

## Investment Analysis and Portfolio Management (F710309)

Due to Covid 19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

**Course size** *(nominal values; actual values may depend on programme)*

**Credits** 6.0      **Study time** 180 h      **Contact hrs** 45.0 h

### Course offerings and teaching methods in academic year 2020-2021

A (semester 1)	English	Gent	guided self-study	2.5 h
			group work	2.5 h
			seminar: practical PC room classes	5.0 h
			lecture	30.0 h
			lecture: plenary exercises	5.0 h

### Lecturers in academic year 2020-2021

Inghelbrecht, Koen      EB21      lecturer-in-charge

### Offered in the following programmes in 2020-2021

	crdts	offering
<a href="#">Master of Science in Business Administration (main subject Finance and Risk Management)</a>	6	A

### Teaching languages

English

### Keywords

Return, risk, diversification, portfolio theory, asset pricing, efficient markets, valuation of financial products, portfolio management, portfolio evaluation

### Position of the course

The aim of this course is first to enable students to understand the characteristics of the most frequently used investment products, second to explain them how to invest in those products directly and indirectly, third to learn them how to manage those products in a portfolio and finally to explain them how to evaluate investment portfolios. The emphasis is on equities and equity portfolios, but also bonds and derivative securities are discussed.

Video lectures are designed to let students to get used to analyzing stock and bond market data, and constructing and evaluating optimal portfolios. Furthermore, students are also familiarized with the reading of academic articles from highly respected financial journals.

### Contents

Theory:

1. General concepts and the investment process
2. Investing direct and indirect
3. Return and risk, and portfolio theory
4. Efficient diversification
5. CAPM, multifactor models and APT
6. Market efficiency and behavioral finance
7. Equity valuation
8. Bond valuation and bond portfolio management
9. Investing using derivatives
10. Portfolio performance evaluation
11. Applied portfolio management
12. Guest lectures

Important concepts which are discussed numerous times throughout the course are: risk-return trade off, diversification (risk reduction) and efficient markets.

Practice:

- Analysis of stock market data
- Exercises on portfolio management and optimization
- Review and discussion of practical academic articles
- Group assignment (compose and evaluate optimal portfolios)

### **Initial competences**

A knowledge of the range of financial products (stocks, bonds, ...) is required. In addition, a basic knowledge of the structure and functioning of financial markets and a basic statistics knowledge is required.

### **Final competences**

- 1 Knowledge and understanding of the principles of investment theory and portfolio management.
- 2 Assess the content of this course in relation to events in the news.
- 3 Interpret and recognize the practical usefulness of the results in the academic literature on asset pricing, valuation of financial products, portfolio management and evaluation.
- 4 Apply basic techniques of data analysis and portfolio management to financial data.
- 5 Analyze and evaluate the performance and risk of financial products.
- 6 Design and evaluate optimal portfolios in teams.
- 7 Write a scientifically sound report based on an implemented analysis.

### **Conditions for credit contract**

Access to this course unit via a credit contract is determined after successful competences assessment

### **Conditions for exam contract**

This course unit cannot be taken via an exam contract

### **Teaching methods**

Guided self-study, group work, lecture, lecture: plenary exercises, seminar: practical PC room classes

### **Extra information on the teaching methods**

Werkcollege: PC-klasoefeningen consist of online video lectures on how to use Microsoft Excel to analyze stock and bond market data and to construct and optimize investment portfolios.

Begeleide zelfstudie consists of solving exercises and answering multiple choice questions in an independent way using an online platform. Solutions and additional comments are given on the platform.

### **Learning materials and price**

Textbook: Bodie, Kane and Marcus (2019). Essentials of Investments. McGraw-Hill.

Supplemented by slides, exercises, financial applications and articles from the literature: made available on electronic learning environment.

Price textbook: About 70 euro.

### **References**

Textbooks that further support this course:

- Bodie, Kane, Marcus (2018). Investments. McGraw-Hill.
- Jones (2010). Investments: Principles and Concepts. John Wiley & Sons.
- Reilly and Brown (2015). Analysis of Investments and Management of Portfolios. South-Western Cengage Learning.
- Elton, Gruber, Brown and Goetzmann (2014). Modern Portfolio Theory and Investment Analysis. John Wiley & Sons.
- Cuthbertson and Nitzsche (2004). Quantitative Financial Economics. John Wiley & Sons.

### **Course content-related study coaching**

The major part of the course is supported by examples, slides and additional exercises. All information is made available on electronic learning environment. There is guidance for the group assignments. The student can ask question to and discuss problems with the teacher right before, during or after the lectures.

**Evaluation methods**

end-of-term evaluation and continuous assessment

**Examination methods in case of periodic evaluation during the first examination period**

Written examination with open questions, written examination with multiple choice questions

**Examination methods in case of periodic evaluation during the second examination period**

Written examination with open questions, written examination with multiple choice questions

**Examination methods in case of permanent evaluation**

Assignment, peer assessment

**Possibilities of retake in case of permanent evaluation**

examination during the second examination period is possible

**Extra information on the examination methods**

Written exam (70%) and assignment (30%).

The written exam consists of 3 open questions, 2 propositions and 20 multiple choice questions.

The group assignment is evaluated by the lecturer and by fellow students using a peer evaluation.

Second term: Depending on the deficits for the evaluation components, a written exam and / or an individual work. The score for the component which the student has succeeded are taken over to the second term.

**Calculation of the examination mark**

End-of-Term evaluation 70%, permanent evaluation 30%.

Students must have passed all evaluation components in order to pass the course. If the student does not pass one component and the mathematical average yields a score of 10 or more on 20, the final score is reduced to 9/20, the highest score for which the students does not pass the course.

Students have to participate in all the components of the non-periodic and periodic evaluation to pass the course. If a student does not participate in all components of the evaluation, the final score (if higher than 7/20) will be reduced to 7/20.

A student who withdraws from end-of-term and/or permanent evaluation for the course, will receive a non-tolerable final mark.