



| Course Code | Course Title | ECTS Credits |
|-----------------------|----------------------|-------------------------|
| MBA-721 | Portfolio Analysis | 7.5 |
| Department | Semester | Prerequisites |
| School of Business | Fall, Spring, Summer | MBA-612/MBA-622 |
| Type of Course | Field | Language of Instruction |
| Elective | Finance | English |
| Level of Course | Year of Study | Lecturer(s) |
| 2 nd Cycle | 2 nd | Dr Haritini Tsangari |
| Mode of Delivery | Work Placement | Co-requisites |
| face-to-face | N/A | None |

Objectives of the Course:

This is one of the courses in the Finance Specialization path. The main objectives of the course are to:

- Teach the student the skills required to manage an investment portfolio under conditions of uncertainty
- Teach students to choose such strategies that balance performance and risk within the investor's objectives
- Make students understand that Portfolio Management is a dynamic process that requires an understanding of both theory and practice.
- Provide students with an understanding of the measurement and evaluation of performance, by separating luck from skill, and adjusting performance for risk.

Learning Outcomes:

After completion of the course students are expected to be able to:

1. **become familiar with the investment environment** (students should be able to discuss how financial markets operate and assess financial instruments, especially the characteristics of bonds and securities, Futures, Forwards and Options.)
2. **apply the basic concepts of portfolio theory** (students should be able to discuss the concepts of risk and return and risk aversion, capital allocation between one risky and one risk-free asset and create optimal risky portfolios)
3. **develop and implement efficient investment strategies** (students are expected to choose an optimally diversified portfolio and use the Markowitz Mean – Variance theory.)
4. **utilize asset pricing theory** (students are expected to use the Capital Asset Pricing Model, CAPM, and Arbitrage Pricing Theory).

- 5. discuss Market Efficiency and Anomalies** (students are expected to explain the different forms of market efficiency and the consequences of market inefficiencies)
- 6. evaluate portfolio performance and do active portfolio management.**

Course Contents:

- 1. General Introduction and Overview:** Investment Environment, Markets and Instruments; Bonds and Securities.
- 2. Portfolio Theory:** a) Risk and Return and Risk Aversion
b) Capital Allocation between one Risky and one Risk-free Asset
c) Optimal Risky Portfolios.
- 3. Efficient Diversification:** Strategies are developed and implemented by choosing an optimally diversified portfolio; the advantages of diversification.
- 4. Markowitz Mean – Variance theory:** the classical portfolio selection theory; efficient frontier, optimal portfolios when there exist many risky assets.
- 5. The Capital Asset Pricing Model:** risk adjustment is usually based upon asset pricing theory; the CAPM is the classical asset-pricing model.
- 6. Arbitrage Pricing Theory:** an alternative theory of asset-pricing based on factor models.
- 7. Market Efficiency and Anomalies:** different forms of market efficiency and market abnormalities or anomalies.
- 8. Futures, Forwards and Options:** their basic characteristics and how they can be used in a portfolio for hedging.
- 9. Portfolio Performance Evaluation and Active Portfolio Management:** methods of evaluating a portfolio's performance and the dynamic process of portfolio management, both in theory and practice.

Learning Activities and Teaching Methods:

Lectures, Assignments, Handouts, Extracts from the Wall Street Journal, Discussion on in-class exercises and real-data examples, Academic Paper Discussions, Case Studies, Computer Software for application of portfolio creation and management, Invitation of guest lecturers for a practical approach to the subject and familiarity with the investment environment.

Assessment Methods:

Attendance and Participation, Final Exam, Project.

Required Textbooks/Reading:

| Authors | Title | Publisher | Year | ISBN |
|--------------------------------------|-------------|-------------|------|------------------|
| Bodie, Z., Kane, A. and Marcus, A.J. | Investments | McGraw-Hill | 2009 | 978-007-127828-7 |

Recommended Textbooks/Reading:

| Authors | Title | Publisher | Year | ISBN |
|--------------------------------|--|------------------|-------------|-------------------|
| Hirschey, M. and Nofsinger, J. | Investments-Analysis and Behavior The Wall Street Journal and related Print Financial Journals or Online Financial Pages. Academic Articles in Finance Journals. | McGraw-Hill | 2010 | 978-0-07-017160-2 |