

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

FINA3327 Hedge Funds: Strategies, Business Management, and Institutions

Class Time and Venue: TBA
Instructor: Dr. Andrew Sinclair
Assistant Professor of Finance
Faculty of Business and Economics
Office: Room KKL 1117
Work Phone: 3917 4180
Email: andrew.sinclair@hku.hk
Office Hours: By appointment

Teaching Assistant: Mr. Frankie Ho
Email: cfhoad@hku.hk

Course description

This course is an in-depth study of the hedge fund industry. We will study hedge fund trading strategies, the business model of hedge funds, hedge fund investors, as well as the institutional and regulatory framework in which hedge funds operate. The course will evaluate and analyze popular hedge fund trading strategies, including equity strategies (activist, market-neutral, long/short, event-driven, etc.), arbitrage strategies (derivatives, convertible, fixed-income, currency and global macro, etc.), and fund of hedge funds. The course will also analyze the hedge fund business model, including: performance evaluation and risk management; fund compensation and contractual features; transaction costs and market impact; as well as fund raising and marketing. In addition, the course will study the institutional relationships hedge funds have with service providers (prime brokers, custodian banks, etc.) and with regulators. We will also discuss public policy implications and the value of hedge funds in society. This course is designed to provide students with the skills necessary to evaluate hedge fund strategies, and to develop, manage, and successfully grow a hedge fund business.

Prerequisite: FINA2322 Derivatives; and FINA2320 Investments and portfolio analysis or STAT3609 The statistics of investment risk

Mutually exclusive: FINA3325 Alternative Investments

Course Aims

This course aims to:

1. *Introduce* you to basic and advanced hedge fund strategies from both a conceptual and risk perspective.
2. *Introduce* you to methods for evaluating the performance and risk of hedge fund strategies.
3. *Introduce* you to the compensation and contractual features of hedge funds.
4. *Help* you to develop skills in designing, implementing, and back-testing hedge fund trading strategies.
5. *Help* you to develop skills in marketing a hedge fund strategy to potential investors.

Learning Outcomes

Upon completion of this course, you should be able to:

CLO1 *Assess* the how a hedge fund trading strategy produces value.

CLO2 *Analyze* and identify the performance and risks of hedge fund strategies.

CLO3 *Analyze* the unique features of the hedge fund industry and the regulatory environment.

CLO4 *Formulate* an effective hedge fund strategy to mitigate arbitrage opportunities.

Aligned Faculty Goals	Course Learning Outcome
1. Acquisition and internalization of knowledge of the programme discipline	CLO1-4
2. Application and integration of knowledge	CLO2-4
3. Inculcating professionalism	CLO2-4
4. Developing global outlook	CLO2-4
5. Mastering communication skills	CLO2 & CLO4
6. Cultivating leadership	CLO2-4

Teaching and Learning Activities

The course will consist of lectures covering the theories and concepts that underlie the hedge fund industry. The two assignments will test the students understanding of the financial economics of hedge funds. Topics may include performance evaluation, risk assessment, cost analysis, and incentive analysis. The assignments will include both quantitative and analytical questions, and points will be given for correct answers.

The term project will involve a write-up and a group presentation. Half of the points will come from the write-up. Students will be expected to utilize the knowledge gained in the

course to pitch their hedge fund strategy in a convincing manner. Points will be awarded for a clear and concise investment thesis, technically correct specifications and testing, and appropriate tone and style. The remaining points will be awarded based on the in-class presentation of the final project. Students are expected to present their thesis idea in a professional and well-articulated manner. Points will be awarded for successfully communicating the investment idea to the class, and for thoughtfully, logically, and clearly responding to audience questions.

The final exam will test understanding of course material. It will include a mix of both quantitative and analytical questions designed to test students' understanding and knowledge of hedge fund strategies, the hedge fund industry and business model, as well as public policy implications for hedge funds

Course Teaching and Learning Activities	Expected contact hour	Study Load (% of study)
T&L1. Lectures	36 hours	27.27%
T&L2. Projects/assignments	36 hours	27.27%
T&L3. Tutorials	12 hours	9.09%
T&L4. Self-study	48 hours	36.36%
Total	132 hours	100%

Textbook and Reading Materials

There is no required textbook for this course. Lecture notes will be posted in Moodle, and are designed to be self-contained. That is, the material you will be tested in in assignments and the exam will all come from the lecture slides and optional homework.

Some of the historical details discussed in this course are adapted from Sebastian Mallaby's 2010 book titled "More Money Than God: Hedge Funds and the Making of a New Elite," (The Penguin Press, New York). This book is not required, but is highly recommended for anyone interested in learning about the individual characteristics of hedge fund managers.

Other Reference Sources:

- Handbook of Hedge Funds by Francois-Serge Lhabitant, Wiley Finance, 2006,
- Hedge Funds: An Analytic Perspective by Andrew W. Lo, Princeton University Press, 2008,
- Hedge Funds: A Dynamic Industry in Transition by Mila Getmansky, Peter A. Lee, and Andrew W. Lo (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2637007)

- Principles of Quantitative Equity Investing: A Complete Guide to Creating, Evaluating, and Implementing Trading Strategies, by Sugata Ray, Pearson Higher Education, 2015.

Required Tool

A standard financial calculator SUCH AS Texas Instruments, Casio, and HP 12C.

Grading Policy

The course grade will be based on tutorial discussions, assignments, and a final exam. The point distribution is as follows:

Assessment Methods	Weights	Aligned Course Learning Outcomes
A1. Tutorial Participation & Discussion	10%	CLO 1-4
A2. Assignments	10%	CLO 1-3
A3. Group Project	30%	CLO 1-4
A3. Year-End Final Exam	50%	CLO 1-4
Total	100%	

Weekly homework questions will be assigned but will *not* be collected and therefore *not* graded. The purpose of these problem sets is to assist you in reviewing the materials and preparing for the exams.

Course Grade Descriptors

Grade	Descriptors
A+ A A-	<ul style="list-style-type: none"> • All aspects were addressed and researched in great depth. • Demonstrates a clear understanding of and the ability to apply theory, concepts and issues relating to the topic. • Able to clearly identify the most critical aspects of the task and adopt a critical perspective. • Excellent development of argument and offers a logically consistent and well-articulated analysis and insight into the subject. • Draws widely from the academic literature and elsewhere whilst maintaining relevance. • All aspects conform to a high academic / professional standard
B+ B B-	<ul style="list-style-type: none"> • Most aspects were addressed and researched in depth. • Demonstrates a good understanding and some application of the theory and issues relating to the topic. • Able to identify critical aspects of the task and adopt a critical perspective. • Some evidence of analysis, supported by logical argument and insight into the subject. • Draws on relevant academic and other material.

	<ul style="list-style-type: none"> • Most aspects conform to a high academic / professional standard.
C+ C C-	<ul style="list-style-type: none"> • Most aspects were addressed and researched adequately. • Demonstrates a good understanding of the theory, concepts and issues relating to the topic but limited application relating to the topic. • Some argument presented showing some insight but not always consistent and logical. • Draws upon an adequate range of academic and other material • Most aspects conform to an acceptable academic / professional standard.
D	<ul style="list-style-type: none"> • Basic aspects were addressed and researched adequately. • Demonstrates mainly description, showing basic understanding of the topic but no application. • Little evidence of analysis but no clear and logical argument relating to the subject. • Draws primarily upon course materials. • Limited aspects conform to academic/professional standards.
F	<ul style="list-style-type: none"> • Basic aspects were superficial, inadequate or absent. • Demonstrates limited understanding of the topic and draws conclusions unrelated to the topic. • The written work is not of an academic/professional standard.

Assessment Rubrics for Each Assessment (same as Course Grade Descriptors)

Course Contents

INTRODUCTION AND TRADING:

Topic 1: Overview

- History, organization, and current status of the hedge fund industry,
- Differences between hedge funds and mutual funds,
- Hedge fund strategies and styles.

Topic 2: Equity return models, stock selection, and risk management

- Risk-adjusted performance measures,
- Buying on margin and short selling,
- Derivatives and leverage,
- Risk management.

Topic 3: Portfolio Formation and Backtesting

- Sorting stocks on characteristics,
- Equal- and value-weighted portfolios,
- Calculating alpha and sharpe ratios,

- Calculating risk measures.

HEDGE FUND STYLES:

Topic 4: Long-short equity and relative value strategies

- Market neutral investing,
- Pairs trading,
- Convertible arbitrage.

Topic 5: Merger/risk arbitrage and event-driven funds

- The size of the control premium,
- The probability of merger success,
- Mechanics of risk arbitrage,
- How activists influence firms.

Topic 6: Fixed-income arbitrage

- Bond pricing and volatility,
- Long-Term Capital Management case study.

Topic 7: Global macro funds and fund-of-hedge funds

- The market portfolio and the Yale Endowment model,
- Carry trades,
- Affordability and diversification of fund-of-funds,
- The cost of fund-of-funds; “fees-on-fees”.

THE BUSINESS OF HEDGE FUNDS:

Topic 8: Hedge fund investors

- Who invests in hedge funds?
- Search costs and hedge fund advertising,
- The principal-agent problem,
- Incentive alignment and performance-based compensation,
- Contractual features and liquidity.
- Due diligence and qualitative analysis.

Topic 9: Hedge fund corporate governance, service providers, and regulation

- Ownership structure of hedge funds,
- Managerial career concerns,
- Prime brokers, and custodial banks,
- Third-party marketers,
- Regulation regarding trading opportunities,
- The Investment Act of 1940,
- Regulation regarding investors:
 - The Securities Act of 1933,
 - Regulation D and the JOBS Act of 2012
 - US and Non-US regulatory differences.

Topic 10: Current trends in the hedge fund market

- Alternative ETFs and the migration of retail investors,
- The rise of institutional investors,
- Risk parity strategies.

Academic Honesty and Integrity

The University Regulations on academic dishonesty will be strictly enforced. Please check the University Statement on plagiarism on <http://www.hku.hk/plagiarism/>.

Cheating or plagiarism of any kind would result in an automatic F grade for the course plus strict enforcement of all Faculty and/or University regulations regarding such behavior. Incident(s) of academic dishonesty will NOT be tolerated.

Academic dishonesty is a 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.

- c. Cheating on In-Class Exams - The covert gathering of information from other students, the use of unauthorized notes, unauthorized aids, etc.

Unauthorized Advance Access to an Exam - The representation of materials prepared at leisure, as a result of unauthorized advance access (however obtained), as if it were prepared under the rigors of the exam setting. This misrepresentation is dishonest in itself even if there are not compounding factors, such as unauthorized uses of books or notes.

TENTATIVE SCHEDULE

Class	Slides	Date	Content and Readings
1	1	Jan. 18	<p>Lecture 1: Introduction Lecture 1 Slides Optional Reading:</p> <ul style="list-style-type: none"> • Mallaby (2010) Introduction, Ch. 1 • Loomis, “The Jones Nobody Keeps Up With”, Fortune, 1966.
2	2	Jan. 25	<p>Lecture 2: Equity Return Models, Stock Selection, and Risk Management Lecture 2 Slides Optional Reading:</p> <ul style="list-style-type: none"> • Markowitz, “Portfolio Selection”, The Journal of Finance, 1952. • Fama and French, “The Cross-Section of Expected Stock Returns,” The Journal of Finance, 1992. • Jegadeesh and Titman, “Return to Buying Winners and Selling Losers: Implications for Stock Market Efficiency”, The Journal of Finance, 1993.
3	3	Feb. 1	<p>Lecture 3: Long-Short Equity and Relative Value Strategies Lecture 3 Slides Optional Reading:</p> <ul style="list-style-type: none"> • Mallaby (2010) Ch. 13 • Grossman and Stiglitz, “On the Impossibility of Informationally Efficient Markets”, The American Economic Review, 1980. • Mikhail, Walther, and Willis, “Do Security Analysts Exhibit Persistent Differences in Stock Picking Ability?”, Journal of Financial Economics, 2004. • Xie, “Call you Clients First: An Examination of How Analysts Add Value to Their Fund Clients”, Yale University PhD Dissertation, 2013. • Froot and Dabora, “How are Stock Prices Affected by the Location of Trade?”, Journal of Financial Economics, 1999. • Gatev, Goetzmann, and Rouwenhorst, “Pairs Trading: Performance of a Relative-Value Arbitrage Rule”, The Review of Financial Studies, 2006. • Vidyamurthy, “Pairs Trading: Quantitative Methods and Analysis”, Wiley, 2004. <p>Elliott, Van Der Hoek, and Malcolm, “Pairs Trading”,</p>

			Quantitative Finance, 2005.
4	4	Feb. 8	Lecture 4: Portfolio Formation and Backtesting Lecture 4 Slides Optional Reading: <ul style="list-style-type: none"> • Glossner, “ESG Risks and the Cross-Section of Stock Returns”, Working Paper, 2017. • Fama and French, “Size, Value, and Momentum in International Stock Returns”, Journal of Financial Economics, 2012. • Asness, Moskowitz, and Pedersen, “Value and Momentum Everywhere”, The Journal of Finance, 2013. • Liu and Tsyvinski, “Risks and Returns of Cryptocurrency”, Working Paper, 2018.
		Feb. 15	<i>Spring Festival</i>
5	5	Feb. 22	Lecture 5: Merger/Risk Arbitrage and Event-Driven Funds Lecture 5 Slides Optional Reading: <ul style="list-style-type: none"> • Mallaby (2010) Ch. 12 • Bernard and Thomas, “Post-Earnings-Announcement Drift: Delayed Price Response or Risk Premium?”, Journal of Accounting Research, 1989. • Schwert, “Markup Pricing in Mergers and Acquisitions”, Journal of Financial Economics, 1996. • Guo, Jarrow, and Lin, “Distressed Debt Prices and Recovery Rate Estimation”, Review of Derivatives research, 2008. • Buelhmaier and Zechner, “Financial Media, Price Discovery, and Merger Arbitrage”, Working Paper, 2017. • Keefe, “Empire of Edge: How a doctor, a trader, and the billionaire Steven A. Cohen got entangled in a vast financial scandal”, The New Yorker, October 13, 2014. • Brav, Jiang, and Kim, “Hedge Fund Activism: Updated Tables and Figures”, Unpublished Manuscript, 2013.
6	6	Mar. 1	Lecture 6: Fixed-Income Arbitrage Lecture 6 Slides Optional Reading: <ul style="list-style-type: none"> • Mallaby (2010) Ch. 10 • Krishnamurthy, “The Bond/Old-Bond Spread”, Journal of Financial Economics, 2002. • Brunnermeier and Pedersen, “Predatory Trading”, The Journal of Finance, 2005.
		Mar. 8	<i>Reading Week</i>

7	7	Mar. 15	<p>Lecture 7: Global Macro and Fund of Funds Lecture 7 Slides Optional Reading:</p> <ul style="list-style-type: none"> • Mallaby (2010) Ch. 4, 7, 9, 12 <p>Brown, Goetzmann, and Liang, “Fees on Fees in Funds of Funds”, <i>The World of Hedge Funds: Characteristics and Analysis</i>, 2005.</p>
8	8	Mar. 22	<p>Lecture 8: Hedge Fund Investors Lecture 8 Slides Optional Reading:</p> <ul style="list-style-type: none"> • Liang, Getmansky, Schwarz, and Wermers, “Share Restrictions and Investor Flows in the Hedge Fund Industry”, Working Paper, 2019. • Baquero and Verbeek, “A Portrait of Hedge Fund Investors: Flows, Performance, and Smart Money”, <i>ERIM Report Series</i>, 2005. • Baquero and Verbeek, “Hedge Fund Flows and Performance Streaks: How Investors Weigh Information”, Working Paper, 2015. • Agarwal, Green, and Ren, “Alpha or Beta in the Eye of the Beholder: What Drive Hedge Fund Flows?”, <i>Journal of Financial Economics</i>, 2018. • Sinclair, “Chasing Performance Through the Lens of Prime Brokers”, Working Paper, 2019. • Mojir and Sinclair, “Heterogeneous Effects of Advertising Bans: The Case of the Hedge Fund Industry”, Working Paper, 2019. • Brown, Goetzmann, and Park, “Careers and Survival: Competition and Risk in the Hedge Fund and CTA Industry”, <i>The Journal of Finance</i>, 2001. <p>Gupta and Sachdeva, “Skin of Skim? Inside Investment and Hedge Fund Performance”, Working Paper, 2019.</p>
9	9	Mar. 29	<p>Lecture 9: Current Trends in the Hedge Fund Market Lecture 9 Slides Optional Reading:</p> <ul style="list-style-type: none"> • Moreira and Miur, “Volatility-Managed Portfolios”, <i>The Journal of Finance</i>, 2017. • Azar, Schmalz, and Tecu, “Anticompetitive Effects of Common Ownership”, <i>The Journal of Finance</i>, 2018.
		Apr. 5	<i>Easter Monday Holiday</i>
10	10	Apr. 12	<p>Lecture 10: Review</p> <ul style="list-style-type: none"> • Lecture 10 Slides
11		Apr. 19	Group Project Presentations
12		Apr. 26	Group Project Presentations

