

ASSET PRICING

Course code	GRAE021
Compulsory in the programmes	Financial Economics
Level of studies	Graduate
Number of credits	6 ECTS (36 contact hours + 2 consultation hours, 124 individual work hours)
Course coordinator (title and name)	Assoc. Prof. Dr. Silviu Ursu silurs@faculty.ism.it
Prerequisites	None
Language of instruction	English

THE AIM OF THE COURSE:

This introductory course aims to provide you with an understanding of the theoretical and, *mainly*, practical aspects of the asset management and the pricing of assets in financial markets. We will take an ***applied perspective*** on various relevant topics, such as risk-return trade-off, diversification, interest rates, efficient markets, portfolio management, valuation and pricing of securities, options and other derivatives, and big data and AI applications to investment management and asset pricing. Topics are selected in accordance to the requirements of Chartered Financial Analyst (CFA) and Professional Risk Manager (PRM) world-leading certification for finance and risk management, so to offer the adequate preparation for CFA and PRM exams and for relevant positions in the finance industry, such as research analyst, investment analyst, or portfolio manager.

MAPPING OF COURSE LEVEL LEARNING OUTCOMES (OBJECTIVES) WITH DEGREE LEVEL LEARNING OBJECTIVES (See Annex), ASSESMENT AND TEACHING METHODS

Course level learning outcomes (objectives)	Degree level learning objectives (Number of LO)	Assessment methods	Teaching methods
CLO1. Describe in considerable depth the players, assets, terminology and conventions in financial markets	LO1.1.	Final exam	Lectures, seminars
CLO2. Explain in considerable detail various portfolio theories as well as the risk-return tradeoff, efficient market hypothesis and behavioral finance	LO1.1., LO1.2. LO3.1., LO3.2.	Final exam, Group work	Lectures, seminars
CLO3. Describe in considerable depth and use CAPM and multi-factor asset pricing models	LO1.1., LO1.2. LO3.1., LO3.2.	Final exam, Group work	Lectures, seminars
CLO4. Understand the pricing and valuation of stocks, bonds, options and other derivatives	LO1.1., LO1.2. LO3.1., LO3.2.	Final exam, Group work	Lectures, seminars
CLO5. Analyze and reflect critically on the big data and artificial intelligence applications to empirical asset pricing	LO1.1., LO1.2. LO3.1., LO3.2.	Final exam, Group work	Lectures, seminars

ACADEMIC HONESTY AND INTEGRITY

The ISM University of Management and Economics Code of Ethics, including cheating and plagiarism are fully applicable and will be strictly enforced in the course. Academic dishonesty, and cheating can and will lead to a report to the ISM Committee of Ethics. With regard to remote learning, ISM remind students that they are expected to adhere and maintain the same academic honesty and integrity that they would in a classroom setting.

COURSE OUTLINE

Topic	In-class hours	Readings
1. Introduction to Financial Services Industry and Asset Pricing	4	[1], [2], [3], Handouts
2. Risk-Return Tradeoff and Modern Portfolio Theory	8	[1], [2], [3], Handouts
3. Capital Asset Pricing Model and Multi-Factor Models	8	[1], [2], [3], Handouts
4. Efficient Security Markets	4	[1], [2], [3], Handouts
5. Pricing and Valuation of Financial Instruments	8	[1], [2], [3], Handouts
6. Empirical Asset Pricing, Big Data and Artificial Intelligence	4	[1], [2], [3], Handouts
	Total: 36 hours	
CONSULTATIONS	2	
FINAL EXAM	2	

FINAL GRADE COMPOSITION

Type of assignment	%
<i>Group Components</i>	30
Written Group Report	15
Presentation of Group Report	15
<i>Individual Components</i>	70
Final Examination	70
Total:	100

DESCRIPTION AND GRADING CRITERIA OF EACH ASSIGNMENT

GROUP WORK

There will be one formal assignment during the course that counts towards 30% of the final grade and must be completed in a group of up to 4 people. Each group will have to prepare a written report (up to 4 pages) on a specific topic and deliver a 20-minute presentation (according to a schedule agreed at the beginning of the course), followed by questions and discussion.

EXAMINATIONS

There will be one written final examination that counts towards 70% of the final grade and covers all topics discussed during the course. It consists of multiple-choice questions and open questions (both theory and quantitative) and is closed book (students are allowed to bring calculators).

RETAKE POLICY

Students are allowed to retake the exam in order to pass. The retake exam covers all course material and its weight is 70%. Group work cannot be rewritten / retaken but its evaluation (if positive) is not annulled.

ADDITIONAL REMARKS

Regular attendance and positive contributions to class are encouraged and rewarded. Consistent positive contributions will help you if you are on a grade border at the end of the course.

READINGS AND COURSE MATERIALS

All necessary readings, including research papers, articles and lecture notes will be distributed in class or via eLearning.

Recommended readings/textbooks:

- [1] *In Pursuit of the Perfect Portfolio: The Stories, Voices, and Key Insights of the Pioneers Who Shaped the Way We Invest*. 2021. Andrew W. Lo and Stephen R. Foerster. Princeton University Press: <https://inpursuitofthepperfectportfolio.com/>
- [2] CFA Institute Investment Series by Wiley – available at <https://www.wiley.com/en-us/shop/cfa-showcase#portfolio>
- [3] CFA Institute Resources for Investment Professionals and Publications related to Automation in the Investment Industry – available on the CFA Institute Research and Policy Center (RPC) site at <https://rpc.cfainstitute.org/research-foundation> and <https://rpc.cfainstitute.org/research/the-automation-ahead-content-series>



ANNEX

DEGREE LEVEL LEARNING OBJECTIVES

Learning objectives for Master of Social Science

Programme:

Financial Economics

Learning Goals	Learning Objectives
Students will be critical thinkers	LO1.1. Students will be able to identify underlying assumptions, limitations of previous research; evaluate managerial solution alternatives.
	LO1.2. Students will become independent learners and develop their own comprehension of scientific theories, models, and concepts.
Students will be socially responsible leaders	LO2.1. Students will be able to evaluate past and current practices in their discipline from an ethical perspective .
Students will be effective communicators	LO3.1. Students will develop and deliver a coherent oral presentation .
	LO3.2. Students will develop and deliver a coherent written research paper .