

Capital University of Economics and Business

Overseas Chinese College

Course Syllabus

<u>Year and Semester</u>	2023 Spring
<u>Course Name</u>	Derivative and Alternative Investments
<u>Course Code</u>	CFA304
<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>	48
<u>Prerequisites</u>	Equity & fixed income securities
<u>Instructor</u>	Manqiu Wei (Eunice Wei)
<u>Contact Information</u>	Office: C203 Tele: (010)83951085 Email:eunicewei2013@163.com
<u>Office Hour</u>	T 15:25-17:00, W 11:35-12:20, F 9:55-12:20
<u>Learning Centre</u>	M 13:30—15:05, W 18-20
<u>Grade/Section</u>	2020CFA/Y01
<u>Course Time/Place</u>	M: 9:55—12:20 / A101

Textbook

SchweserNotes 2021 Level I CFA : *Derivative and Alternative Investments*, Kaplan Inc. USA,
ISBN: 978-7-5217-2004-4

Reference Books

1. CFA Institute, *Derivative and Alternative Investments, CFA Program Curriculum, Volume 5*, 2019, Wiley Press, USA, ISBN: 978-1-944250-42-3
2. Zvi Bodie. *Investment, 10th Edition*, China Machine Press, Beijing, ISBN: 978-7-111-58160-4
3. John C. Hull, *Options, Futures, and other Derivatives, 10th Edition*, China Machine Press, Beijing, ISBN: 978-7-111-60276-7

Course Description

This course aims to prepare students with fundamental knowledge and skills expected of a financial analyst in relation to derivative and alternative investment. Students are required to familiarize themselves with derivatives instruments (forward, futures, swap and option), along with fundamentals of derivatives pricing and valuation. Another important topic covered is alternative investment, which includes hedge funds, private equity, real estate, commodities and other alternative investments instruments.

Student Learning Objectives

After completing this course, students should be able to:

Knowledge:

- ◆ Identify basic characteristics of different types of derivatives;

- ◆ Explain determination of forward and futures prices
- ◆ Explain the application of derivative instruments in risk management;
- ◆ Explain strategies used by hedge funds, private equity funds, venture capitals etc.

Capability

- ◆ Compare and contrast different types of derivative instruments;
- ◆ Recognize Market quotes for derivative products;
- ◆ Discuss the operation and mechanism of futures trading;
- ◆ Demonstrate hedging strategies using futures;
- ◆ Discuss the basics of alternative investments vehicles.

Mindset:

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

Website Source

- 1 <https://www.cfainstitute.org/>
2. <http://www.cffex.com.cn/> China Financial Futures Exchange
3. <http://www.shfe.com.cn/> Shanghai Futures Exchange
4. <http://www.czce.com.cn/> Zhengzhou Commodity Exchange
5. <https://www.cmegroup.com/>

Teaching Methods

This course contains lectures, class discussions, homework, quizzes, presentation and exams. Textbook content will be introduced first. Then 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

Midterm test: TBA

Final Exam: TBA

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	Homework
1	<ul style="list-style-type: none"> ● Syllabus ● Reading 01 Derivative Markets And Instruments Module 1: Forwards And Futures 1) Define a derivative and distinguish between exchange-traded and OTC derivatives. 2) Contrast forward commitments with contingent claims. 3) Define forward contracts, futures contracts, and compare their basic characteristics. 	—
2		
3		
4	<ul style="list-style-type: none"> Module 2: Swaps and Options 1) Define swaps, options, and credit derivatives and compare their basic characteristics. 2) Determine the value at expiration and profit from an option position. 3) Describe purposes of, and controversies related to, derivative markets. 4) Explain arbitrage and the role it plays in determining prices and promoting market efficiency 	—
5	Comprehensive exercise	—
6	<ul style="list-style-type: none"> Reading 02 Basics of Derivative Pricing and Valuation Module 1: Forwards And Futures Valuation 1) Explain how the concepts of arbitrage, replication, and risk neutrality are used in pricing derivatives. 2) Explain the difference between value and price of forward and futures contracts. 3) Explain how the value and price of a forward contract are determined at expiration, during the life of the contract, and at initiation. 	—

	4) Describe monetary and nonmonetary benefits and costs associated with holding the underlying asset and explain how they affect the value and price of a forward contract.	
7	<p>Module 2: Forward Rate Agreements and Swap Valuation</p> <p>1) Define a forward rate agreement and describe its uses.</p> <p>2) Explain why forward and futures prices differ.</p>	—
8	<p>3) Explain how swap contracts are similar to but different from a series of forward contracts.</p> <p>4) Explain the difference between value and price of swaps.</p>	
9	<p>Module 3: Option Valuation and Put call Parity</p> <p>1) Explain the exercise value, time value, and moneyness of an option.</p> <p>2) Explain put–call parity for European options.</p> <p>3) Identify the factors that determine the value of an option and explain how each factor affects the value of an option</p>	
10	<p>4) Explain put–call–forward parity for European options.</p> <p>Module 4: Binomial Model for Option Values</p> <p>1) Explain how the value of an option is determined using a one-period binomial model.</p> <p>2) Explain under which circumstances the values of European and American options differ</p>	—
11	<p>●Reading 04 Introduction To Alternative Investments</p> <p>Module 1: Alternative Investment Structures</p> <p>1) Describe types and categories of alternative investments.</p> <p>2) Describe characteristics of direct investment, co-investment, and fund investment methods for alternative investments.</p> <p>3) Describe investment and compensation structures commonly used in alternative investments.</p> <p>Module 2: Hedge Funds</p> <p>1) Explain investment characteristics of hedge funds.</p> <p>2) Hedge Fund Strategies.</p> <p>3) Hedge Fund Potential Benefits and Risks.</p>	
12	Labor Day Holiday	
13	<p>●Reading 04 Introduction To Alternative Investments</p> <p>Module 1: Alternative Investment Structures</p> <p>1) Describe types and categories of alternative investments.</p> <p>2) Describe characteristics of direct investment, co-investment, and fund investment methods for alternative investments.</p> <p>3) Describe investment and compensation structures commonly used in alternative investments.</p> <p>Module 2: Hedge Funds</p> <p>1) Explain investment characteristics of hedge funds.</p> <p>2) Hedge Fund Strategies.</p> <p>3) Hedge Fund Potential Benefits and Risks.</p>	
14	<p>Module 3: Private Capital</p> <p>1) Explain investment characteristics of private capital.</p> <p>2) Private Equity Strategies</p> <p>3) Risks and Returns of Private Capital</p>	

	Module 4: Natural Resources, Real Estate, and Infrastructure 1) Explain investment characteristics of natural resources. 2) Explain investment characteristics of real estate. 3) Explain investment characteristics of infrastructure.	
15	Module 5: Performance Appraisal and Return Calculations 1) Describe issues in performance appraisal of alternative investments. 2) Performance Appraisal for Private Capital and Real Estate 3) Calculate and interpret returns of alternative investments	
16	●Presentation	
	●Revision	

Note: Some chapters or sections may leave for self-study, this is the students' duty to learn and understand, they may also be included in the quizzes or exams.

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

Spring Semester, 2023	
Feb. 11-12	Registration
Feb. 13	Classes Begin
Apr.5	Qing Ming Festival
April 7	Spring Sports
May 1	Labor Day
June 22	Dragon-Boat Festival

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: Manqiu Wei

Department Head: _____

