

COURSE SYLLABUS

2226 - Hedge Funds, 3.5 ECTS

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202122

COURSE INSTRUCTOR

Gonçalo Marçal De Sommer Ribeiro

SHORT BIOGRAPHY

Gonçalo Sommer Ribeiro is a partner at We Talent Solutions, a financial consultancy firm specialized in Financial, Strategic & Management consulting. Previously he was senior portfolio manager at Math Fund, an absolute return fund based on macro, arbitrage, and asset allocation strategies while assuming the same position at ST^2 Fund, where he developed and implemented short and medium term systematic trading strategies. Gonçalo is also an Adjunct Assistant Professor at Nova School of Business and Economics where he lectures the courses of Risk Management, Hedge Funds, the Nova Students Portfolio (NSP) and Behavioral Finance. He holds an MSc in Investment Analysis from Tilburg University and a degree in Economics from Nova SBE. He is a CFA charterholder.

INSTITUTIONAL EMAIL

goncalo.ribeiro@novasbe.pt

OFFICE HOURS

Online, by Appointment

PREREQUISITE(S) / PRÉ-REQUISITO(S)

NA

COURSE UNIT AIMS

In general, this course is designed to help students to structure their own investment and trading decisions in the context of the financial markets. The course has a strong analytical component, as most investment strategies will be back-tested and analyzed from an historical perspective. It should help to prepare the students to work in a trading room of a bank or a hedge fund.

COURSE UNIT CONTENT

Overview - What are Hedge Funds, history, evolution, main strategies, performance

In search of Alpha - Methodology

Investment Strategy: Trading - Systematic vs Opportunistic, technical vs fundamental vs other, back-testing, data-mining, over-fitting, trading costs, examples



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Investment Strategy: Arbitrage - Definition, pure arbitrage x relative value, geographic / product arbitrage, statistical arbitrage, pair trading, relative value baskets

Intraday strategies - examples with Matlab

Investment Strategy: Macro - reflexivity theory, simulation of real time investment decisions

Fixed Income Arbitrage - duration, convexity, basis risk, yield curve trades

Volatility Arbitrage - Volatility, gamma, vega, theta, rho, plain vanilla x exotics

Commodity Arbitrage - Curve slopes - contango x backwardation, roll down trade

FX Arbitrage - Carry trades, interest rate differentials

LEARNING OBJECTIVES

- A. Knowledge and Understanding
 Understand the most common investment/trading strategies employed by hedge funds and investment banks
- B. Subject-Specific Skills
 Analyze market data, use Bloomberg/Eikon, back-test and access investment strategies
- C. General Skills

Develop new investment strategies and make investment decisions

DEMONSTRATION OF THE COHERENCE OF THE SYLLABUS WITH COURSE UNIT AIMS/LEARNING OBJECTIVES

This course is an in-depth study of the theory and practice of Hedge Funds, with particular emphasis on understanding their most common investment strategies. The course has a practical focus with lots of applied work using historic and real time data. Students will be given exposure to industry practice, studying real life funds and real-life investment strategies, reading industry notes and research papers.

TEACHING AND LEARNING METHODS

There are two classes per week. Each class is of 1h20m. The classes consist of discussions about hedge funds and their most common investment strategies. After a brief presentation of each investment strategy, real life examples will be discussed in detail. Classroom participation is expected and required. Students are expected to conduct their own research on existing hedge funds (Bloomberg and Internet) and on investment / trading strategies (look for academic papers on libraries or internet databases).

ASSESSMENT

Regular Exam Period

Assignments: 30%

Final Project: 20%

Final Exam: 50%



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Adjustments of 2 points in the final grade (in either direction) can eventually be made, based on other information available such as participation in class and contribution to the coursework.

Assignment 1 - Portfolio back-testing

Assignment 2 - Equity long-short strategy

Assignment 3 - Macro scenario + Macro trades

Project - Develop New Investment Strategy

BIBLIOGRAPHY

"Expected Returns: An Investor's Guide to Harvesting Market Rewards", Antti Ilmanen

ADDITIONAL INFORMATION