# Finance and risk management

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***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

This course starts by providing an introductory survey of the field of finance, and examining the agents, instruments, and institutions that make up the financial system of a modern economy. Along the way, standard concepts and tools of financial analysis are introduced: time value of money, present discounted value, and the efficient markets hypothesis. It will then focus on the investment and financing decisions of firms. Recent developments in the field – in particular, the application of psychology to financial markets (called behavioral finance) – are also discussed within the various topics. Moving to the second module, students will be exposed to a genuine grasp of risk management techniques. In recent years, pure financial risk management has been increasingly embracing enterprise-wide risk management. Individuals and firms confront risk in nearly all decisions they make. We live in a turbulent and complex world, full of vulnerabilities which – through an educated mindset and wise use of financial tools – can be turned into opportunities: risk management discipline is therefore critical for the success of any business. The course aims at teaching students the essential financial tools, while showing them how to recognize, measure and manage risks in various settings. Alongside the intuition and theoretical framework around finance and risk management more broadly, the course will address traditional practices at banking institutions, as well as the most common techniques employed in a corporate context.

At the completion of the course, students will be able to:

1. Understand the background and tools to support financial decisions within a company.
2. Critically discuss how corporates and financial institutions make use of the insights and tools of risk management.
3. Broaden their view on the major risk drivers, with a framework for measuring and monitoring it.
4. Recognize potential threats, risks, and vulnerabilities in an organization.
5. Frame risks through scenario planning in a given context, by employing acquired know-how and own intuition towards sensible risk management practices.
6. Discuss risk profiles with internal / external stakeholders, within an international work set-up.
7. Master the financial jargon and key technicalities of the risk management practice.

***COURSE CONTENT***

*Module I*

The first module will discuss the following topics:

– Introduction to financial management.

– Financial statements analysis, cash flow analysis.

– Time value of money, discounted cash flow valuation.

– Interest rates and bond valuation.

– The investment decision: net present value and criteria for selecting investments.

– Equity markets and stock valuation.

– Risk and return, the cost of capital, and capital structure decisions.

– Raising capital: equity issues and debt issues.

– Mergers and acquisitions.

*Module II*

The second module is organized around four sub-sections:

1. The concept of risk

– The risk matrix: introduction to risk and its measurement, old and new risks.

– The role of insurance and optimal decision making under risk.

1. Asymmetric information and psychological considerations affecting risk management

– Exploration of barriers to risk management.

– Incentive problems arising from asymmetric information, moral hazard and adverse selection.

– Typical mistakes in risky scenarios.

– Real-life examples and case studies.

1. Firms facing trade-offs in managing risk: investigating the potential benefits vs. costs incurred

– Corporate risk management: how firms can manage their own risk for value creation.

– Prevention, resiliency planning and crisis management.

– Scenario-based strategic planning & risk mitigants.

– The costs of a poor risk management culture.

– Real-life examples and case studies.

1. Managing risk in financial markets and within financial institutions

– Threat or opportunity? Interest rate risk, equity risk, credit risk, FX risk, and others.

– The use of derivatives as a powerful tool.

– Introduction to portfolio management and risk-modelling.

– Behavioural finance in executive decision making.

– Real-life examples and case studies.

***READING LIST***

Lecture notes, readings, case studies, problem sets, and surveys will be posted on Blackboard. Students are responsible for checking Blackboard regularly for updates.

***TEACHING METHOD***

Interactive face-to-face lectures, exercises and case studies, guest speakers.

***ASSESSMENT METHOD AND CRITERIA***

Final grades for the course are determined by one comprehensive written exam, which will include both theoretical and numerical exercises. A mock exam will be made available on Blackboard at the end of the course, to help students understand the format of the exam.

***NOTES AND PREREQUISITES***

There are no formal prerequisites for the course, but students are assumed to have an introductory knowledge of accounting, financial statements, and statistics, good quantitative skills and curiosity for problem-solving, together with a proficient level of English, written and spoken.

Who should attend? Participants are aspiring (i) executives in banking and banking-related industries, (ii) managers of large multi-national corporations or (iii) start-up enthusiasts / entrepreneurs willing to navigate the broader risk environment with the right tools and techniques. Attendance is strongly recommended.

*Office hours*

Please check on Blackboard.