



浙江大學

FINS982

Derivative Securities and Risk Management

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Instructor Contact Details

Lecturer-in-charge: TBA

Email: wlwyxy_29@zju.edu.cn

Office location: Huajiachi Campus, Zhejiang University

Consultation Time: to be announced, and by appointment

Teaching Times, Modes and Locations

The Time: TBA

Modes: Online/Face-to-face

Location: Anywhere via online/Huajiachi Campus, Zhejiang University via face-to-face

Academic Level

Postgraduate

Units of Credit

The course is worth 6 units of credit

Credit Hours

The number of credit hours of this course equals to the credits of a standard semester-long Australian university course.

Contact Hours

The course contains a total of 53 contact hours, which consists of orientation, lectures, seminars, quiz, discussion, research, case study, small tests, assignments, on-site field trip(s), in-class and after-class activities, revision and final exam. Students will receive an official transcript which is issued by Zhejiang University when completing this course.

Course Description:

This course provides introductory theory and applied knowledge of financial derivatives. The theoretical part covers some basic pricing principles applicable to various derivatives contracts in the financial market. The working knowledge section will cover the main types of derivatives contracts and valuation techniques. The course emphasizes the use of derivatives in financial risk management. It includes an options market making simulation designed to help students gain practical knowledge about complex options market making mechanisms.

Prerequisite:

N/A

Learning Resources

Chance, D and Brooks, R. (2014). 10th Edition. Introduction to Derivatives and Risk Management, Cengage Learning.

Options, Futures and Other Derivatives, by John C. Hull, 9th Ed., Prentice-Hall, 2015.

Learning Objectives

By the end of this course you should be able to:

- Explain the definitions and uses of a variety of derivatives, e.g., futures, options, swaps, and some exotic options.
- Develop an understanding of the economic intuition underlying option pricing;
- Outline the correct derivatives used for hedging the different types of risks;
- Understand and evaluate the shortcomings of hedging as well as the general health of the financial markets;
- Communicate financial derivatives pricing and risk management ideas in a clear and succinct manner.

Course Delivery:

- Online Lecture mode includes lectures, seminars, quiz, discussion, research, case study, small tests, assignments, online field trip(s), in-class activities, revision and final exam.
- Face-to-face Lecture mode includes lectures, seminars, quiz, discussion, research, case study, small tests, assignments, on-site field trip(s), in-class and after-class activities, revision and final exam.

The following course will be taught in English. There will also be guest speakers and optional field trips available for students who would like to enhance their learning experience. All courses and others sessions will be run during weekdays.

Topics and Course Schedule:

Topic	Activities
Orientation	
Fundamentals of Forwards and Futures	Lecture; Tutorial
Hedging technique and pricing of forward and futures.	Lecture; Tutorial
Principles of options pricing Value of a call Effect of time Effect of interest rates	Lecture; Tutorial
Options Pricing Model	Lecture; Tutorial
Origins of The Black-Scholes-Merton Model Assumptions of this formula Stock price, exercise price Standard deviation	Lecture; Tutorial
Seminar	

Option Strategies	Lecture; Tutorial
Advanced Option Strategies <ul style="list-style-type: none"> • The modified butterfly • Key criterias to consider 	Lecture; Tutorial
Seminar	
Pricing derivative securities	Lecture; Tutorial
Futures and Forwards	Lecture; Tutorial
Contracting Expiration Dates Strike Price Pricing Exercise and assignment	Lecture; Tutorial
Futures Arbitrage Strategies	Lecture; Tutorial
Hedging	Lecture; Tutorial
Interest rate swaps Currency Swaps Equity Swaps	Lecture; Tutorial
Revision	
Final exam	

Assessments:

Class participation	10%
Quiz	15%
Research and case study	15%
Individual Assignment	20%
Final exam	40%

Grade Descriptors:

HD	High Distinction	85-100
D	Distinction	75-84
Cr	Credit	65-74
P	Pass	50-64
F	Fail	0-49

High Distinction 85-100

Treatment of material evidences an advanced synthesis of ideas
Demonstration of initiative, complex understanding and analysis
Work is well-written and stylistically sophisticated, including appropriate referencing, clarity, and some creativity where appropriate
All criteria addressed to a high level

Distinction 75-84

Treatment of material evidences an advanced understanding of ideas
Demonstration of initiative, complex understanding and analysis
Work is well-written and stylistically strong
All criteria addressed strongly

Credit 65-74

Treatment of material displays a good understanding of ideas
Work is well-written and stylistically sound, with a minimum of syntactical errors
All criteria addressed clearly

Pass 50-64

Treatment of material indicates a satisfactory understanding of ideas
Work is adequately written, with some syntactical errors
Most criteria addressed adequately

Fail 0-49

Treatment of ideas indicates an inadequate understanding of ideas
Written style inappropriate to task; major problems with expression
Most criteria not clearly or adequately addressed

Academic Integrity

Students are expected to uphold the university's academic honesty principles which are an integral part of the university's core values and principles. If a student fails to observe the acceptable standards of academic honesty, they could attract penalties and even disqualification from the course in more serious circumstances. Students are responsible for knowing and observing accepted principles of research, writing and any other task which they are required to complete.

Academic dishonesty or cheating includes acts of plagiarism, misrepresentation, fabrication, failure to reference materials used properly and forgery. These may include, but are not limited to: claiming the work of others as your own, deliberately applying false and inaccurate information, copying the work of others in part or whole, allowing others in the course to copy your work in part or whole, failing to appropriately acknowledge the work of other scholars/authors through acceptable referencing standards, purchasing papers or writing papers for other students and submitting the same paper twice for the same subject.

This Academic Integrity policy applies to all students of the Zhejiang University in all programmes of study, including non-graduating students. It is to reinforce the University's commitment to maintain integrity and honesty in all academic activities of the University community.

Policy

- The foundation of good academic work is honesty. Maintaining academic integrity upholds the standards of the University.
- The responsibility for maintaining integrity in all the activities of the academic community lies with the students as well as the faculty and the University. Everyone in this community must work together to ensure that the values of truth, trust and justice are upheld.
- Academic dishonesty affects the University's reputation and devalues the degrees offered.
- The University will impose serious penalties on students who are found to have violated this Policy. The following penalties may be imposed:
 - Expulsion;

- Suspension;
- Zero mark/fail grade;
- Marking down;
- Re-doing/re-submitting of assignments or reports; and
- Verbal or written warning.

