**Portfolio Management**

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***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The course aims to offer a view of the investment processes in financial markets and of portfolio management. After an introduction on investors’ objectives and constraints, the structure of the asset management industry and the principles at the basis of decisions on investment in financial market, the course will focus on possible strategies for portfolio management, making a distinction between active and passive strategies as well as the equity and bond component of the portfolio.

At the end of the course, students will be able to:

1. demonstrate their knowledge and understanding of basic concepts on the subject that are necessary to interpret decisions concerning the portfolio.

2. apply knowledge to define portfolio strategies and determine independent judgements on the performance of a portfolio manager, in a simplified context.

3. gather and interpret data useful to found portfolio decisions and determine independent judgements on the performance of a portfolio manager.

4. use technical language that allows them to communicate clearly and efficiently about acquired knowledge.

5. demonstrate necessary learning skills necessary to autonomously continue further studies in the subject.

***COURSE CONTENT***

1. *The investment process*
   1. Objectives and constraints of the individual and institutional investor
   2. Stages of the process and policy statement
   3. Asset classes and asset allocation
   4. Asset management industry and its products
   5. Costs of investment funds
2. *The selection process of portfolios: yield correlation and the single-index model*
   1. The inputs of portfolio analysis
   2. The main features of the single-index model
   3. The estimate of beta
3. *Multifactorial models and grouping techniques*
   1. Multifactorial models
   2. Average correlation models
   3. Hybrid models
   4. Fundamental multifactorial models
4. *Choosing the best portfolio*
   1. Choosing the best portfolio in the single index model
   2. Choosing negotiable bonds
   3. Choosing the best portfolio in the constant correlation model
5. *Calculating expected returns*
   1. Strategic asset allocation
   2. Forecasting bond yields
   3. Portfolio analysis with discrete data
6. *Multifactorial models, APT, and portfolio management*
   1. A new interpretation of multifactorial models and APT
   2. Passive portfolio management
   3. Active portfolio management
7. *Behavioural finance, decision-making processes, and bond valuation*
   1. Behavioural finance
   2. Behavioural finance and bond pricing
8. *The portfolio performance evaluation*
   1. Evaluation techniques
   2. The breakdown of performance
   3. The performance of investment funds
9. *Investing in bonds*
   1. The main features and pricing of bonds
   2. Bond yields: from Yield to Maturity and alternative measures
   3. The risks related to bond investments
10. *Bonds: interest rates and pricing*
    1. The yield curve and its determinants
    2. Spot and forward rates
    3. The yield curve, its duration and convexity
    4. The effects of the yield curve when it is not flat and the shifts are not parallel
11. *Portfolio management strategies*
    1. Passive strategies: buy & hold, and indexing
    2. Active strategies with and without benchmarks (absolute return); the different types of exposition to risk factors; bond swaps and derivatives; mixed strategies
    3. Liability-driven strategies: dedication, immunisation, horizon-matching; dynamic strategies

***READING LIST***

Bodie, Zvi, Kane, Alex and Alan Marcus: Investments, 11th Edition, McGraw-Hill, 2018.

Reilly, Frank C., Brown, Keith C. and Sandford Leeds Investment Analysis & Portfolio Management, 11th Edition, Cengage, 2019.

Elton, Edwin J., Gruber, Martin J., Brown, Stephen J. and William N. Goetzmann: Teorie di portafoglio e analisi degli investimenti, Maggioli Editore, 2007.

Each part of the course will be based on specific chapters of the two textbooks.

Further details on the usage of the books and further material will be provided by the lecturer during the course.

***TEACHING METHOD***

Lectures.

Although the course is divided into two parts, the content is unified. The lecturers will alternate according to a given schedule which will be communicated at the beginning of the course.

There may also be one or two seminars led by experts in the field.

***ASSESSMENT METHOD AND CRITERIA***

Students will be assessed through a written exam on official exam dates. The exam is comprised of exercises and open-ended and/or multiple choice questions. Even if the course is divided into two parts, there will be one single exam.

There will be an interim test for students attending lectures regularly. The test will focus on the content of the first part of the course. Students who have passed the interim test, will take a specific exam focusing on the content of the second part of the exam on the first two official exam dates in the summer. In this case, the mark will be the weighted average of the marks obtained in the interim test and the final exam, plus one point for regular attendance. Students who do not take the final exam within the first two exam dates in the summer, are required to take the final exam on the entire course content.

***NOTES AND PREREQUISITES***

*Prerequisites*

Adequate knowledge of course content of Corporate Finance (asset pricing and corporate finance), as well as nonModels for Financial Markets (Derived Tools) or Real Estate Market (Structured Derived Tools).

*Notes*

Given the prerequisites and the course prerequisites, students who are not enrolled in degree courses such as Economics and Corporate Law (major in Finance), Management (major in Finance), Economics (major in International Finance) are discouraged from enrolling in this course.

Further information can be found on the lecturer's webpage at http://docenti.unicatt.it/web/searchByName.do?language=ENG, or on the Faculty notice board.