

**THE UNIVERSITY OF HONG KONG
FACULTY OF BUSINESS AND ECONOMICS**

**FINA3325: Alternative Investments
Semester 1, 2021-22**

GENERAL INFORMATION

Instructor: Dr. Fangzhou LU

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Consultation times: TBA

Tutor: TBD

Pre-requisite(s):

FINA0301/ FINA2322 Derivatives; and FINA2802/ FINA2320 Investments and portfolio analysis or STAT2309/STAT3609 The statistics of Investment Risk.

Mutually exclusive:

FINA3327 Hedge Funds: Strategies, Business Management, and Institutions

Course website: Available through HKU Portal e-learning

Other important details: ** If you need to contact the instructor/ TA via email, please send your email directly from your email account to their email accounts. Do not use the email facility in Moodle. Moreover, this year's course material will be offered slightly different from the previous years.*

COURSE DESCRIPTION

This course provides an overview of various forms of alternative investments that include hedge funds, cryptocurrencies, managed futures, private equity, venture capital, real estate, commodities and foreign exchange. The purpose of the course is to give students a good understanding of the operation of these investments; the benefits and pitfalls associated with them; and strategies to integrate them into the context of portfolio management. The current state of research and practice of the industry will be addressed. This course focus on the "Poet" side instead of the "Quant" side of alternative investment. Real life investment stories will be the focus of the class.

Recommended Readings

There is no required textbook for the course. Since the alternative investment space comprises of many disparate and often unrelated assets, there is simply no textbook in the market covering all of them. There are some textbooks and professional books on specific forms of alternative investments such as venture capital and hedge funds. A number of reference books will be referred to in this course. Other readings for the course are sourced from industry reports and journal papers. They will be uploaded to Moodle as the course proceeds.

Reference books (available as e-book):

1. *Alternative Investments*, CAIA Level I, 3rd edition, John Wiley & Sons, 2015.

(CAIA I 2015)

Alternative Investments, CAIA Level II, 3rd edition, John Wiley & Sons, 2016.

(CAIA II 2016)

These two handbooks serve as the main reading sources of the course. They are for people planning to take the CAIA Level 1 and 2 Exams (<https://caia.org/content/curriculum-study-tools2>). Pages from some chapters from the handbooks will be assigned as required readings, especially for the hedge fund part. There is no need to buy the handbooks. They are available as e-book in the HKU Main Library.

2. *Venture Capital, Private Equity, and the Financing of Entrepreneurship*, by Josh Lerner, Ann Leamon, et al. (2012)

3. *Venture Capital and the Financing of Innovation*, by Andrew Metrick and Ayako Yasuda (2010)

Note on readings:

Readings related to course materials are scattered over multiple sources and within specific pages in assigned chapters. It is often not necessary to read the entire assigned chapters. To keep the reading materials within reasonable range, specific reading assignments (e.g. to the extent of page range) and guidance on readings (e.g. notice that whether the readings are for background info or essential) will be provided.

FACULTY LEARNING GOALS (FLGs)

- FLG1:** Acquisition and internalization of knowledge of the programme discipline
- FLG2:** Application and integration of knowledge
- FLG3:** Inculcating professionalism
- FLG4:** Developing global outlook
- FLG5:** Mastering communication skills
- FLG6:** Cultivating leadership

COURSE LEARNING OUTCOMES (CLOs)

Course Learning Outcomes	Aligned Faculty Learning Goals (FLGs)
CLO1. characterize the common features of alternative investments and the structure of their markets;	Goal # 1, 2, 3, 4, 5
CLO2. distinguish among the principal classes of alternative investments and their business models;	Goal # 1, 2, 3, 4, 5
CLO3. Understand and apply the investment techniques and strategies of hedge funds, buyouts, venture capital, and commodities;	Goal # 1, 2, 3, 4, 5
CLO4. assess performance of alternative assets and the skills and benefits, such as return enhancement and/or risk diversification, of adding them in a portfolio.	Goal # 1, 2, 3, 4, 5

COURSE TEACHING AND LEARNING ACTIVITIES

Course Teaching and Learning Activities	Expected Study Hours	Study Load (% of study)
TLA 1 Lecture	36 hours	30%
TLA 2 In-Class discussion	12 hours	10%
TLA 3 Self-study and Consultation	72 hours	60%
Total	120 hours	100%

Assessment Methods	Brief Description	Weight
Problem Sets	Four in total (10% each)	40%
Class Participation	Class Participation	10%
Term Paper and Presentation	Alternative Investment Strategy Design	20%
Quiz	Two quizzes (15% each)	30%
	Total	100%
Coursework / Examination Ratio:	70% / 30%	

STANDARDS FOR ASSESSMENT

Course Grade Descriptors

A+, A, A- High distinction	Strong evidence of superb ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
B+, B, B- Distinction	Strong evidence of the ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
C+, C, C- Credit pass	Evidence of adequate ability to fulfill the intended learning outcomes of the course at low levels of learning such as describe and apply but not at high levels of learning such as evaluate and synthesis.
D+, D	Evidence of basic familiarity with the subject.

Pass	
F Fail	Little evidence of basic familiarity with the subject.

Assessment Rubrics for Each Assessment

Assessment Rubrics for Assignments and Final examination are the same as in course grade descriptors. A less than 2-page term-paper and less than 3-minute presentation (video-recording) per student to pitch a new alternative investment idea is required as part of the assessment, which accounts for 20% of the total grade. For the two quizzes, one will happen near the half of semester in class, the other one will happen in the last class. (Depending on the COVID-19 conditions, these two quizzes can also be given online)

COURSE CONTENT AND TENTATIVE TEACHING SCHEDULE

1. Topic: Introduction to Alternative Asset Space

Major types of Alternative Assets and their commonalities
Investors, regulations, drivers of demand for alternative assets
Beta, Alpha, and their separation
Gross and net exposure
Active Performance: Benchmark versus Weight-based measures,
Information Ratio,
Separation of asset selection and market timing

2. Topic: Hedge Funds

Hedge fund Strategies
Equity hedge funds – long short, short bias, emerging market, market neutral
Event driven hedge funds – Merger arbitrage, distressed debt, activist
Relative value – Fixed income arbitrage, convertible arbitrage, volatility
arbitrage, swap spread arbitrage
Other strategies – Global macro and managed futures
Issues in assessing hedge funds' return
Data bias, asset illiquidity, serial correlation

3. Topic: Cryptocurrencies

Blockchain
Initial Token Offerings
Bitcoin, Ethereum, and their futures
Cross-platform arbitrage
DeFi and Altcoins

4. Topic: Private Equity

Private equity cycle and limited partnership agreements between LPs and GPs
Deal structure – PE securities and their motivations
Special considerations in applying standard valuation models to private firms
Relative valuation approach, Adjusted present value approach,
Option approach, Venture capital approach, Analysis of leverage buyouts
Achieving Liquidity - Choice of exit modes
Private equity benchmark

5. Topic: Commodities (Depends on the schedule)

Economics of Commodity Spot Markets
Models of Commodity Supply:
Hotelling's model
Hubbert's model
Industry Supply Curve model

Drivers of Demand for Commodities
Commodities as a Diversifier and Inflation Hedge
Assessing Commodity Investment Products - commodity index funds/swaps, commodity futures, ETNs/commodity-linked notes, equities of commodity-based firms, etc.

Deep dive into Commodity Futures:

Differences between Commodity and Financial Futures
Term Structure of Commodity Futures (Backwardation/Contango)
Hedgers, Speculators, and Risk Premium in Futures Pricing
Components of return: Excess return, Spot return, and Roll yield

Relative Value Strategies using Commodity Futures:
Calendar Spread, Processing Spread, Crack Spread, Substitution
Spread, Quality/Location Spread
Allocation to Commodities

MEANS/PROCESSES FOR STUDENT FEEDBACK ON COURSE

conducting SETL around the end of the semester

COURSE POLICY (e.g. plagiarism, academic honesty, attendance, etc.)

The University Regulations on academic dishonesty will be strictly enforced! Please check the University Statement on plagiarism on the web: <http://www.hku.hk/plagiarism/>
Academic dishonesty is behavior in which a deliberately fraudulent misrepresentation is employed in an attempt to gain undeserved intellectual credit, either for oneself or for another. It includes, but is not necessarily limited to, the following types of cases:

a. Plagiarism - The representation of someone else's ideas as if they are one's own. Where the arguments, data, designs, etc., of someone else are being used in a paper, report, oral presentation, or similar academic project, this fact must be made explicitly clear by citing the appropriate references. The references must fully indicate the extent to which any parts of the project are not one's own work. Paraphrasing of someone else's ideas is still using someone else's ideas, and must be **acknowledged**.

b. Unauthorized Collaboration on Out-of-Class Projects - The representation of work as solely one's own when in fact it is the result of a joint effort. Where a candidate for a degree or other award uses the work of another person or persons without due acknowledgement:

- (1) The relevant Board of Examiners may impose a penalty in relation to the seriousness of the offence;
- (2) The relevant Board of Examiners may report the candidate to the Senate, where there is *prima facie* evidence of an intention to deceive and where sanctions beyond those in (1) might be invoked.

Plagiarism will automatically result in at least a zero score in the plagiarized assignment or examination. Serious cases will be referred to the University's Disciplinary Committee.