

# **PRINCIPLES OF FINANCE**

24-hour course

### Céline Vaessen

Céline Vaessen is General Advisor, Federal Holding and Investment Company (SFPI-FPIM), managing the Belgian State shares in financial institutions which benefited from State aid. Previously, she worked as an investment banker at Calyon. She lectures at the Solvay Brussels School of Economics and Management.

### **Course Outline**

This course articulates the principles, tools and techniques to assess investment and financing decisions made by firms, in their intimate relationship with financial markets.

Referring to the arbitrage principle in financial decision-making, the course starts with the key foundations of finance, the valuation principles in general, and the understanding of the requirement of return given a level of risk.

The second part is devoted to the valuation of the various asset classes, projects and firms, including the arbitrage principle in financial decision-making, time value of money, interest rate management and bond portfolio management, project valuation, capital markets and the price of risk.

Participants will be advised on reading material for each subject and will work on exercises for each theme to be covered in class in small groups.

At the end of the course, Participants will be able to:

- Value a share, a bond, a company, a project, ...
- Make a choice between different investment projects
- Build the term structure of interest rates and make the difference between spot & forward interest rates
- Assess risk and make the link with expected returns
- Estimate the cost of capital for companies with different financial structures
- Discuss capital markets efficiency
- Address the payout policy of a company



# **Course Structure**

### I. Microeconomics review

- a. Time dimension of financial decisions
- b. Fisher Separation Theorem

# II. Introduction to Financial Statement Analysis

- a. Financial Ratios
- b. Cash flow statements

### III. Time Value of Money

- a. Valuing a stream of Cash Flows
- b. Simplified valuation formulas

# IV. Project Valuation

- a. Investment rules
- b. Fundamentals of capital budgeting

# V. Interest rates

- a. Determinants of interest rates
- b. Term structure of interest rates (in certainty and uncertainty)

# VI. Risk and Return

- a. Capital Markets and Pricing of Risk
- b. CAPM
- c. Estimating the cost of capital
- d. Investor behaviour and capital markets efficiency

# VII. Arbitrage and Financial Decision Making

- a. Asset pricing review
- b. Valuation Model in uncertainty

### VIII. Capital Structure

- a. Modigliani Miller theory
- b. Debt and Taxes
- c. Financial Distress
- d. Payout policy