SUBJECT PROGRAMME

MODERN THEORY OF PORTFOLIO MANAGEMENT

Lecturer: Dr. Blerina Dervishaj

Load: 5 Hours per week; 3 (Lecture), 2 (Seminar),

Course Typology: Program Characterizing Subject

Academic year / Semester: 2020-2021 / first

Course type: Required

Study program: MASTER of SCIENCES / Finance

Course Code: FIN 536

E-mail address: blerina.dervishaj@univlora.edu.al

SUMMARY AND LEARNING OUTCOMES:

"Portfolio management" introduces the concept of a portfolio approach to investments. The needs of individual and institutional investors are each examined, along with the range of available investment solutions. We explain why the portfolio approach is important to all types of investors in achieving their financial goals. Financial needs of different types of individual and institutional investors are compared and also types of investment management products available to investors are compared. The process of examining the risk and return characteristics of individual assets, creating all possible portfolios, selecting the most efficient portfolios and ultimately choosing the optimal portfolio tailored to the individual in question will be explored. You will learn to compute risk and return of a portfolio and also about the role that correlation plays in diversifying portfolio risk.

MAIN CONCEPTS:

1. Planning of the portfolio
2. Execution of the portfolio
3. Feedback of the portfolio
4. Measures of portfolio risk and return
5. Introduction of modern portfolio theory
6. Asset pricing
7. Portfolio selection
8. CAL, CML,SML, CAPM, β,

SUBJECT TOPICS

WEEK 1: Portfolio Management: An Overview

At the end of this topic you should know:

a. describe the portfolio approach to investing;

b. describe types of investors and distinctive characteristics and needs of each;

c. describe defined contribution and defined benefit pension plans;

Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 38; pages 207-241, by Robert M. Conroy, DBA, CFA, and Alistair Byrne,PhD, CFA

WEEK 2: Portfolio Management: An Overview

At the end of this topic you should know:

a. describe the steps in the portfolio management process;

b. describe mutual funds and compare them with other pooled investment products.

Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 38; pages 207-241, by Robert M. Conroy, DBA, CFA, and Alistair Byrne,PhD, CFA

WEEK 3: Portfolio Risk and Return: Part I

At the end of this topic you should know:

a. calculate and interpret major return measures and describe their appropriate uses;

b. describe characteristics of the major asset classes that investors consider in forming portfolios;

c. calculate and interpret the mean, variance, and covariance (or correlation) of asset returns based on historical data;

Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 39; pages **243-300,** by Vijay Singal, PhD, CFA

WEEK 4: Portfolio Risk and Return: Part I

At the end of this topic you should know:

a. explain risk aversion and its implications for portfolio selection;

b. calculate and interpret portfolio standard deviation;

c. describe the effect on a portfolio's risk of investing in assets that are less than perfectly correlated;

Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 39; pages **243-300,** by Vijay Singal, PhD, CFA

WEEK 5: Portfolio Risk and Return: Part I

At the end of this topic you should know:

a. describe and interpret the minimum-variance and efficient frontiers of risky assets and the global minimum-variance portfolio;

b. explain the selection of an optimal portfolio, given an investor's utility (or risk aversion) and the capital allocation line.

Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 39; pages **243-300,** by Vijay Singal, PhD, CFA

WEEK 6: Portfolio Risk and Return: Part II

At the end of this topic you should know:

a. describe the implications of combining a risk-free asset with a portfolio of risky assets;

b. explain the capital allocation line (CAL) and the capital market line (CML);

c. explain systematic and nonsystematic risk, including why an investor should not expect to receive additional return for bearing nonsystematic risk;

Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 40; pages 313-355, by Vijay Singal, PhD, CFA

WEEK7: Portfolio Risk and Return: Part II

At the end of this topic you should know:

a. explain return generating models (including the market model)and their uses;

b. calculate and interpret beta;

c. explain the capital asset pricing model (CAPM), including its assumptions, and the security market line (SML);

Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 40; pages 313-355, by Vijay Singal, PhD, CFA

WEEK 8: Portfolio Risk and Return: Part II

At the end of this topic you should know:

a. calculate and interpret the expected return of an asset using the CAPM;

b. describe and demonstrate applications of the CAPM and the SML;

c. calculate and interpret the Sharpe ratio, Treynor ratio, *M*2, and Jensen's alpha.

Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 40; pages 313-355, by Vijay Singal, PhD, CFA

WEEK 9: Basics of Portfolio Planning and Construction

At the end of this topic you should know:

a. describe the reasons for a written investment policy statement (IPS);

b. describe the major components of an IPS;

c. describe risk and return objectives and how they may be developed for a client;

Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 41; pages 368-398

WEEK 10: Basics of Portfolio Planning and Construction

At the end of this topic you should know:

a. distinguish between the willingness and the ability (capacity) to take risk in analyzing an investor's financial risk tolerance;

b. describe the investment constraints of liquidity, time horizon, tax concerns, legal and regulatory factors, and unique circumstances and their implications for the choice of portfolio assets;

Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 41; pages 368-398

WEEK 11: Basics of Portfolio Planning and Construction

At the end of this topic you should know:
a. explain the specification of asset classes in relation to asset allocation;
b. describe the principles of portfolio construction and the role of asset allocation in relation to the IPS.
Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 41; pages 368-398

WEEK 12: Risk Management: An Introduction
At the end of this topic you should know:
a. define risk management;
b. describe features of a risk management framework;
c. define risk governance and describe elements of effective risk governance;
Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 42; pages 408-448, by Don M. Chance, PhD, CFA, and Michael E. Edleson, PhD, CFA

WEEK 13: Risk Management: An Introduction
At the end of this topic you should know:
a. explain how risk tolerance affects risk management;
b. describe risk budgeting and its role in risk governance;
Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 42; pages 408-448, by Don M. Chance, PhD, CFA, and Michael E. Edleson, PhD, CFA

WEEK 14: Risk Management: An Introduction
At the end of this topic you should know:
a. identify financial and non-financial sources of risk and describe how they may interact;
b. describe methods for measuring and modifying risk exposures and factors to consider in choosing among the methods.
Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 42; pages 408-448, by Don M. Chance, PhD, CFA, and Michael E. Edleson, PhD, CFA

WEEK 15: Fintech in Investment Management
At the end of this topic you should know:
a. describe "fintech;"
b. describe Big Data, artificial intelligence, and machine learning;
c. describe fintech applications to investment management;
d. describe financial applications of distributed ledger technology.
Required Literature: Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management; Reading 43; pages 455-473, by Barbara J. Mack and Robert Kissell, PhD

FINAL EXAM

KNOWLEDGE FORM OF CONTROL

ATTENDANCE: Presence in teaching activities in auditorium is mandatory at 75%

CONTINUOUS CONTROL: Level of discussion in seminars (10%), Final exam (90%)

The grades will be calculated as follows:

S ≥ 91 % = 10
81 ≤ S < 90% = 9
71 ≤ S < 80% = 8
61 ≤ S < 70% = 7
51 ≤ S < 60% = 6
41 ≤ S < 50% = 5
S < 40% = 4

a. Mandatory Basic Literature:

Book " 2019 CFA® PROGRAM CURRICULUM LEVEL I, Portfolio Management, CFA Institute. All rights reserved. ISBN 978-1-946442-07-9 (paper); ISBN 978-1-946442-31-4 (ebk)

b. Recommended literature:

- Portfolio Management: Theory and Practice, Scott D. Stewart, Christopher D. Piros, Jeffrey C. Heisler, 2019), ISBN-10: 1119397413, ISBN-13: 978-1119397410, Sherif Bundo Drejtimi i PORTOFOLIT.

CONCLUDING REMARKS FROM THE LECTURER

Students are required to observe the schedule of their presentation in the auditorium.
During the course of the lesson, active student participation is required and encouraged, as in the classroom lectures and seminars.
The use of electronic means of personal communication is not permitted during the lesson.