

Capital University of Economics and Business

Overseas Chinese College

Course Syllabus

<u>Year and Semester</u>	Fall 2021 (September 2, 2021— January 16, 2022)
<u>Course Name</u>	Fixed Income Securities
<u>Course Code</u>	CFA302
<u>Course Type</u>	<input type="checkbox"/> General Education (Required) <input type="checkbox"/> General Education (Elective) <input type="checkbox"/> Professional Course (Required) <input checked="" type="checkbox"/> Professional Course (Elective) <input type="checkbox"/> Basic Disciplinary Course
<u>Course Credits</u>	3
<u>Course Hours</u>	3*17=51
<u>Prerequisites</u>	None
<u>Instructor</u>	Manqiu Wei
<u>Contact Information</u>	Office: C203 Tele: (010)8395 1085 Email:eunicewei2013@163.com
<u>Office Hour</u>	T 15:30-16:30; TH 9-10, 11-12; 13-15; F 13-14
<u>Learning Centre</u>	M 15:30-17:30; 18-20
<u>Grade/Section</u>	2019CFA/Y01
<u>Course Time/Place</u>	T: 13:30—15:20 / BX206 TH:10:10—11:00 / BX208
<u>Textbook</u>	SchweserNotes 2020 Level I CFA Book 4: <i>Corporate Finance, Equity, Fixed Income</i> , Kaplan Inc. USA, ISBN: 978-7-5217-0891-2

Reference Books

1. CFA Institute, *Equity and Fixed Income Investments, CFA Program Curriculum, Volume 5*, 20120, Wiley Press, USA
2. Frank J. Fabozzi. *Bond Markets, Analysis and Strategies, 9th Edition*, Renmin University Press, Beijing, ISBN: 978-7-300-25225-4
3. Zvi Bodie et al. *Investments, 10th Edition*, China Machine Press, Beijing, ISBN: 978-7-111-58160-4
4. Frank K. Reilly, et al. *Analysis of Investments and Management of Portfolio, 10th Edition*, China Machine Press, Beijing, ISBN: 978-7-111-43864-9

Course Description

This course aims to equip students with the essential knowledge of fixed income securities analysis and valuation. 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

After completing this course, students should be able to:

Knowledge:

- ◆ Describe characteristics of fixed income securities;
- ◆ Describe primary issuers, sectors and types of bonds;
- ◆ Explain and apply market conventions for prices/yields calculation and quotation;
- ◆ Explain Measures of risk for fixed income securities;
- ◆ Explain the risk of asset-backed securities;
- ◆ Explain the framework of credit analysis for fixed income investments.

Capability

- ◆ Calculate and interpret prices, yields and spreads of fixed-income securities;
- ◆ Calculate duration, convexity, and analyze interest rate risk;
- ◆ Discuss securitization process and related risk;
- ◆ Apply valuation models to evaluate fixed-income securities;

Mindset:

- ◆ Act with integrity, respect, and in an ethical manner in the finance field;
- ◆ Be independent and diligent in the investment process;
- ◆ Strive to improve professional knowledge and competence;
- ◆ Apply critical thinking in the process of decision making.

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 and exams. Textbook content will be introduced first. Then real case and practice questions will be delivered to students as a way to test their understanding of the knowledge. 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. 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 50 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 or course related materials. Each group needs 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
Total	100%	

Detailed Grade Computation

	Before Midterm	After Midterm
Attendance	5%	5%
Participation	5%	5%
Homework	5%	10%
Quizzes	5%	10%
Presentation		10%
Midterm test	20%	
Final exam		20%
Total	40%	60%

Grading Policy

A+ 97-100	A 93-96	A- 90-92	B+ 87-89	B 83-86	B- 80-82
C+ 75-79	C 70-74	C- 67-69	D+ 63-66	D 62-60	F 0- 59

Exam Schedule

Final Exam: January 5-14, 2022

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
1	<ul style="list-style-type: none"> ● Syllabus ● Course introduction ● Reading 1# Fixed –income securities: defining elements a: Describe basic features of a fixed-income security b: Describe content of a bond indenture. c: Compare affirmative and negative covenants. d: Describe how legal, regulatory, and tax considerations affect the issuance and trading of fixed-income securities.
2	<ul style="list-style-type: none"> e: Describe how cash flows of fixed-income securities are structured. Principal repayment structure and coupon payment structure 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
3	<ul style="list-style-type: none"> ● Reading 2# Fixed-income markets a: Describe classifications of global fixed-income markets.

	<p>b: Describe the use of interbank offered rates as reference rates in floating rate debt.</p> <p>c: Describe mechanisms available for issuing bonds in primary markets.</p>
4	<p>d: Describe secondary markets for bonds.</p> <p>e: Describe securities issued by sovereign governments.</p> <p>f: Describe securities issued by non-sovereign governments, quasigovernment entities, and supranational agencies.</p> <p>g: Describe types of debt issued by corporations.</p> <p>h: Describe structured financial instruments.</p>
5	National Day Holiday
6	<p>i: Describe short-term funding alternatives available to banks.</p> <p>j: Describe repurchase agreements (repos) and the risks associated with them.</p> <p>Comprehensive exercise</p>
7	<p>● Reading 3# Introduction to fixed-income valuation</p> <p>a: Calculate a bond's price given a market discount rate.</p> <p>b: Identify the relationships among a bond's price, coupon rate, maturity, and market discount rate (yield-to-maturity).</p> <p>c: Define spot rates and calculate the price of a bond using spot rates.</p> <p>d: Describe and calculate the flat price, accrued interest, and the full price of a bond.</p> <p>e: Describe matrix pricing.</p> <p>f: Calculate and interpret yield measures for fixed-rate bonds, floating-rate notes, and money market instruments.</p> <p>g: Define and compare the spot curve, yield curve on coupon bonds, par curve, and forward curve.</p> <p>h: Define forward rates and calculate spot rates from forward rates, forward rates from spot rates, and the price of a bond using forward rates.</p> <p>i: Compare, calculate, and interpret yield spread measures</p>
8	● Comprehensive Exercises
9	<p>● Midterm Test</p> <p>Reading 4# Introduction to asset-backed securities</p> <p>a: Explain benefits of securitization for economies and financial markets</p> <p>b: Describe securitization, including the parties involved in the process and the roles they play.</p> <p>c: Describe typical structures of securitizations, including credit tranching and time tranching.</p> <p>d: Describe types and characteristics of residential mortgage loans that are typically securitized.</p> <p>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.</p>
10	<p>f: Define prepayment risk and describe the prepayment risk of mortgage backed securities.</p> <p>g: Describe characteristics and risks of commercial mortgage-backed securities.</p> <p>h: Describe types and characteristics of non-mortgage asset-backed securities, including the cash flows and risks of each type.</p> <p>i: Describe collateralized debt obligations, including their cash flows and risks</p>
11	<p>● Reading 5# Understanding fixed-income risk and return</p> <p>a: Calculate and interpret the sources of return from investing in a fixed-rate bond.</p> <p>b: Define, calculate, and interpret Macaulay, modified, and effective durations.</p> <p>c: Explain why effective duration is the most appropriate measure of interest rate risk for bonds with embedded options.</p> <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.</p>
12	<p>e: Explain how a bond's maturity, coupon, and yield level affect its interest rate risk.</p> <p>f: Calculate the duration of a portfolio and explain the limitations of portfolio duration.</p> <p>g: Calculate and interpret the money duration of a bond and price value of a basis point (PVBP).</p> <p>h: Calculate and interpret approximate convexity and distinguish between approximate and effective convexity.</p>

	i: Estimate the percentage price change of a bond for a specified change in yield, given the bond's approximate duration and convexity.
13	<p>j: Describe how the term structure of yield volatility affects the interest rate risk of a bond.</p> <p>k: Describe the relationships among a bond's holding period return, its duration, and the investment horizon.</p> <p>l: Explain how changes in credit spread and liquidity affect yield-to-maturity of a bond and how duration and convexity can be used to estimate the price effect of the changes.</p>
14	<p>● Reading 6# Fundamentals of credit analysis</p> <p>a: Describe credit risk and credit-related risks affecting corporate bonds.</p> <p>b: Describe default probability and its severity as components of credit risk.</p> <p>c: Describe seniority rankings of corporate debt and explain the potential violation of the priority of claims in a bankruptcy proceeding.</p> <p>d: Distinguish between corporate issuer credit ratings and issue credit ratings and describe the rating agency practice of "notching".</p> <p>e: Explain risks in relying on ratings from credit rating agencies.</p> <p>f: Explain the four Cs (Capacity, Collateral, Covenants, and Character) of traditional credit analysis.</p> <p>g: Calculate and interpret financial ratios used in credit analysis.</p> <p>h: Evaluate the credit quality of a corporate bond issuer and a bond of that issuer, given key financial ratios of the issuer and the industry.</p> <p>i: Describe factors that influence the level and volatility of yield spreads.</p> <p>j: Explain special considerations when evaluating the credit of high yield, sovereign, and non-sovereign government debt issuers and issues.</p>
15	Presentation
16	Presentation
17	Revision

Note: During the semester, this course may be switched to on-line teaching; in the case of on-line teaching, YunBanKe, 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. YunBanKe and Tencent Meeting will be used as main platform to organize study activities. When school reopen YunBanKe will be used to release learning materials.

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

Fall Semester, 2021 September 2, 2021— January 16, 2022

Sep.5	Registration (Sophomores, Juniors and Seniors)
Sep.6	Classes Begin (Sophomores, Juniors and Seniors)
Sep.21	Mid-Autumn Festival
Oct.1	National Day
Nov.1-5	Midterm Test (tentative)
Jan.1, 2022	New Year's Day
Jan.1-4	Revision (Sophomores, Juniors and Seniors)
Jan.5-14	Final Exam Period (Sophomores, Juniors and Seniors)

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: Eunice Wei **Department Head:** _____

