



# Exchange programme Vrije Universiteit Amsterdam

Vrije Universiteit Amsterdam - Exchange programme Vrije Universiteit Amsterdam - 2024-2025

## Exchange

Vrije Universiteit Amsterdam offers many English-taught courses in a variety of subjects, ranging from arts & culture and social sciences, neurosciences and computer science, to economics and business administration.

The International Office is responsible for course approval and course registration for exchange students. For details about course registration, requirements, credits, semesters and so on, please [visit the exchange programmes webpages](#).

# Asset Pricing

Course Code	E_IBK3_AP
Credits	6
Period	P4
Course Level	300
Language Of Tuition	English
Faculty	School of Business and Economics
Course Coordinator	dr. M.A. Dijkstra
Examiner	dr. M.A. Dijkstra
Teaching Staff	dr. M.A. Dijkstra
Teaching method(s)	Study Group, Instruction course, Lecture

## Course Objective

In this course you will learn about asset pricing, which explores the factors that determine the prices and returns of financial assets.

In the first part of the course, the central concept is the relationship between risk and return of financial assets. The goal is to gain insights into the risks associated with financial portfolios and investments and to be able to calculate/estimate such risks. Furthermore, another goal is to learn how to benefit from diversification possibilities. Finally, you will also learn how to compute expected returns on investments and the cost of capital on the basis of the Capital Asset Pricing Model and multifactor models. (Academic and Research Skills, Bridging Theory and Practice - Application)

In the second part of the course, the goal is to gain deeper insight into risk management by analyzing Value-at-Risk, duration-based strategies and risk management based off derivatives such as futures and forwards. (Academic and Research Skills, Bridging Theory and Practice - Application). By accomplishing these learning goals, you will gain new academic and research skills and develop your professional knowledge in the area of financial risk and risk management.

You will apply these theoretical concepts into practice by focusing on the creation of portfolios and investments using real-world data. (Bridging theory and practice - Application)

## Course Content

Central topics that will be discussed are:

- Trade-off between risk and return;
- Estimation of average return and volatility;
- Concepts of covariance and correlation and their estimation;
- Risk and return of portfolios;
- Diversification;
- Concept of efficient portfolios;
- CAPM and multifactor models;
- Cost of capital
- Value-at-Risk
- Characteristics and pricing of futures and forwards;
- Use of forwards and futures in risk hedging;
- Principle of no arbitrage;
- Interest rate risk
- Duration

## Additional Information Teaching Methods

Knowledge clips, lectures, tutorials and Q&A-sessions.

## Method of Assessment

Written exam, data-based assignment, and weekly Canvas quizzes.

## Entry Requirements

The course builds on concepts discussed in previous Finance courses (Finance, Financier Management) and uses methods that students have learned in Quantitative Research Methods I and II.

## Literature

J. Berk and P. DeMarzo, Corporate Finance, Pearson, 6th Global Edition.

Lecture and tutorial materials (slides, papers)

## Explanation Canvas

There will be weekly quizzes on Canvas that are relevant to the final grade.

## Recommended background knowledge

The course builds on concepts discussed in previous Finance courses (Finance, Financier Management) and uses methods that students have learned in Quantitative Research Methods I and II.