

#### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

### **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Risk management in transport [N2Log2-MPTS>ZRwT]

Course

Field of study Year/Semester

Logistics 1/2

Area of study (specialization) Profile of study

Manager of a Transport and Forwarding Company general academic

Course offered in Level of study

second-cycle Polish

Form of study Requirements

elective part-time

**Number of hours** 

Lecture Laboratory classes Other 0

14

**Tutorials** Projects/seminars

0 16

Number of credit points

4.00

Coordinators Lecturers

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### **Prerequisites**

The student knows the basic issues related to multimodal transport chains in logistics, such as: the importance of individual transport carriers and their specificity, the role of transshipment sites, basic information on various forms and criteria for the selection of means of transport, types of cargo used in modern logistics, issues related to the selection of the form of packaging as part of production logistics, basic issues related to containerization.

#### Course objective

The aim of the course is to familiarize students with issues related to the identification and assessment of risks related to the performance of transport, with particular emphasis on the use of multimodal chains, aspects of transshipment operations and loading of transport units. During the lecture, not only risks related to the operational activities of operating companies will be taken into account, but also risks related to the international aspect of trade in goods, including issues related to the protection of critical infrastructure for logistics and terrorist threats.

## Course-related learning outcomes

Knowledge:

- 1. Student knows the extended concepts for logistics and its detailed issues and supply chain management in terms of risks associated with it [P7S WG 05]
- 2. Student knows the detailed methods, tools and techniques characteristic of the subject being studied in the field of logistics, and in particular the basic tools of risk assessment. [P7S WK 01]
- 3. The student knows the conditions for the functioning of transport companies as participants in logistics processes and the strategies of their operation, as well as knows the risks associated with their operation and is able to assess and manage them [P7S WK 02]

#### Skills:

- 1. Student is able to apply to solve the problem within the framework of the studied subject appropriate experimental and measurement techniques, information and communication, and is familiar with the solutions used today to assess and manage risk within logistics and its specific issues and supply chain management [P7S UW 03]
- 2. Student is able to critically evaluate the risk assessment tools used in the analyzed logistics system (in particular with regard to equipment, facilities and processes) [P7S\_UW\_04]
- 3. Student is able to formulate and solve tasks through interdisciplinary integration of knowledge from fields and disciplines used to design logistics systems [P7S UO 01]

#### Social competences:

- 1. Student notices cause-and-effect relationships in the implementation of the set goals and grade the significance of alternative or competitive tasks [P7S KK 01]
- 2. Student correctly identifies and resolves dilemmas related to the profession of logistics manager, compliance with the principles of professional ethics and respect for the diversity of views and cultures IP7S KK 021
- 3. Student is able to plan and manage business ventures in a creative way [P7S\_KO\_01]

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: On the basis of a test (written work) on the issues discussed in the lecture. You can take the exam after obtaining your project and laboratory grades. The exam is passed after providing factually correct answers to most of the issues raised.

Project: Based on the substantive quality of the implemented project and the defense of the completed project.

#### Programme content

The program content includes knowledge of risk management in road transport of goods and passengers

#### **Course topics**

Lecture: Identification and analysis of risk sources in contemporary logistics processes. Detailed characteristics of risks related to risk in transport studies. Taxonomy of concepts used in the analysis and management of risk issues. Specific risks associated with special forms of transport and resulting from a specific form of cargo. The importance of risk analysis for logistics companies and the most commonly used methods. Using software and numerical analysis for the assessment and optimization of risk management in transport.

Project: Best Practices and Case Study Analyzes for Transport Risk Management.

## Teaching methods

Lecture: conversation lecture, information lecture.

Project: case studies, project method.

Independent work: work with the book and source materials and international regulations.

### **Bibliography**

#### Basic:

- 1. Hopkin P., Fundamentals of Risk Management, 4th Edition, Kogan Page, 2017.
- 2. Zsidisin G.A., Henke M., Revisiting Supply Chain Risk, Springer Verlag, 2019.
- 3. Kouvelis P., Dong L., Boyabatli O., Li R., Handbook of Integrated Risk Management in Global Supply

## Chains, Wiley, 2012.

4. European Commission, Harmonised Risk Acceptance Criteria for Transport of Dangerous Goods, DNV-GL 2014.

## Additional:

- 1. Hubbard, D.W., The Failure of Risk Management, Wiley, 2009.
- 2. Rodrigue J.-P., The Geography of Transport Systems, 3th Edition, Routledge, 2013.

# Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
Classes requiring direct contact with the teacher	30	1,50
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)	70	2,50