UNIVERSITY of NICOSIA

Course Syllabus

Course Code	Course Title	ECTS Credits
MBAN-754	Portfolio Analysis	6
Prerequisites	**Department**	**Semester**
MBAN-550/MBAN-630/ MBAN-640	School of Business	Fall, Spring
Type of Course	**Field**	**Language of Instruction**
Concentration	Finance	English
Level of Course	**Lecturer(s)**	**Year of Study**
2nd Cycle	Prof. Haritini Tsangari	1st or 2nd
Mode of Delivery	**Work Placement**	**Corequisites**
Face-to-Face	N/A	None

Course Objectives:

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 know how financial markets operate and become familiar with financial instruments, especially with the characteristics of bonds and securities, Futures, Forwards and Options and how they can be used in a portfolio).
2. **Investigate portfolio theory** (students should be able to understand the concepts of risk and return and risk aversion, capital allocation between one risky and one risk-free asset and how to construct optimal risky portfolios, making informed decisions based on substantiated comparison and appraisal of alternative investment options).

3. **Develop and implement efficient investment strategies** (students are expected to understand the advantages of hedging and diversification and thus develop and implement strategies to formulate an optimally diversified portfolio. They will also use Markowitz Mean-Variance theory, the classical portfolio selection theory, design the efficient frontier and construct optimal portfolios when there exist many risky assets).

4. **Learn asset pricing theory** (students are expected to develop an understanding of the classical Capital Asset Pricing Model, CAPM, and how risk adjustment is usually based upon asset pricing theory).

5. **Develop an understanding of Market Efficiency, Anomalies, Technical and Fundamental analysis** (students are expected to learn the different forms of market efficiency and the consequences of market inefficiencies, abnormalities and anomalies, technical and fundamental analysis).

6. **Evaluate portfolio performance and do active portfolio management** (methods of evaluating a portfolio's performance and the dynamic process of portfolio management, both in theory and practice).

   "Details on the contribution of the course's learning outcomes towards the learning goals / competencies and learning objectives of the programme are included in the curriculum map of each programme".

Course Content:

1. **Introduction to the Investment Environment:** operation of financial markets, Money Market instruments and their characteristics.
2. **The Capital Market:** instruments and their characteristics
3. **Statistical Formulas:** computation formulas that will be used throughout the course, such as expected value, sample mean, variance, standard deviation, correlation and covariance.
4. **Risk and Return:** concepts, definitions and computation based on appropriate formulas
5. **Risk aversion and Utility Scores:** computation of utility scores for competing investment portfolios and evaluation of portfolios based on investor's risk aversion
6. **Hedging and diversification:** methods for portfolio risk reduction, application with real data and demonstration of advantages of corresponding methods.
7. **Capital Allocation between one Risky and one Risk-free Asset:** informed decision-making on percentage placed in risk-free money market securities versus risky assets classes, based on computation techniques.
8. **Optimal Risky Portfolios:** construction of optimal risky portfolios, using efficient diversification techniques.
9. **Markowitz Mean – Variance theory:** portfolio selection based on the Nobel-awarded theory of Harry Markowitz.
10. **The Capital Asset Pricing Model:** determination of the arbitrage-free, equilibrium price of an asset based on CAPM and investment decisions based on the calculations.
11. **Technical and Fundamental Analysis, Market Efficiency and Anomalies:** evaluation and comparison of various techniques for investing and security analysis.

Learning Activities and Teaching Methods:

1. Lectures
2. Handouts and lecture notes
3. Case Studies and real-data examples
4. Directed and background reading
5. Extracts from the Wall Street Journal
6. Academic Paper Discussion
7. Student-led Presentations
8. Assignments and project with real data; Computer Software for application of portfolio creation and management.

Assessment Methods:

Assignment, Project with real data, Final Exam

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Investments	Bodie, Z., Kane, A. and Marcus, A.J.	McGraw-Hill	2018 (11th edition)	9781259277177

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Investments-Analysis and Behavior	Hirschey, M. and Nofsinger, J.	McGraw-Hill	2010 (2nd. Ed.)	9780073382418

The Wall Street Journal and related Print Financial Journals or Online Financial Pages.

Academic Articles in Finance Journals