

## Course information 2025-26

# FN3204 Investments and Portfolio Management

### General information

**MODULE LEVEL:** 6

**CREDIT:** 30

**NOTIONAL STUDY TIME:** 300 hours

**MODE:** Online Taught Only

### Summary

The goal of the course is to broaden, and selectively deepen, students' understanding of finance, building on their existing knowledge of financial economics. This course will examine the empirical evidence on the behaviour of stock prices, the extent to which financial markets are informationally efficient, portfolio management and performance evaluation, and elements of international finance. Students will study the empirical evidence of the CAPM and other asset pricing models, learn arbitrage pricing theory, and analyse different tests of market efficiency focusing on event studies and investment anomalies. The course also studies the main empirical findings in behavioural finance and behavioural explanations for various market anomalies. Furthermore, students will learn how to measure the performance of a portfolio manager and to attribute it to different types of skill. Finally, the course introduces the foundations of international finance and explores issues related to international portfolio management.

### Conditions

Please refer to the relevant programme structure in the EMFSS Programme Regulations to check:

- where this course can be placed on your degree structure; and
- details of prerequisites and corequisites for this course.

You should also refer to the Exclusions list in the EMFSS Programme Regulations to check if any exclusions apply for this course.

## **Aims and objectives**

The aims of this course are to:

- Provide a solid foundation in empirical methods used to test and refine asset pricing theories and to analyse the efficiency of financial markets.
- Provide insight into the use of finance theory in investment management.
- Provide a guide to the measurement and analysis of risk of financial investments.
- Examine techniques for portfolio construction, performance evaluation, and international asset allocation.

## **Learning outcomes**

At the end of the course and having completed the essential reading and activities you should be able to:

- Evaluate investment decisions by examining the empirical behaviour of security prices.
- Outline and critically assess empirical evidence on the Capital Asset Pricing Model (CAPM) and Multifactor Models.
- Master asset valuation using factor models and the Arbitrage Pricing Theory (APT).
- Produce and analyse event studies to test market efficiency
- Identify investment anomalies and their link to return predictability.
- Critically evaluate the main empirical findings in behavioural finance
- Measure asset management performance and attribute it to different types of skill.
- Apply asset management theories/models within an international context.

## **Employability skills**

Below are the three most relevant employability skills that students acquire by undertaking this course which can be conveyed to future prospective employers:

1. Decision making
2. Communication
3. Complex problem solving

## Essential reading

Detailed course programmes and reading lists are distributed at the start of the course. Illustrative texts include:

Zvi Bodie, Alex Kane, and Alan Marcus, Investments, McGraw-Hill, 12th International Student Edition ed. (note: earlier or later editions can be used but chapter numbers might be different.)

Inefficient Markets: An Introduction to Behavioral Finance by Andrei Shleifer, Oxford University Press.

## Assessment

This course is assessed by a three-hour and fifteen-minute closed-book written examination.

## Syllabus

The syllabus for this course comprises the following topics:

- Modern Portfolio Theory and Capital Asset Pricing Model (CAPM): basic rules of statistics; portfolio risk and return; review of Markowitz portfolio theory; review of CAPM; CAPM applications.
- Empirical tests of the CAPM: review of regression analysis; regression and asset returns; estimating expected returns; two-pass approach; Fama-MacBeth approach; Roll's critique.
- Multifactor models: additional CAPM tests; betas, size, and book-to-market; multifactor models; Arbitrage Pricing Theory (APT); Fama-French three-factor model.
- Market efficiency: Efficient Markets Hypothesis (EMH); three forms of efficiency; weak form tests; event study methodology; semi-strong form tests; joint hypothesis problem.
- Investment anomalies and return predictability: defining an anomaly; reversals; momentum; earnings announcement puzzle; calendar anomalies; twin stocks puzzle; asset price bubbles; size and value effects.
- Behavioural finance: underreaction and overreaction; behavioural theories of momentum; empirical tests; limits to arbitrage; noise-trader risk; performance-based arbitrage; riding the sentiment wave.
- Fixed-income portfolio management: Interest rate risk and the term structure of interest rates; inference from the term structure; duration; convexity; interest rate immunisation; interest rate swaps.
- Active portfolio management and performance evaluation: passive vs active management; Treynor-Black model; Sharpe ratio; M2 measure; Jensen's alpha; Treynor's ratio; Appraisal ratio; market timing; style analysis.
- Elements of international finance: FX markets and forward exchange rates; covered interest parity; unbiased expectations hypothesis; purchasing power parity; real exchange and interest rates.

- International asset allocation: investing in foreign markets; risk in international markets; hedging FX risk; International CAPM; tests of ICAPM; international diversification; home bias.