FINANCIAL RISK MANAGEMENT

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| Course code | *FIN108* |
| Compulsory in the programmes | *Elective* |
| Level of studies | *Undergraduate* |
| Number of credits | *6 ECTS (48 in-class hours + 6 consultation hours + 2 exam hours, 104 individual work hours)* |
| Course coordinator (title and name) | *Assoc. Prof. Silviu Ursu,* [*silurs@faculty.ism.lt*](mailto:silurs@faculty.ism.lt) |
| Prerequisites | *Principles of Finance or equivalent* |
| Language of instruction | *English* |

**THE AIM OF THE COURSE:**

This course aims to provide you with an overview of the financial risks that every firm, particularly those in the financial services industry, and people working in these firms face in their activities. Using effective learning approaches such as case studies from PRMIA, FRM and other word-leading certifications for finance and risk management, along with various stories on the lessons of the past narrated by financial historians in famous books or documentaries about finance and risk, and most recent regulatory standards, you will gain an understanding on the evolution and current practices of companies to measure and manage the most important risks they are exposed to: market risk, credit risk, liquidity risk, and operational risk.

Upon successful completion of this course, you will be able to answer each of the following questions: (1) How do individuals define, perceive and deal with risk, and what does this imply for financial risk management? (2) How does a good risk management process help firms, particularly those from the financial services industry, and what can be the consequences of the inadequate risk management? (3) Which are the main financial risks and what are the techniques and tools to measure and manage them? (4) What are some of the most important cases and history lessons with respect to financial risk management failures and what do they teach us?

**MAPPING OF COURSE LEVEL LEARNING OUTCOMES (OBJECTIVES) WITH DEGREE LEVEL LEARNING OBJECTIVES (See Annex), ASSESMENT AND TEACHING METHODS**

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| Course level learning outcomes (objectives) | Degree level learning objectives (Number of LO) | Assessment methods | Teaching methods |
| CLO1. Define risk, risk measurement and risk management, explain the functions, benefits and costs of risk management and describe a risk management process for both financial institutions and non-financial corporations | BLO1.1, ELO1.1  BLO1.2, ELO1.2 | Final exam,  group work | Lectures, seminars, self-study |
| CLO3. Define the market risk, credit risk, liquidity risk, operational risk and systemic risk and describe the main techniques and tools to measure and manage them | BLO1.1, ELO1.1  BLO1.2, ELO1.2 | Final exam,  group work | Lectures, seminars, self-study |
| CLO4. Analyze and reflect critically on both the good practices and failures in financial risk management based on the recent news articles, assigned readings, cases and relevant research | BLO1.2, ELO1.2  BLO4.2, ELO4.2  BLO4.3, ELO4.3 | Final exam,  group work | Lectures, seminars, self-study |

**ACADEMIC HONESTY AND INTEGRITY**

The ISM University of Management and Economics Code of Ethics, including cheating and plagiarism are fully applicable and will be strictly enforced in the course. Academic dishonesty, and cheating can and will lead to a report to the ISM Committee of Ethics. With regard to remote learning, ISM remind students that they are expected to adhere and maintain the same academic honesty and integrity that they would in a classroom setting.

**COURSE OUTLINE**

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| **Topic** | **In-class hours** | **Readings** |
| **Introduction to Financial Risk Management and Course Outline**  Risk, uncertainty, probability, luck and the development of Quantitative Finance  Typology of risks at financial institutions and nonfinancial corporations  Risk Measurement versus Risk Management | 8 | [1], [2], [3], [4] |
| **Market Risk Measurement and Management**  Definition and sources of market risk: interest rate and foreign exchange rate risk  Value-at-Risk (VaR), Expected Shortfall (ES) and similar metrics of market risk | 8 | [1], [2], [5] |
| **Credit Risk Measurement and Management**  Definition and sources of credit risk: default, spread, counterparty and sovereign risk  Credit risk of a single borrower versus credit portfolio risk  Credit scoring versus credit ratings  Expected loss (EL), unexpected loss (UL), default risk models, credit Value-at-Risk (VaR), credit valuation adjustment (CVA) and similar metrics of credit risk | 8 | [1], [2], [5] |
| **Liquidity Risk Measurement and Management**  Definition and sources of liquidity risk: credit, maturity and liquidity transformation  Commercial banking and management of liquidity risk: asset-liability management, liquidity portfolio management and determining funding sources to address liquidity mismatches  Quantitative liquidity metrics | 8 | [1], [2], [5] |
| **Operational Risk Measurement and Management**  Definition and sources of operational risks  Measurement and assessment of operational risks  Governance, mitigation and reporting of operational risks | 8 | [1], [2], [5] |
| **Financial Crises, Systemic Risk and Financial Regulation**  Definition, types and features of financial crises  Systemic risk, systemic event and systemic crises  Overview of Financial Regulation and the Basel Regulatory Framework | 8 | [1], [2], [5] |
|  | **Total:**  **48 hours** |  |
| CONSULTATIONS | 6 |  |
| FINAL EXAM | 2 |  |

**FINAL GRADE COMPOSITION**

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| --- | --- |
| **Type of assignment** | **%** |
| ***Group Components*** | **30** |
| Written Group Project | 20 |
| Presentation of Group Project | 10 |
| ***Individual Components*** | **70** |
| Final Examination | 70 |
| **Total:** | **100** |

**DESCRIPTION AND GRADING CRITERIA OF EACH ASSIGNMENT**

**Group work**

There will be one formal assignment during the course that counts towards 30% of the final grade and must be completed in a group. Each group will have to prepare and deliver a 30-minute presentation (according to a schedule agreed at the beginning of the course), followed by questions and discussion.

**Examinations**

There will be one written final examination that counts towards 70% of the final grade and covers all topics discussed during the course. It consists of multiple-choice questions and open questions.

***NB:*** You must obtain at least 5.0 points (out of 10.0) for *each* assignment to be counted for the total score.

**RETAKE POLICY**

Students are allowed to retake the exam in order to pass. The retake covers all course material and its weight is 70%. Group work cannot be rewritten / retaken but its evaluation (if positive) is not annulled.

**ADDITIONAL REMARKS**

The course focuses on intuition and understanding and assumes only introductory-level familiarity with mathematics, probability and statistics. Quantitative and technical material primarily will be conveyed primarily using graphical and numerical examples, as well as through using sources of financial and statistical data.

Positive contributions to class are encouraged and rewarded. Consistent positive contributions will help you if you are on a grade border at the end of the course.

**READINGS AND COURSE MATERIALS**

All necessary readings, including research papers, articles and lecture notes will be distributed in class or via eLearning.

Recommended readings/textbooks:

1. Crouhy, Michel, Galai, Dan, Mark, Robert (2023). *The Essentials of Risk Management, 3rd Edition.* McGraw-Hill Companies, ISBN 978-1-264258864
2. Coleman, Thomas (2011). *A Practical Guide to Risk Management*. CFA Institute. ISBN 978-1-934667415 (https://www.cfainstitute.org/-/media/documents/book/rf-publication/2011/rf-v2011-n3-1-pdf.pdf)
3. Bernstein, Peter L. (1998). *Against the Gods: The Remarkable Story of Risk*. Wiley. ISBN 978-0471295631
4. Desai, Mihir A. (2017). *The Wisdom of Finance: Discovering Humanity in the World of Risk and Return*, Boston/New York: Houghton Mifflin Harcourt. ISBN: 978-0544911130
5. *Professional Risk Manager (PRM). Case Studies and Standards.* Professional Risk Managers International Association (PRMIA). Updated August 4, 2021. (https://prmia.org/Public/Public/PRM/Case\_Studies\_and\_Standards.aspx)

(Last updated: 2023 12 05)

**ANNEX**

**DEGREE LEVEL LEARNING OBJECTIVES**

**Learning objectives for the Bachelor of Business Management**

*Programmes:*

*International Business and Communication,*

*Business Management and Marketing, Finance,*

*Industrial Technology Management*

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| **Learning Goals** | **Learning Objectives** |
| Students will be critical thinkers | BLO1.1. Students will be able to understand core concepts and methods in the business disciplines |
| BLO1.2. Students will be able to conduct a contextual analysis to identify a problem associated with their discipline, to generate managerial options and propose viable solutions |
| Students will be socially responsible in their related discipline | BLO2.1. Students will be knowledgeable about ethics and social responsibility |
| Students will be technology agile | BLO3.1. Students will demonstrate proficiency in common business software packages |
| BLO3.2. Students will be able to make decisions using appropriate IT tools |
| Students will be effective communicators | BLO4.1. Students will be able to communicate reasonably in different settings according to target audience tasks and situations |
| BLO4.2. Students will be able to convey their ideas effectively through an oral presentation |
| BLO4.3. Students will be able to convey their ideas effectively in a written paper |

**Learning objectives for the Bachelor of Social Science**

*Programmes:*

*Economics and Data Analytics,*

*Economics and Politics*

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| --- | --- |
| **Learning Goals** | **Learning Objectives** |
| Students will be critical thinkers | ELO1.1. Students will be able to understand core concepts and methods in the key economics disciplines |
| ELO1.2. Students will be able to identify underlying assumptions and logical consistency of causal statements |
| Students will have skills to employ economic thought for the common good | ELO2.1.Students will have a keen sense of ethical criteria for practical problem-solving |
| Students will be technology agile | ELO3.1. Students will demonstrate proficiency in common business software packages |
| ELO3.2. Students will be able to make decisions using appropriate IT tools |
| Students will be effective communicators | ELO4.1.Students will be able to communicate reasonably in different settings according to target audience tasks and situations |
| ELO4.2.Students will be able to convey their ideas effectively through an oral presentation |
| ELO4.3. Students will be able to convey their ideas effectively in a written paper |