FI 346 ALTERNATIVE INVESTMENTS, DERIVATIVES, STRUCTURED PRODUCTS & HEDGE FUNDS
IES Abroad Vienna

DESCRIPTION:
This course builds on traditional asset management topics, such as portfolio optimization and asset allocation. It offers a foundation in alternative investment structures and markets. Looking at the different types of hedge fund strategies and a range of statistics used to define investment performance, the course aims to familiarize students with alternative investment terms and encourage them to develop the ability to solve investment problems based on various strategy characteristics and portfolio management tools.

The students will develop a better understanding of the conceptual framework that the alternative investments / hedge fund industry is based on, and the competing options available to sophisticated investors globally. Students will assess the risks inherent in such products and strategies, and will examine unusual events, such as hedge fund collapses, or if and how hedge funds may contribute to the emergence of financial crises.

CREDITS: 3

CONTACT HOURS: 45

INSTRUCTOR: Mag. Thomas Berger

LANGUAGE OF INSTRUCTION: English

PREREQUISITES:
- An introductory course in finance or investments is required.
- A course in corporate finance and /or accounting would be advantageous.

METHOD OF PRESENTATION: Combination of lectures, discussions, case studies (cases in tail events and financial crises) and oral student presentations on assigned readings/topics.

REQUIRED WORK AND FORM OF ASSESSMENT:
- Quiz - 5%
- Midterm exam - 25%
- Final exam - 30%
- Research exercise and paper - 30%
- Course participation - 10%

Quiz
10 minutes, at the beginning of week 3, covers weeks 1 and 2. The quiz will have around 5 to 10 questions; question formats may include multiple choice, fill in the blanks, true or false, or short answers.

Midterm Exam
45 minutes, at the beginning of week 6, covers weeks 1 to 5. This will have multiple-choice questions, some which may require calculations. There will also be some written response questions.

Final Exam
120 minutes, covers weeks 6 to 11. This will have multiple-choice questions, some which may require calculations. There will also be some written response questions.

Research Exercise and Paper based on the movie "The Big Short" https://www.imdb.com/title/tt1596363/
Students conduct their own research on the topic provided (each student will be provided with a distinct/individual topic), write a 750-word paper, and present on their paper. A rubric for the assessment of the paper will be provided.

Course Participation
A rubric for participation will be posted on Moodle.

LEARNING OUTCOMES:
By the end of the semester, the students will be able to:

- Express what alternative investments are, and which environment they operate in
- Explain the different types of hedge fund strategies
- Analyze and measure the specific risk and return profiles of hedge fund strategies
- Evaluate unusual events and special situations in the context of alternative investments / hedge funds
- Interpret and discuss subject specific articles on alternative investments in general and hedge funds in particular
- Examine and convey the impact – whether beneficial or detrimental – of complex financial products and hedge funds on financial markets
- Communicate an opinion about the quality and suitability of alternative investment products for a given objective
- Develop professional conduct for all market conditions to navigate ambiguous ethical situations and dilemmas in the investment profession

ATTENDANCE POLICY:
IES Abroad Vienna requires attendance at all class sessions, including field study excursions, internship meetings, scheduled rehearsals, and all tests and exams. Attendance will be taken for every class. If a student misses more than the equivalent of a week of classes without an excuse, the final grade will be reduced by one-third of a letter grade (for example, A- to B+) for every additional unexcused absence.

Missing Mandatory Course-related trips Outside of Regular Class Hours
Some classes include mandatory trips outside of regular class hours, i.e., on weekends. Students will be made aware of the specific dates of such trips at the latest during the first week of class. Missing a mandatory field trip for reasons other than a health or medical emergency will automatically result in a reduction of the final grade by a third of a letter grade.

Excused absences are permitted only when:

1) a student is ill (health issues),
2) when class is held on a recognized religious holiday traditionally observed by the student, or
3) in the case of a grave incident affecting family members;
4) exceptions may be made for conflicting academic commitments, but only in writing and only well in advance of missed class time.

Any other absences are unexcused.

CONTENT:
The course content is divided into three modules, which will proceed in the following order across the semester:

Week	Content	Assignments
Module 1: **Week 1**	**Introduction to Alternative Investments: Typology, Environment, Foundations** What is an Alternative Investment? 1. Alternative investments as opposed to traditional investments 2. Various types of alternative investments: real assets, hedge funds, private equity, structured products 3. Structures as distinguishing aspects 4. Return characteristics and goals The Environment of Alternative Investments 1. Participants (buy side, sell side, service providers, regulators) 2. Financial markets 3. Regulatory Environment (US vs. non-US regulations) 4. Liquid alternative investments 5. Taxation (income tax and withholding tax)	Alternative Investments: CAIA Level I, 3rd Edition • Read chapter 1, [pages 3 to 21] • Read chapter 2 [pages 23 to 43]
Week 2	Foundations 1. Quantitative foundations (returns and internal rate of return) 2. How are hedge fund managers paid: management fee and performance fee 3. Statistical foundations 4. Measures of risk and performance 5. Ratio-based performance measures 6. Efficient markets 7. Arbitrage 8. Benchmarking 9. Alpha (as a measure of superior return performance) and Beta (as a measure of systematic risk)	Alternative Investments: CAIA Level I, 3rd Edition • Read chapters 3.1, 3.3, 3.5, 4.1, 4.4, 5.1, 5.3, 6.1, 6.4, 6.5, 7.1, 8.1 [pages 45 to 47, 50 to 54, 61 to 69, 71 to 73, 88 to 94, 101 to 105, 111 to 117, 121 to 124, 135-147, 159-162, 175-177]
Week 3	Detailed Typology 1. Real assets: natural resources and land; commodity futures and applications; real estate as an investment 2. Private equity: equity types vs. debt types 3. Structured products: structuring, credit risk and credit derivatives, CDOs Hedge funds	Alternative Investments: CAIA Level I, 3rd Edition • Read chapters 11.1, 11.2, 11.3, 11.4, 12.1, 12.2, 14.2, 14.4, 22.1, 22.2, 25.1, 25.4, 25.6, 26., 26.4, 26.7, 27.1 [pages 251 to 269, 277-282, 323-333, 335-341, 613-620, 685, 689-697, 703-707, 709, 720-728, 732-734, 737-740]

Module 2: **Week 4**	**Hedge Funds: Industry Structure, Categories, Strategies** Structure of the Hedge Fund Industry: 1. Origins of hedge funds (1949) 2. Distinguishing features. Investment flexibilities of hedge funds 3. Hedge fund fees and managerial behavior 4. Hedge fund classification 5. Evaluation a hedge fund investment program 6. Hedge fund indices 7. Do hedge funds adversely affect the financial markets?	Alternative Investments: CAIA Level I, 3rd Edition • Read chapter 16 [pages 381 to 420]
Week 5	Categories and Strategies 1. Macro and Managed Futures Funds 2. Event-Driven Hedge Funds 3. Relative Value HF 4. Equity HF 5. Fund of HF	Alternative Investments: CAIA Level I, 3rd Edition • Read chapters 17, 18.1, 19.1, 19.2, 20.1, 20.2, 21.1 [pages 423 to 457, 459-462, 499-509, 547-558, 583-591]
Week 6	Midterm week Research Exercise and Paper (based on the MOVIE: "The Big Short")	Watch the movie and select research exercises and papers on core topics and issues in the movie (deadline: end of Week 7)
Module 3: **Week 7**	**Risk Management and Due Diligence** Cases in Tail Events 1. Problems driven by markets losses: Long-term Capital Management; Amaranth Advisors LLC 2. Failures driven by fraud: Bernie Madoff 3. Trading technology and financial crises: the Flash Crash of 2010 4. Lessons learned	Alternative Investments: CAIA Level I, 3rd Edition • Read chapter 29 [pages 783 to 799]
Week 8	Investment Process, Operations and Risk 1. Investment strategy and process 2. Investment process and risk (leverage) 3. Operational risk 4. Controlling operational risk: 5. errors, valuation procedures, custody of assets, fund culture / professional standards	Alternative Investments: CAIA Level I, 3rd Edition • Read chapter 30 [pages 801 to 814]
Week 9	Due Diligence of Fund Managers: 1. Due diligence evidence and organization 2. Fundamental questions: investment objective; investment process; source of value added by manager	Alternative Investments: CAIA Level I, 3rd Edition • Read chapter 31 [pages 815 to 843]

	3. Reviews: structural, strategic, administrative, performance, portfolio risk, legal, references	
Week 10	The Investment Professional: 1. Integrity of capital markets 2. Duties to clients and employers 3. Conflicts of interest	Standards of Practice Handbook, , 2014 [pages 59 to 123, 185-206]
Week 11	Research exercise and paper (based on the movie 'The Big short'): Presentation of research papers	oral presentation, Q&A, discussion
Week 12	Finals week	

COURSE-RELATED TRIPS: None

REQUIRED READINGS (with **selected parts** from)**:**

- Chambers, Donald R. / Anson, Mark J.P. / Black, Keith H. / Kazemi, Hossein. Alternative Investments: CAIA Level I. New Jersey: John Wiley & Sons Inc. 2015.
- CFA Institute, Standards of Practice Handbook, 11th edition, 2014 (will be made available).

REQUIRED VIEWINGS:
"The Big Short" https://www.imdb.com/title/tt1596363/ In 2006-7 a group of hedge funds bets against the US mortgage market. In their research they have discovered how flawed and corrupt the market is.

RECOMMENDED READINGS:

- Lewis, Michael: The Big Short, Allen Lane, 2010.
- Tett, Gillian: Fool's Gold, Little Brown, 2009.

INSTRUCTOR BIO:
Thomas Berger studied at the WU Vienna University of Economics and Business Administration and the University of Illinois at Urbana-Champaign, USA, and subsequently received his master's degree in Business Administration. In September 1995, he joined an Austrian bank as account executive on the institutional financial futures desk. In 1996, he transferred into the bank's investment management arm where he was part of an effort to establish a managed futures operation. Based first in Vienna and then in London, he held various responsibilities from product development, to operations, and finally fund management. From 1998 to 2000, Mr. Berger was employed by a Chicago based IT firm specializing in electronic execution platforms. Based in London, he held responsibility for the European client base. In September 2000, he returned to Austria to join an international CTA firm, as manager for the Vienna office. From August 2001 to March 2005, and again from June 2007, Mr. Berger was employed by another Austrian CTA firm, as chief operating officer with responsibilities for finance, fund administration and controlling. He has served as a member of the board of directors of several alternative investment funds since 2002. He has previously lectured on the topics of Alternative Investments, Derivatives, and Structured products at the Lauder Business School, in Vienna, Austria.