FINA3327 – Hedge Funds: Strategies, Business Management, and Institutions

**GENERAL INFORMATION**

Instructor: Dr. Andrew Sinclair  
Email: andrew.sinclair@hku.hk  
Office: K.K. Leung 1117  
Phone: 3917 4180  
Consultation times: To be confirmed  
Tutor: TBA  
Pre-requisites: FINA2322 Derivatives; and FINA2320 Investments and portfolio analysis or STAT3609 The statistics of investment risk  
Co-requisites: None  
Mutually exclusive: FINA3325 Alternative Investments (or possibly the opposite direction)  
Course Website: MOODLE via HKU portal  
Other important details:  

**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.

**COURSE OBJECTIVES**

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

...  

**FACULTY GOALS**

Goal 1: Acquisition and internalization of knowledge of the programme discipline  
Goal 2: Application and integration of knowledge  
Goal 3: Inculcating professionalism and leadership  
Goal 4: Developing global outlook  
Goal 5: Mastering communication skills
# COURSE LEARNING OUTCOMES

<table>
<thead>
<tr>
<th>Course Learning Outcomes</th>
<th>Aligned Faculty Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLO1. Understand the features of different hedge fund strategies.</td>
<td>Goal 1</td>
</tr>
<tr>
<td>CLO2. Analyze and identify the performance and risks of hedge fund strategies.</td>
<td>Goal 1, 2, 3, 4, 5</td>
</tr>
<tr>
<td>CLO3. Analyze the unique features of the hedge fund industry and the regulatory environment.</td>
<td>Goal 1, 2, 3, 4</td>
</tr>
<tr>
<td>CLO4. Formulate an effective hedge fund strategy to mitigate arbitrage opportunities.</td>
<td>Goal 1, 2, 3, 4, 5</td>
</tr>
</tbody>
</table>

# COURSE TEACHING AND LEARNING ACTIVITIES

<table>
<thead>
<tr>
<th>Course Teaching and Learning Activities</th>
<th>Expected contact hour</th>
<th>Study Load (% of study)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T&amp;L1. Lectures</td>
<td>36 hours</td>
<td>27.27%</td>
</tr>
<tr>
<td>T&amp;L2. Assignments/Cases/Final Project</td>
<td>60 hours</td>
<td>45.45%</td>
</tr>
<tr>
<td>T&amp;L3. Self-study</td>
<td>36 hours</td>
<td>27.27%</td>
</tr>
<tr>
<td>Total</td>
<td>132 hours</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment Methods</th>
<th>Brief Description (Optional)</th>
<th>Weight</th>
<th>Aligned Course Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1. Assignments</td>
<td>Students (individually) will complete two assignments that are designed to test understanding and knowledge of hedge fund strategies, performance and risk analysis, and industry structure and business models. Each assignment is worth 10%.</td>
<td>20%</td>
<td>CLO1, CLO2, CLO3</td>
</tr>
<tr>
<td>A2. Class Participation</td>
<td>Class attendance and participation is worth 20%. Class participation will be based on active engagement in class discussions with the goal of improving technical and persuasive communication skills.</td>
<td>5%</td>
<td>CLO1, CLO2, CLO3</td>
</tr>
<tr>
<td>A3. Term Project</td>
<td>The term (group) project is to write a business plan and prepare a marketing presentation for a start-up hedge fund. Step 1: select a trading strategy and present a proposal in class. Step 2: form a “paper portfolio” and trade the portfolio over the course of the semester. Conduct performance evaluation using the methods learned in the class. Step 3: write a comprehensive report detailing the benefits and risks of the strategy, and present the project in class.</td>
<td>35%</td>
<td>CLO1, CLO2, CLO3, CLO4</td>
</tr>
<tr>
<td>A4. Final Exam</td>
<td>The final exam will test understanding and knowledge of hedge fund strategies, performance and risk analysis, and industry structure and business models. The final will cover material from lectures, assignments, and may include information presented during the term project presentations.</td>
<td>40%</td>
<td>CLO1, CLO2, CLO3, CLO4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

# STANDARDS FOR ASSESSMENT


Course Grade Descriptors

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+, A, A-</td>
<td>Exhibited high level of understanding of the course materials through dedicated participations, completion of all assignments/cases with almost perfect scores, and excellent performance in the final project.</td>
</tr>
<tr>
<td>B+, B, B-</td>
<td>Exhibited reasonably high level of understanding of the course materials through full participations, completion of all assignments/cases with good scores, and good performance in final project.</td>
</tr>
<tr>
<td>C+, C, C-</td>
<td>Exhibited fair level of understanding of the course materials through satisfactory participations, completion of most assignments/cases with acceptable scores, and acceptable performance in final project.</td>
</tr>
<tr>
<td>D+, D</td>
<td>Exhibited limited level of understanding of the course materials through limited participations, completion of only a part of assignments/cases with acceptable scores, and acceptable performance in final project.</td>
</tr>
<tr>
<td>F</td>
<td>Exhibited low level of understanding of the course materials through rare participations, completion of only a part of assignments/cases with unacceptable scores, and poor performance in final project.</td>
</tr>
</tbody>
</table>

Assessment Rubrics for Each Assessment (Please provide us the details in a separate file if the space here is not enough)

The two assignments will be problem set questions that test the students understanding of the financial economics that underlie 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 CONTENT AND TENTATIVE TEACHING SCHEDULE

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, implementation, and risk management
- Risk-adjusted performance measures,
- Buying on margin and short selling,
- Derivatives and leverage,
- Market impact and slippage costs,
- Risk management.

HEDGE FUND STYLES:

Topic 3: Long-short equity and relative value strategies
- Market neutral investing,
- Pairs trading,
- Convertible arbitrage.

**Topic 4: 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 5: Fixed-income, CTA/futures and options strategies**
- Bond pricing and volatility,
- Long-Term Capital Management case study,
- Commodity and FX funds.

**Topic 6: 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 7: 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 8: Hedge fund corporate governance and service providers**
- Ownership structure of hedge funds,
- Managerial career concerns,
- Prime brokers, and custodial banks,
- Third-party marketers.

**Topic 9: The regulatory environment**
- 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

**REQUIRED/RECOMMENDED READINGS & ONLINE MATERIALS (e.g. journals, textbooks, website addresses etc.)**

**Recommended Textbooks:**
- Francois-Serge Lhabitant, *Handbook of Hedge Funds*, 2006, Wiley Finance,

**Other Reference Sources:**
- *Hedge Funds: An Analytic Perspective* by Andrew W. Lo, Princeton University Press, 2008,

**Topic 1: Overview**
- Ch. 1, 2, and 6 (Lhabitant 2006)
- Class Handouts

**Topic 2: Equity return models, stock selection, and risk management**
- Ch. 5, 18, 19, 20, and 21 (Lhabitant 2006)
- Class Handouts

**Topic 3: Long-short equity and relative value strategies**
- Ch. 7, 8, and 9 (Lhabitant 2006)
- Class Handouts
<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
<th>Chapters/Handouts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic 4: Merger/risk arbitrage and event-driven funds</td>
<td>- Ch. 10 and 11 (Lhabitant 2006)</td>
<td></td>
</tr>
<tr>
<td>Topic 5: Fixed-income, CTA/futures and options strategies</td>
<td>- Ch. 12, 13, and 16 (Lhabitant 2006) - Class Handouts</td>
<td></td>
</tr>
<tr>
<td>Topic 6: Global macro funds and fund-of-hedge funds</td>
<td>- Ch. 15, 25, 26, and 27 (Lhabitant, 2006) - Class Handouts</td>
<td></td>
</tr>
<tr>
<td>Topic 7: Hedge fund investors</td>
<td>- Ch. 22, 23, and 24 (Lhabitant, 2006) - Class Handouts</td>
<td></td>
</tr>
<tr>
<td>Topic 8: Hedge fund corporate governance and service providers</td>
<td>- Ch. 4 (Lhabitant, 2006) - Class Handouts</td>
<td></td>
</tr>
<tr>
<td>Topic 9: The regulatory environment</td>
<td>- Ch. 3 (Lhabitant, 2006) - Class Handouts</td>
<td></td>
</tr>
</tbody>
</table>

**MEANS/PROCESSES FOR STUDENT FEEDBACK ON COURSE**

- conducting mid-term survey in additional to SETL around the end of the semester
- Online response via Moodle site
- Others: **Course evaluation at the end of the course** (please specify)

**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/](http://www.hku.hk/plagiarism/)

Attendance is required and prior notification must be provided for any absences.

**ADDITIONAL COURSE INFORMATION** (e.g. e-learning platforms & materials, penalty for late assignments, etc.)

Students may want to use the online Equities Lab ([http://www.equitieslab.com](http://www.equitieslab.com)) platform for building, analyzing, and testing hedge fund strategies for their final project. Equities Lab is available for purchase for $USD30, and allows students to easily build and test the portfolios we discuss in class.