Course Syllabus

Course Number: 40511423-2
Course Name (CH): 投资学
Course Name (EN): Investment
Credits: 3
Prerequisites: Introduction to Finance/Statistical Analysis
Teaching Language: English
Courseware Language: English
Teaching Method: ☒lecture ☒discussion ☐case study ☒literature reading ☐computer-aided assignment ☐students' in-class presentation
Assessment Method: ☐in-class quiz ☐oral presentation ☐group discussion ☐ case analysis (report) ☐final report/thesis ☒final exam ☒practice project (report)
☐others______Assignment____________________
Semester: ☒spring ☐autumn ☐summer
Course Category: ☒core course ☐elective course
Target Students: ☒Undergraduate ☐Master ☐PhD ☐MBA ☐EMBA ☐ TIEMBA

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Discussion Board:
TA: See Announcement

Course Description (course objectives and content):

This course provides students with a critical understanding of the basic theory of investment and securities analysis techniques used for portfolio management by fund managers, analysts, risk managers, banks' trading desks and other financial institutions. One of the strengths of the module is that it is accompanied by realistic practical examples that students are asked to solve using R, Python or other software. Moreover, the module covers pricing of a large range of asset classes including equities, bonds, foreign exchange and commodities. Students who have completed the module should be able to implement trading strategies, risk management techniques, valuation and portfolio construction methods in a wide range of assets including equities, bonds, foreign exchange and commodities.

Textbooks & References:

1. Main: lecture notes
2. (Optional) ***Investments***: Zvi Bodie, Alex Kane and Alan J. Marcus (10 or 10+ Edition in Chinese 中文版)
3. (Optional) Recommended academic/industry papers
4. (Optional) Newspapers: Wall Street Journal, Financial Times, Economists, etc.

Grading (percentage of all the assessment methods involved):

No.	Assessment method	Percentage
1	Individual Assignment * 3	15%
2	Group Project	15%
3	Mid-term Exam	20%
4	Final Exam	50%

Teaching Schedule:

This course will cover the following topics:

- **Section 1 (Introduction)**: basics of investment system and investing mechanism, overview of different asset classes.
- **Section 2 (Risk-Return Tradeoff)**: review of historical performance on various asset classes; the risk-return tradeoff in financial markets; computing security risk and return.
- **Section 3 (Portfolio Theory)**: measuring portfolio risk and return, forming optimal portfolio using mean-variance analysis, portfolio diversification, deriving efficient frontier.
- **Section 4 (Asset Pricing Theory)**: Capital Asset Pricing Model (CAPM), Arbitrage Pricing Theory (APT).
- **Section 5 (Efficiency Market Hypothesis and Behavioral Finance)**: understanding the concepts of financial market efficiency and anomalies; understanding the concepts of behavioral finance.
- **Section 6 (Bond Market)**: Bond pricing; term structure of interest rates; bond portfolio management.
- **Section 7 (Foreign Exchange Market)**: currency market and interest rate parity.
- **Section 8 (Derivatives):** futures/forwards, options; commodity futures.