

## COURSE TECHNICAL DATA

Course Information	
ECTS Credits	3 ects. Elective. (T3).
Degree	Master in Finance / Master Universitario en Finanzas por la Universidad Pontificia de Comillas
Professor	Prof. Jorge Martín, PhD / Prof. Ricardo Pereira, PhD
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## CONTENT AND OBJECTIVES

### OBJECTIVES

#### General Competencies

CG.1 Project-Based Learning: Ability to develop and execute financial projects in their various phases, based on real-life situations, proposing practical solutions, and optimizing all interactions with the team, clients, and other stakeholders.

RA1 - Ability to engage in the development of experimental collective projects based on real-world scenarios, managing and aligning client needs with available resources, optimally distributing tasks, communicating and planning their various phases, proposing practical solutions, and optimizing all interactions with the team, clients, and other stakeholders.

CG.2 Critical Thinking: Use critical thinking for decision-making and problem-solving in financial management processes.

RA1 - Interpret, analyze, synthesize, and evaluate ideas from a critical perspective.

CG.6 Global and Local Orientation Capability: Analyze current financial problems in both local and global contexts, considering complex economic aspects as well as cultural, social, and ethical factors.

RA1 - Ability to analyze current problems in local and global contexts, taking into account complex economic aspects as well as cultural, social, and ethical factors.

CG.10 Technical Capability: Ability to analyze, synthesize, and project solutions, problems, and models in the financial field.

RA1 - Capable of conducting analytical studies of cases and scenarios and synthesizing information and data effectively.

#### Specific Competencies

CEOPT 3: Understand the resources and solutions provided by the private equity industry and other alternative assets, and how they are used for impact investing or achieving one or more sustainable development goals.

RA01: Understands and applies advanced asset management techniques in conjunction with behavioral finance to create alternative strategies for managing both traditional and alternative assets using instruments traded in spot markets and/or derivatives in fixed income, equities, foreign exchange, private debt, real estate, or commodities markets.

RA02: Understands how to structure and manage alternative investment vehicles aimed at business financing, as well as measure and quantify the real impact these financing activities have on society.

RA03: Understands and applies new concepts, methodological techniques, and paradigms that directly and indirectly affect the modern asset management industry.

<b>CONTENTS</b>
<b>Module 1: Introduction to Hedge Funds</b>
<b>Topic 1: Review of basic concepts related to alternative investments</b>
1.1 Introduction
1.2 A global outlook
1.3 Key terms and concepts
1.4 Traditional versus Alternative Investments.
1.5 Establishing a Hedge Fund
<b>MODULE 2: Risks of Managing a Hedge Fund</b>
<b>Topic 2: Risks and returns</b>
2.1 Risk structure of a hedge fund
2.2 How to identify risks in a hedge fund.
2.3 Performance Measures: Sharpe Ratio, Sortino Ratio, Calmar, Jensen's Alpha, Omega
2.4 Due Diligence
<b>MODULE 3: Hedge Fund Strategies</b>
<b>Topic 3: Different taxonomies</b>
3.1 Global Macro & Trading
3.2 Relative Value
3.3 Event Driven
3.4 Equity Hedge
<b>MODULE 4: Real Estate Investment Markets</b>
4.1 Private markets
4.2 Public Markets
4.3 Four quadrant investment strategies
<b>MODULE 5: Real Estate Investment Valuation</b>
5.1 Conventional valuation models
5.2 Discounted cash-flow analysis
5.3 Option pricing model
<b>MODULE 6: Real Estate Financing</b>
6.1 Sources of debt
6.2 Types of debt solutions
6.3 Debt guarantees, covenants and credit enhancement facilities
6.4 Impact of leverage on returns and risk
6.5 Geared cash-flows
<b>MODULE 7: Real Estate Investment Analysis</b>
7.1 Investment return metrics
7.2 Risk analysis
7.3 Stress testing and sensitivity analysis

## FORMATIVE ACTIVITIES

Formative activities	Workload (%)	Attendance (%)
Teacher's Lecture	17	100
Student Presentations, Debates, and Group Dynamics	34	100
Exercises and Problem-Solving, Applied Work Preparation	70	25
Study and Documentation	109	0
Tutorial Sessions	4	50
Development of Real Projects for Organizations	6	50

## TEACHING METHODOLOGY

### Methodological Aspects of the Course

This course is designed to provide a deep understanding of the fundamental concepts, strategies, and practices in the fields of hedge funds and real estate, with a particular focus on the most technical aspects. Participants will learn to analyze and manage complex investments in these markets, combining theory and practice to develop key professional skills.

The course workload will be distributed as follows:

Lectures: Theoretical sessions delivered by subject-matter experts.

Practical and participative sessions: Interactive activities focused on case analysis, problem-solving, and simulations.

Autonomous work: Both individual and team-based, to reinforce acquired knowledge and develop projects related to the course topics.

Tutorials: Dedicated spaces for addressing questions and receiving personalized guidance on course content and projects.

This comprehensive approach allows students to gain a solid theoretical foundation and relevant practical experience to excel in the fields of hedge funds and real estate.

## EVALUATION CRITERIA

Evaluation Activities	(%)
Final Test	30%
Group Assignments	50%
Participation	20%

### Grading

#### Course Evaluation Criteria

Attendance: All students must attend 100% of the scheduled days for this course. Any absences must be justified. Failure to provide justification for an absence will result in a penalty, depending on the number of unexcused absences.

Final Grade: The final grade will be the sum of the activities, evaluation criteria, and weightings described in the Evaluation and Grading Criteria section. Passing all elements of the course evaluation is mandatory.

Submission of Assignments: Individual and group assignments must be submitted on time and in accordance with the guidelines provided by the course instructor.

Retake Exam: A final grade below 5 will require taking a retake exam. The final grade obtained in this exam cannot exceed the median of the grades achieved in the ordinary exam.

#### Evaluation Criteria for Students in Second Enrollment

Students enrolled in the course for the second time must complete the individual and group assignments specified by the course instructor. The same evaluation criteria outlined in the Evaluation and Grading Criteria section will apply.

#### General Provisions

In cases not covered by this course guide, the regulations of the Advantere School of Management and the General Regulations of Comillas University will be applied.

## BIBLIOGRAFÍA Y RECURSOS

### Basic Bibliography

#### Books:

- Investment Strategies of Hedge Funds by Filippo Stefanini. Publisher: Wiley, 2006.
- More Money than God. Sebastian Mallaby, the Penguin Press, 2010.
- AIMAs Roadmap to Hedge Funds 2012 Edition available at website of the Alternative Investment Management Association.
- Lo, Andrew W., Hedge Funds: An Analytical Perspective, Princeton University Press, 2008.323.
- "Efficiently Inefficient: How Smart Money Invests and Market Prices Are Determined," Lasse H. Pedersen
- "Hedge Fund Strategies and Tools," Mick Swartz Amazon, Wiley Finance, 2015.
- "Handbook of Alternative Assets", Anson, Wiley Finance, 2002.
- "Convertible Arbitrage: Insights and Techniques for Successful Hedging", Calamos, N. 2003.
- "Derivative Securities: The Complete Investor's Guide", Jarrow and Turnbull, Second Edition, South-Western.
- Geltner, David M., Norman G. Miller, Jim Clayton, and Piet Eichholtz. Commercial Real Estate Analysis and Investments. Cincinnati, OH: South-Western Educational Publishing, 2007.

- Ling, David C. and Wayne R. Archer. 2018. Real Estate Principles: A Value Approach, Fifth Edition. NewYork, New York: McGraw-Hill/Irwin.
- Peiser, Richard B with David Hamilton. 2012. Professional Real Estate Development, Third Edition.
- Washington, DC: Dearborn Financial Publishing and The Urban Land Institute.