



## Syllabus Course Program



# Financial risk management

### Specialty

072 – Finance, banking, insurance and stock market

### Educational program

Finance and banking,

### Level of education

Master's degree

### Semester

2

### Institute

Institute of Economics, management and international business

### Department

Accounting and finance (205)

### Course type

Special (professional), Elective,

### Language of instruction

English, Ukrainian

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## Lecturers and course developers



### Olha Mashchenko

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D.Sc. in Economics, Professor of Accounting and Finance Department

Author and co-author of more than 85 scientific and methodological publications. Courses: "Insurance and insurance business", "Financial markets", "Bank management", "Financial services industry", "Financial risk management", "Theory of international finance".

[More about the lecturer on the department's website](#)

## General information

### Summary

The course "Financial risk management " develops the knowledge and skills necessary for effective financial risk management. In the course of training, students will learn the main methods, techniques and tools of financial risk management, ways and directions of their minimization

### Course objectives and goals

Acquisition of theoretical knowledge and practical skills in the field of financial risk management. Formation of practical skills of detection, identification, evaluation and neutralization of financial risks arising in the activities of economic entities.

### Format of classes

Lectures, practical work, independent work, consultations. The final control is a credit.

### Competencies

- GC1. Ability to think abstractly, analyze and synthesize.
- GC3. Ability to conduct research at an appropriate level.
- GC4. Ability to identify, pose and solve problems.
- GC5. Ability to make informed decisions.
- GC6. Interpersonal skills.
- GC7. Ability to motivate people and move towards a common goal.

SC2. Ability to use theoretical and methodological tools for diagnosing and modeling the financial activities of business entities.  
SC3. Ability to apply management skills in the field of finance, banking and insurance.  
SC4. Ability to evaluate the effectiveness of scientific, analytical and methodological tools to substantiate management decisions in the field of finance, banking and insurance.  
SC5. Ability to assess the limits of one's own professional competence and improve professional qualifications.  
SC6. Ability to apply interdisciplinary approaches in solving complex tasks and problems in the field of finance, banking and insurance.  
SC7. Ability to search, use and interpret information necessary to solve professional and scientific tasks in the field of finance, banking and insurance.  
SC9. Ability to develop technical tasks for designing information systems in the field of finance, banking and insurance.

### **Learning outcomes**

PL03. Adapt and modify existing scientific approaches and methods to specific situations of professional activity.  
PL04. Search, process, systematize and analyze information necessary to solve professional and scientific tasks in the field of finance, banking and insurance.  
PL06. Present research results in an accessible and reasoned manner orally and in writing, participate in professional discussions.  
PL09. Apply management skills in the field of finance, banking and insurance.  
PL12. Justify the choice of management decision options in the field of finance, banking and insurance and evaluate their effectiveness, taking into account goals, existing limitations, legislative and ethical aspects.

### **Student workload**

The total volume of the course is 120 hours (4 ECTS credits): lectures - 32 hours, practical classes - 16 hours, self-study - 72 hours.

### **Course prerequisites**

To successfully complete the course, you must have knowledge and practical skills in the following disciplines: "Financial management", "International financial reporting standards", "Basics of scientific research", "Insurance management".

### **Features of the course, teaching and learning methods, and technologies**

Lectures are held remotely using interactive learning methods using multimedia technologies. Practical classes use a project-based approach to learning, focusing on the application of information technologies in financial risk management. Study materials are available to students through OneNote Class Notebook.

## **Program of the course**

### **Topics of the lectures**

Topic 1. Economic nature of financial risk  
Prerequisites for updating financial risk management. Economic essence of financial risk. Types of financial risks, areas of their manifestation.  
Topic 2. Theoretical principles of financial risk management  
Basic approaches and principles of financial risk management. Subjects of financial risk management and their functions.  
Topic 3. Fundamentals of financial risk assessment  
General approaches to quantitative assessment of financial risks. Financial risk assessment indicators. Taking into account the degree of exposure to risk. Utility function.  
Topic 4. Analysis and assessment of financial risks  
Content of the process of analysis and assessment of the level of financial risks. Basic methods of analysis and assessment of the level of financial risks.

#### Topic 5. Credit risk management

The essence and types of credit risk. Methodical approaches to the assessment of the borrower's credit risk and its management. Evaluation and management of credit risk by non-financial corporations. The use of credit derivatives in the practice of credit risk management.

#### Topic 6. Currency risk management

Types of currency risk and factors of its determination. Methods of currency risk management. Methods of currency risk management based on hedging.

#### Topic 7. Interest rate risk management

The essence of interest rate risk and its determinants. Basic methods of interest rate risk management. Interest rate risk hedging instruments.

#### Topic 8. Risk hedging using derivative financial instruments

Economic essence of derivative financial instruments. Hedging using forward contracts. Hedging using futures contracts. Hedging risks using swaps. Hedging risks using options.

#### Topic 9. Neutralization of financial risks of insurance companies

Economic essence of financial risks of insurance companies. The role and place of financial risks in the activities of insurance companies. Financial risk management of insurance companies and its main stages.

#### Topic 10. Investment risk management through diversification

The main stages of the investment process. The role of the diversification mechanism in portfolio analysis. Stages of investment portfolio formation. The role and place of beta coefficients in the diversification of an investment portfolio.

#### Topic 11. Risk management of borrowing through the stock market

Risk management strategies when investing in stocks and bonds. Determining the profitability and riskiness of an investment portfolio according to Markovits. Use of statistical data to assess asset characteristics. Investment functions of the banking sector and types of risks in the investment activity of banks. Use of regression and correlation analysis in investment portfolio management.

#### Topic 12. Taxation risks when using derivatives and risk management

General principles and individual approach in taxation. Tax cost of transactions. Withholding taxes on interest income and dividends. Derivatives as simulated assets.

### Topics of the workshops

Topic 1. Theoretical and methodological foundations of financial risk management

Topic 2. Analysis and assessment of the level of financial risks

Topic 3. Credit risk management

Topic 4. Currency risk management

Topic 5. Management of interest rate risks

Topic 6. Neutralization of financial risks of insurance companies

Topic 7. Investment risk management through diversification

Topic 8. Risk management of borrowing through the stock market

### Topics of the laboratory classes

Laboratory work is not provided within the discipline.

### Self-study

The course involves completing an individual assignment in the form of a test. Students are recommended additional materials (videos, articles) for each topic for independent study and analysis.

## Course materials and recommended reading

#### Main literature

1 Gurina O. V., Korneva N. O. Financial risk management: textbook. Mykolaiv: publisher Rumyantseva G. V., 2022. 359 p.

2 Dolinsky L. B. Financial risk management: textbook. Kyiv: National University "Kyiv-Mohyla Academy", 2022. 132 p.

3 Laktionova O. A. Financial risk management: textbook. Vinnytsia: TVORY, 2020. 256 p.

- 4 Regulations on the organization of the risk management system in Ukrainian banks and banking groups: Resolution of the Board of the National Bank of Ukraine dated 11.06.2018 No. 64. URL: <https://zakon.rada.gov.ua/laws/show/v0064500-18#Text>
- 5 Khoma I., Bondarenko L., Chubko O. Modeling financial decisions under uncertainty: textbook. Kyiv: "Kondor", 2023. 284 p.
- 6 Shklyaruk S. G. Financial risk management: textbook. Kyiv: DP "Publishing house "Personal", 2019. 494 p.
- 7 Chance M. Financial Risk Management: An End User Perspective. World Scientific Publishing Company, 2019. 860 p.
- 8 Hopkin P. Risk Management (Strategic Success): textbook. Kodan Page, 2022. 288 p.

#### Additional literature

- 1 Shyshkina O. V. Mechanism of financial risk management of industrial enterprises: theory, methodology, practice: monograph. Chernihiv: ChNTU, 2020. 317 p.

## Assessment and grading

### Criteria for assessment of student performance, and the final score structure

The final grade can be given as a result of accumulating grades from individual modules during the semester if the applicant completes all types of current control measures or based on the results of the exam (test).

100% of the final grade consists of the results of assessment in the form of:

- final test work (30%);
- individual work (20%);
- independent work (50%)

Test: written assignment (20 test tasks of varying difficulty levels).

### Grading scale

Total points	National	ECTS
90–100	Excellent	A
82–89	Good	B
75–81	Good	C
64–74	Satisfactory	D
60–63	Satisfactory	E
35–59	Unsatisfactory (requires additional learning)	FX
1–34	Unsatisfactory (requires repetition of the course)	F

## Norms of academic integrity and course policy

The student must adhere to the Code of Ethics of Academic Relations and Integrity of NTU "KhPI": to demonstrate discipline, good manners, kindness, honesty, and responsibility. Conflict situations should be openly discussed in academic groups with a lecturer, and if it is impossible to resolve the conflict, they should be brought to the attention of the Institute's management.

Regulatory and legal documents related to the implementation of the principles of academic integrity at NTU "KhPI" are available on the website: <http://blogs.kpi.kharkov.ua/v2/nv/akademichna-dobrochesnist/>

## Approval

Approved by

Date, signature

**Head of the department**  
Oleksandr MANOYLENKO

Date, signature

**Guarantor of the educational program**  
Tatiana NAZAROVA

