



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Technical standards and technical aspects of activity [N2Log2-MPTS>NTiTAD]

Course

Field of study

Logistics

Year/Semester

2/3

Area of study (specialization)

Manager of a Transport and Forwarding Company

Profile of study

general academic

Level of study

second-cycle

Course offered in

Polish

Form of study

part-time

Requirements

elective

Number of hours

Lecture

8

Laboratory classes

0

Other

0

Tutorials

8

Projects/seminars

8

Number of credit points

3,00

Coordinators

dr inż. Mirosław Kruszyński

miroslaw.kruszynski@put.poznan.pl

Lecturers

Prerequisites

When starting this course, the student should have basic knowledge of the economics and organization of transport and should know the principles of operation of a transport company as well as know the rules of shipping management (also international). I should know the basics of civil law, tax law and insurance rules in road transport. He should also have the ability to obtain information from the indicated sources and be ready to cooperate as part of the team.

Course objective

The aim of the course is to provide students with basic knowledge in the field of basic issues related to transport technologies, including road transport. The student has knowledge and skills about the principles of managing the means of transport and infrastructure in road transport enterprises and identifies barriers in road transport, as well as issues related to the functioning of the entire branch of road transport. In addition, he acquires the ability to work individually and in a team in a road transport company, can control and analyze the correct use of devices and the implementation of transport processes in accordance with the procedures resulting from applicable regulations

Course-related learning outcomes

Knowledge:

1. Student knows the extended concepts for detailed issues in the field of transport techniques and technologies and transport management in the logistics supply chain [P7S_WG_05]
2. Student knows the detailed methods, tools and techniques characteristic for the studied subject in the field of logistics [P7S_WK_01]
3. Student knows the best practices in logistics and its specific issues [P7S_WK_04]
4. Student knows the extended concepts and rules in the field of industrial property protection and copyright [P7S_WK_05]

Skills:

1. Student is able to assess the usefulness and the possibility of using new achievements (techniques and technologies) in the field of transport and functionally related areas [P7S_UW_06]
2. Student is able to design, using appropriately selected means, an experiment, an analysis process or scientific research solving the problem within the transport and its specific issues and logistics supply chain management [P7S_UK_01]
3. Student is able to formulate and solve tasks through the interdisciplinary integration of knowledge from the fields and disciplines used to organize transport in the designed logistic systems [P7S_UO_01]
4. Student is able to select, based on the analysis of the usefulness and limitations, the appropriate tools and methods for solving engineering problems relevant for the construction or reorganization of the logistics system [P7S_UO_02]
5. Student is able to identify changes in requirements, standards, regulations, technical progress and the reality of the labor market, and on their basis determine the need to supplement their own and other knowledge [P7S_UU_01]

Social competences:

1. Student correctly identifies and resolves dilemmas related to the profession of a manager of a transport and shipping company, with observance of the principles of professional ethics and respect for the diversity of views and cultures [P7S_KK_02]
2. Student is able to plan and manage in a creative way business ventures [P7S_KO_01]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: The knowledge acquired in the field of the lecture is verified in the form of a test consisting of 50 closed multiple-choice questions. Passing threshold: 60% of points.

Tutorial: Pass based on the result of the final test in the form of a test with multiple-choice closed questions - 25 questions - after obtaining a minimum of 60% of points and active participation in classes.

Project: credit based on the evaluation of the implemented project, after obtaining 60% of points.

Programme content

The program content includes knowledge of technical standards and technical aspects of activities in relation to road transport of goods and passengers

Course topics

Lecture: Technical requirements. Member States' vehicle weight and dimension rules and exception procedures for non-standard loads. Selection of vehicles and their components (chassis, engine, transmission system, braking system, etc.) in accordance with the needs of the company. The different types of transport and unloading equipment (boxes, containers, pallets, etc.) and the procedures and instructions used for loading and unloading goods (loading, stacking, stowage, blocking and chocking, etc.). A variety of combined piggy-back and horizontal handling techniques. Procedures used to meet the regulations on the transport of dangerous goods and waste, those resulting from Directive 2008/68/EC and Regulation (EC) No. 1013/2006. The procedures used to meet the requirements of the regulations on the transport of perishable foodstuffs, in particular the requirements arising from the agreement on international transport of perishable foodstuffs and special means of transport for such transport (ATP). Procedures used to meet the requirements of the regulations on the transport of live animals. Vehicle homologation. Formalities related to type approval, registration, and technical inspection of these vehicles. External effects of transport activity. Measures to reduce noise and reduce air pollution resulting from exhaust emissions. Preparation of periodic maintenance plans for vehicles

and their equipment. Vehicle registration. Technical inspection of vehicles. Maintaining vehicles and their equipment in proper technical condition. Daily vehicle maintenance. Vehicle maintenance. Vehicle repairs.

Tutorial: Best practices and case studies in the field of the application of technical standards and technical aspects of activities in the area of: vehicle technical testing; maintaining vehicles and their equipment in a proper technical condition; daily vehicle maintenance and vehicle maintenance; repair of vehicles and technical transport equipment.

Project: Designing the transportation process.

Teaching methods

Lecture: an informative lecture supported by a multimedia presentation illustrated with examples.

Tutorial: exercise method supported by a multimedia presentation illustrated with examples; solving tasks, examples on the blackboard; performing tasks given by the teacher - practical exercises.

Project: design method.

Independent work: work with a book.

Bibliography

Basic:

1. Madej B., Michnikak J., Madej R., Kurcz J., Certyfikat kompetencji zawodowych - Podręcznik przewoźnika drogowego, Akademia Transportu i Przedsiębiorczości spółka z o.o., Warszawa, 2019.
2. Madej B., Przewozy drogowe osób i rzeczy, AIP, Warszawa, 2011.

Additional:

1. Madej B., Zasady prawidłowego załadunku pojazdów, AIP, Warszawa, 2012.
2. Abramek K., Podstawy obsługi i napraw, WKiŁ, Warszawa, 2008.
3. Ustawa z dnia 20.06.1997 r. - Prawo o ruchu drogowym (tekst jednolity Dz.U. Nr 108 z 2005r., z późn. zm.).
4. Rozporządzenie Ministra Infrastruktury z 31.12.2002 r. w sprawie warunków technicznych pojazdów oraz zakresu ich niezbędnego wyposażenia (Dz.U. Nr 32 z 2003r., z późn. zm.)
5. Poradniki dostępne na stronie Państwowej Inspekcji Pracy.

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	24	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	51	2,00