

Capital University of Economics and Business Overseas Chinese College Course Syllabus

Year and Semester	Spring 2026					
Course Name	Derivative and Alternative Investments					
Course Code	CFA304					
Course Type	<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 type="checkbox"/> Professional Course (Elective)		<input type="checkbox"/> Professional Course (Expanded)			
	<input checked="" type="checkbox"/> Professional Course (Advanced)					
Course Credits	3					
Course Hours	Total Class Hours	48	Lecture Hours	48	Experiment (Computer) Hours	0
Applicable object	<input type="checkbox"/> Freshman <input checked="" type="checkbox"/> Sophomore <input type="checkbox"/> Junior <input type="checkbox"/> Senior					
	<input type="checkbox"/> Business Administration (Accounting)					
	<input checked="" type="checkbox"/> Information Management and Information Systems (Finance)					
Prerequisites	CFA Equity Investments, CFA Fixed-income Securities					
Instructor	Wei Manqiu					
Contact Information	Office: C203					
	Tel: (010) 8395 1085					
	Email: weimanqiu@cueb.edu.cn					
Office Hour	TH 11:35-12:20,13:30-15:05; F 11:35-12:20,13:30-15:05;					
Learning Centre	T 11:35-12:20; W 18:00-20:00 (online); F 11:35-12:20					
Grade/Section	2024CFA					
Course Time/Place	2024CFA M 9:55-12:20 , A106;					
Textbook	SchweserNotes CFA 2025 Level I Book 3: <i>Derivative Investments</i> , by Kaplan Inc. USA, ISBN: 978-1-0788-4564-9 SchweserNotes CFA 2025 Level I Book 4: <i>Alternative Investments</i> , by Kaplan Inc. USA, ISBN: 978-1-0788-4566-3					

Reference Book

CFA Institute, CFA 2025 Level I Volume 7 Derivative, Volume 8 Alternative Investments, CFA Program Curriculum, Wiley Press, USA

Course Description

CFA304 derivative and alternative investments is an expanded professional course for students in CFA class. It 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), derivative market features, and 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. The ideological and political elements of this course include the integration of the core economic thoughts, such as the financial sector serving the real economy, developing green finance, and preventing and controlling financial risks. These elements are incorporated into the professional knowledge points and practical teaching links of the course on Derivatives and Alternative Investments.

This integration not only enables students to master professional theories and practical capabilities, but also guides them to understand the connotation of the path of financial development with Chinese characteristics, establish financial professional concepts that meet the requirements of national development, and cultivate financial talents with both professional competence and a sincere patriotism for the country.

Student Learning Objectives

On successful completion of this exam, candidates should be able to:

Knowledge	<ul style="list-style-type: none"> Identify basic characteristics of different types of derivatives; Explain determinants of forward and futures prices; Explain market quotes for derivative products; Explain strategies used by hedge funds, private equity funds, venture capitals
Capability	<ul style="list-style-type: none"> Compare and contrast different types of derivative instruments; Discuss the operation and mechanism of futures trading; Calculate the values and payoffs of derivative instruments; Apply binomial model for option valuation;
Mindset	<ul style="list-style-type: none"> Act with integrity, respect, and in an ethical manner in the finance field; Strive to improve professional knowledge and competence; Apply critical thinking in the process of decision making; The financial sector serving the real economy, developing green finance, and preventing and controlling financial risks

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

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. 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 the contents that have been taught in class. The test paper may be composed of multiple choice questions and it should be completed within 50 minutes in class.
		Most of the assigned homework is taken from the exercises in the textbook and

Homework	15%	tutor's notes. Assignments will be collected at the clearly stated date. Late assignments will not be accepted. The graded assignments may be kept by the tutor for reference and won't be returned to students.
Quizzes	15%	There will be 2 quizzes during the semester. Quizzes may 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
Total	100%	

Detailed Grade Computation

	Before Midterm	After Midterm
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	Platform	Homework
1	<ul style="list-style-type: none"> ● Syllabus <u>Part One: Derivative Investment</u> ● Reading 1 Derivative Instrument and Derivative Market Features Module 1: Derivatives Markets 1 define a derivative and describe basic features of a derivative instrument. 2 describe the basic features of derivative markets, and contrast over-the-counter and exchange-traded derivative markets. ● Reading 2 Forward Commitment and Contingent Claim Features and Instruments Module 1: Forwards and Futures 1 Define forward contracts, futures contracts. 2 Compare and contrast basic characteristics of forwards and futures. 	Classroom & Xuexitong	Homework for Reading 1
2	<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 Contrast forward commitments with contingent claims. *Case: China Credit Risk Mitigation Warrants (CRMWs) the Phase 1 2023 Credit Risk Mitigation Warrant for 23 Yixin Leasing SCP004 issued by Bank of Communications Co., Ltd. 	Classroom	Homework for Reading 2
3	<ul style="list-style-type: none"> ● Reading 3 Derivative Benefits, Risks, and Issuer and Investor Uses Module 1: Uses, Benefits, and Risks of Derivatives 1 Describe benefits and risks of derivative instruments. 2 Compare the use of derivatives among issuers and investors. 		Homework for Reading 3

	<p>*China Derivative Markets</p> <p>*Hedging cases of real enterprises: derivatives in the risk management</p>		
4	<p>● Reading 4 Arbitrage, Replication, and the Cost of Carry in Pricing Derivatives</p> <p>Module 1: Arbitrage, Replication, and Carrying Cos</p> <p>1 Explain how the concepts of arbitrage, replication, and risk neutrality are used in pricing derivatives.</p> <p>2 Explain the difference between the spot and expected future price of an underlying and the cost of carry associated with holding the underlying asset.</p>	Classroom	Homework for Reading 4
5	<p>● Reading 5 Pricing and Valuation of Forward Contracts and for an Underlying with Varying Maturities</p> <p>Module 1: Forward Contract Valuation</p> <p>1 Explain how the value and price of a forward contract are determined at expiration, during the life of the contract, and at initiation.</p> <p>2 Explain how forward rates are determined for an underlying with a term structure and describe their uses.</p>	Classroom	Homework for R5
6	<p>● Reading 6 Pricing and Valuation of Futures Contracts</p> <p>Module 1: Futures Valuation</p> <p>1 Compare the value and price of forward and futures contracts.</p> <p>2 Explain why forward and futures prices differ.</p> <p>● Reading 7 Pricing and Valuation of Interest Rate and Other Swaps</p> <p>Module 1: Swap Valuation</p> <p>1 Explain how swap contracts are similar to but different from a series of forward contracts.</p> <p>2 Contrast the value and price of swaps.</p>	Classroom	Homework for Reading 6&7
7	<p>● Reading 8 Pricing and Valuation of Options</p> <p>Module 1: Option Valuation</p> <p>1 Explain the exercise value, moneyness, and time value of an option.</p> <p>2 Contrast the use of arbitrage and replication concepts in pricing forward commitments and contingent claims.</p> <p>3 Identify the factors that determine the value of an option and describe how each factor affects the value of an option.</p>	Classroom	Homework for Reading 8
8	<p>● Reading 9 Option Replication Using Put-call Parity</p> <p>Module 1: Put-call Parity</p> <p>1 Explain put–call parity for European options.</p> <p>2 Explain put–call–forward parity for European options.</p> <p>● Reading 10 Valuing a Derivative Using a One-Period Binomial Model</p> <p>Module 1: Binomial Model for Option Values</p> <p>1 Explain how to value a derivative using a one-period binomial model.</p> <p>2 Describe the concept of risk neutrality in derivatives pricing.</p>	Classroom	Homework for R9
9	Labour Day Holiday		
10	Midterm Test	Classroom	

11	<p>Part Two: Alternative Investments</p> <p>● Reading 1 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>	Classroom	Homework for R1
12	<p>● Reading 2 Performance Calculation and Appraisal of Alternative Investments</p> <p>Module 1: Performance Appraisal and Return Calculations</p> <p>1 Describe issues in performance appraisal of alternative investments.</p> <p>2 Calculate and interpret returns of alternative investments both before and after fees.</p>	Classroom	Homework for R2
13	<p>● Reading 3</p> <p>Private Capital, Real Estate, Infrastructure, Natural Resources, and Hedge Funds</p> <p>Module 1: Private Equity and Private Debt</p> <p>1 Explain investment characteristics of private equity.</p> <p>2 Explain investment characteristics of private debt.</p> <p>*Case: PE and VC investment case</p> <p>*It aligns with the new trend that AI and healthcare have become the major investment areas for private equity.</p> <p>Module 2: Real Estate, Infrastructure, and Natural Resources</p> <p>1 Explain investment characteristics of real estate.</p> <p>2 Explain investment characteristics of infrastructure.</p> <p>3 Explain investment characteristics of natural resources.</p> <p>*Case: Daxing Airport PPP, Metro developments PPP etc.</p> <p>*The supporting role of infrastructure investment in green and low-carbon development ,</p> <p>*Alternative investments to serve the country's major development strategies, such as digitization, data center.</p>	Classroom	Homework for R3
14	<p>Module 3: Hedge Funds</p> <p>1 Explain investment characteristics of hedge funds.</p>	Classroom	
15	● Presentation	Classroom	
16	● Revision	Classroom	

Note: Wechat group and Xuexitong will be used to facilitate our teaching and learning activities. The Wechat group will be mainly used to inform the students study activities and answer questions. Xuexitong will be used as the main study platform to organize the study activities and upload learning materials.

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

Midterm Test	Week 10
Final Exam	Refer to the notice of the Academic Affairs Office

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: Wei Manqiu **Department Head:** _____

