instructor's office hour is shown in the front of the office door.
- ◆ Students are suggested to use the instructor's office hour and learning center to ask questions or talk with the instructor once at least per week for good communication and effective learning, which is recorded in the students' participation.
- ◆ The time can be scheduled by instructors or students, or both.

### Cheating and Plagiarism

Cheating is not tolerated. Any student caught cheating on a quiz; test or exam will be given a mark of zero (0) for the particular work. At the beginning of the semester the definition of plagiarism will be carefully explained, when any thoughts or writings of another person are used, they must be clearly identified (usually one uses quotation marks) and the source notes. **If any student is caught cheating on any homework assignment, the highest score the student can earn in that course is a "C".**

### Important Dates

<b>Midterm Test</b>	<b>Week 9 or 10</b>
<b>Final Exam</b>	<b>Week 18 (Refer to the notice of the Academic Affairs Office)</b>

*Note: This syllabus is tentative and may be changed or modified throughout the semester. All students will be notified and a new syllabus will be given.*

**Instructor:** 张倩

**Department Head:** \_\_\_\_\_

