



## Syllabus Course Program



# Risk management

**Specialty**

073 - Management

**Educational program**

Business Administration

**Level of education**

Bachelor's level

**Semester**

8

**Institute**

Institute of Education and Science in Economics,  
Management and International Business

**Department**

Management (204)

**Course type**

Optional, Profile

**Language of instruction**

English

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## Lecturers and course developers

**Shyian Nataliia**

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Doctor of Economic Sciences, Associate Professor of Management  
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Authored and co-authored over 100 scientific publications.  
Courses: Sustainable of Development Concepts, Risk Management,  
Innovation Management, Business ethics and social responsibility  
<https://web.kpi.kharkov.ua/mto/about/staff/shyian/>

## General information

### Summary

Formation of students' theoretical knowledge and practical skills to:  
identification, analysis, risk assessment;  
determining the factors of influence on the crisis situation;  
choose methodological approaches to reduce risks, manage of them.

### Course objectives and goals

obtaining theoretical knowledge and practical skills on the following issues:  
the concept and definition of risks;  
risk classification;  
risk indicators and their measurement;  
risk management methods;  
management of economic, financial risks; risk improvement.

### Format of classes

Lectures, practices, consultation. Final control in the form of an exam.

### Competencies

GC 03. The ability to abstract thinking, analysis, synthesis.  
GC 05. Knowledge and understanding of the subject area and understanding professional activity.  
GC 08. Skills of information and communication technology usage.

GC 09. The ability to learn and to master modern knowledge.

GC 11. The ability to adapt and perform in a new situation.

SC 02. The ability to analyze the results of organization activity, to compare them with the factors of the external and internal environment.

SC 12. The ability to analyze and structure problems organizations, form informed decisions.

SC 2.2. The ability to identify areas of investment and to justify the effectiveness of real and financial investments.

SC 2.3. To understand the principles and methods of business evaluation.

SC 2.4. The ability to formulate the main tasks related to the implementation of risk management and insurance in business.

## **Learning outcomes**

LO 03. To demonstrate knowledge of theories, methods and functions management, modern concepts of leadership.

LO 04. To demonstrate skills in finding problems and justifying their solutions.

LO 08. To apply management methods to ensure organizational effectiveness.

LO 16. To demonstrate skills of independent work, flexible thinking, openness to new knowledge, be critical and self-critical

LO 2.4. To adapt existing methods and approaches to various business tasks, perform the functions of a business integrator, plan and manage time.

## **Student workload**

The total volume of the course is 180 hours (6 ECTS credits): lectures - 20 hours, practice - 20 hours, self-study - 140 hours.

## **Course prerequisites**

To successfully complete the course, you must have knowledge and practical skills from the following disciplines: "Fundamentals of management", "Organizational theory", "Financial management".

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

Interactive lectures with presentations, discussions, practical cases, individual tasks. Study materials are available to students in OneNote.

## **Program of the course**

### **Topics of the lectures**

#### **Topic 1. The notion and definition of risks**

Essence of risk. Risk management. A risk management standard.

#### **Topic 2. Risk classification**

Systematic and Unsystematic risks. Types of risks.

#### **Topic 3. Methods of risk management**

Prevention, conservation, sharing, transfer and reduction of risk. Definition of likelihood, consequence and risk levels.

#### **Topic 4. Risk Measurement and Metrics**

Standard Deviation and Variation. The Sharp Ratio. Beta. Value at Risk.

#### **Topic 5. Uncertainty in RM**

Essence of uncertainty. Decision Criteria under uncertainty. Evaluation Criteria under uncertainty.

#### **Topic 6. Enterprise and Risk**

Essence of Business Risk. Qualitative methods for assessing entrepreneurial risks. Quantitative methods for assessing entrepreneurial risks.

#### **Topic 7. Financial risk-management**

Essences and types of Finance Risk. Credit rating of the company. Measures of Finance Risks.

#### **Topic 8. Reducing the risk**

The Risk reduction system. Risk identification, Risk Assessment, Risk Mitigation and Risk Transfer, as an element of the risk reduction system.

## Topics of the workshops

### Topic 1. The notion and definition of risks

Approaches to the definition of the concept of risk. A risk management standard.

### Topic 2. Risk classification

Systematic and Unsystematic risks. Types of risks.

### Topic 3. Methods of risk management

Building of the Risk Matrix.

### Topic 4. Risk Measurement and Metrics

Standard Deviation and Variation. The Sharp Ratio. Beta. Value at Risk.

### Topic 5. Uncertainty in RM

Building a Decision Tree. Hurwitz criterion.

### Topic 6. Enterprise and Risk

Maximization of money income.

### Topic 7. Financial risk-management

Calculating individual indicators of the financial condition of the company LVMN (Louis Vuitton Moët Hennessy).

### Topic 8. Reducing the risk

The Risk reduction system. Risk identification, Risk Assessment, Risk Mitigation and Risk Transfer, as an element of the risk reduction system.

## Topics of the laboratory classes

Laboratory work within the discipline is not provided.

## Self-study

The course involves the preparation of Essays, essays on key issues of the discipline. Students are also recommended additional materials (videos, articles) for independent analysis and study.

## Course materials and recommended reading

### Basic literature

1. Horkin P. Fundamentals of Risk Management: Understanding, evaluating and implementing effective risk management. 2010. 385 p. URL: <https://www.pdfdrive.com/fundamentals-of-risk-management-understanding-evaluating-and-implementing-effective-risk-management-e184225889.html>.
2. Enterprise Risk Management: Tools and Techniques for effective implementation. IMA: Institute of management accountants. URL: <https://erm.ncsu.edu/az/erm/i/chan/m-articles/documents/IMAToolsTechniquesMay07.pdf>.
3. Kiseleva I.A., Karmanov M.V., Korotkov A.V., Kuznetsov V.I. Risk management in business: concepts, types, evaluation criteria. Espacio. 2018. Vol.39 (Nº27). P.18-36. URL: <https://www.revistaespacios.com/a18v39n27/a18v39n27p18.pdf>.
4. Krause, A. Financial Risk-management. URL: <https://people.bath.ac.uk/mnsak/Teaching/ES50090/Slides.bho/ES50090%20-%20Lecture%20Slides.pdf>.
5. Risk Management Guideline. URL: <https://www.state.nj.us/transportation/capital/pd/documents/RiskManagementGuideline.pdf>
6. Roncalli, Th. 2020. Financial Risk Management. URL: <http://www.thierry-roncalli.com/download/FRM-Lecture1.pdf>.
7. Risk Assessment Matrix. Risk Priority Action List. Hierarchy hazard controls. URL: [https://www.deakin.edu.au/data/assets/pdf\\_file/0007/1238956/OHS-RiskAssessmentGuide.pdf](https://www.deakin.edu.au/data/assets/pdf_file/0007/1238956/OHS-RiskAssessmentGuide.pdf)

## Addition literature

1. BS 31100:2011 Risk management. Code of practice and guidance for the implementation of BS ISO 31000 9780580716072. URL: <https://dokumen.pub/bs-311002011-risk-management-code-of-practice-and-guidance-for-the-implementation-of-bs-iso-31000-9780580716072.html>.
2. Clappitt, Ph.G. & DeKoch, R.J. Embracing Uncertainty: The Essence of Leadership. Routledge. 240 p.
3. Comes, T., Adrot, A. & Rizza C. Decision-making under uncertainty. URL: [https://drmkc.jrc.ec.europa.eu/portals/0/Knowledge/ScienceforDRM/ch04/ch04\\_subch0402.pdf](https://drmkc.jrc.ec.europa.eu/portals/0/Knowledge/ScienceforDRM/ch04/ch04_subch0402.pdf).
4. Erickson, K.N. (2014) Financial Risk Management. Length, 102 p.
5. How to Reduce Revenue Risk. URL: <https://gocardless.com/guides/posts/how-to-reduce-revenue-risk/>.
6. Jean-Marc Bardet Laplace's method and BIC model selection for least absolute value criterion. URL: <https://hal.archives-ouvertes.fr/hal-03779838/document>.
7. Kenton W., Brock Th., Belluco-Chatham A. Is Risk Management in Finance, and Why Is It Important? URL: <https://www.investopedia.com/terms/r/riskmanagement.asp>.
8. Reduce your income tax reporting risk. URL: [https://www.bdo.com/getattachment/44c170be-a97d-42c5-bb9c-99f9563eccce/attachment.aspx?TAX\\_ASC740\\_Reduce-Your-Income-Tax-Reporting-Risk\\_Infog.pdf](https://www.bdo.com/getattachment/44c170be-a97d-42c5-bb9c-99f9563eccce/attachment.aspx?TAX_ASC740_Reduce-Your-Income-Tax-Reporting-Risk_Infog.pdf).
9. Sheynin O.B. P. S. Laplace's Work on Probability. URL: <https://www.jstor.org/stable/41133466>.
10. Springer Ch.G. (2009) Strategic management of three critical levels of risk. PA Times, 32(10), The American Society for Public Administration. URL: [https://digitalscholarship.unlv.edu/sea\\_fac\\_articles/324](https://digitalscholarship.unlv.edu/sea_fac_articles/324).
11. Sunchalin, A.M., Kochkarov, R.A., Levchenko, K.G., Kochkarov, A. & Ivanyuk, V.A. Methods of risk management in portfolio theory. Espacios. URL: <https://www.revistaespacios.com/a19v40n16/a19v40n16p25.pdf>.
12. What are the Essential Techniques of Risk Management. URL: <https://hr.fullerton.edu/risk-management/information-and-document-requests/information-management/essential-techniques-of-risk-management.php>.

## Assessment and grading

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

100 % Final assessment as a result of exam (40 %) and Continuous assessment (60 %).

**Exam 40 %**

**Continuous assessment (70 %).**

40 % practical assessment;  
20 % mid-term control  
10 % other activities.

### 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  
Olena PROKHORENKO

Date, signature

Guarantor of the educational  
program  
Olena PROHORENKO