



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Technology of repair of food transport vehicles

### Course

Field of study

Year/Semester

Transport

4/7

Area of study (specialization)

Profile of study

Food transport

general academic

Level of study

Course offered in

First-cycle studies

polish

Form of study

Requirements

full-time

elective

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

30

15

0

Tutorials

Projects/seminars

0

0

### Number of credit points

4

### Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

dr inż. Aleksandra Rewolińska

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tel. 61 665 2232

### Prerequisites

Knowledge: Has basic knowledge in the field of construction, technology and operation of machines.

Skills: Can characterize the basic methods of mechanical processing.

Social competences: Can think and act creatively. General knowledge in the field of study and detailed knowledge related to the selected specialization.

### Course objective

Acquainting with the organization and planning of maintenance and repair works as well as methods of restoring vehicle fitness

### Course-related learning outcomes

Knowledge



1. The student has knowledge of important development trends and the most important technical achievements and of other related scientific disciplines, in particular transport engineering.
2. The student has a basic knowledge of the life cycle of means of transport, both equipment and software, and in particular about the key processes occurring in the product life cycle
3. The student knows the basic techniques, methods and tools used in the process of solving tasks in the field of transport, mainly of an engineering nature engineering

#### Skills

1. Student is able, when formulating and solving tasks in the field of transport, to apply appropriately selected methods, including analytical, simulation or experimental methods
2. The student is able to design elements of means of transport using data on environmental protection
3. The student is able to organize, cooperate and work in a group, assuming various roles in it, and is able to properly define priorities for the implementation of a task set by himself or others

#### Social competences

Is aware of the importance of maintaining the suitability of food transport means and the associated responsibility for decisions made

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

1. The student is aware of the importance of knowledge in solving engineering problems, knows examples and understands the causes of malfunctioning transport systems that have led to serious financial and social losses or to serious loss of health and even life

#### Programme content

General characteristics of the truck fleet and repair plants in Poland. Characteristics of maintenance and repair systems and methods of repairing motor vehicles. Eligibility of vehicles for repair. Stages of the technological process of vehicle repair. Discussion individual stages - disassembly, verification, cleaning, assembly. Examples of technological repair processes. Technological documentation of the repair process. Vehicle damage. Repair methods - replacement of parts, repair by machining, repair of parts by gluing, regeneration by spray metallization, repair of parts by welding, regeneration of parts by electroplating.

#### Teaching methods

1. Lecture with multimedia presentation
2. Exercise method (subject exercises, practice exercises) - in the form of auditorium exercises
3. Laboratory (experiment) method (independent conducting of experiments by students)

#### Bibliography



Basic

1. Nosal S., Inżynieria odnowy maszyn : wybrane zagadnienia – Wydanie I. – Poznań, 2017
2. Jóska M., Kowalczyk J., Mańczak R., Nosal S., Ulbrich D., Inżynieria odnowy pojazdów samochodowych, Tom 1 Inżynieria obsługiwaniana Poznań, 2019
3. Jóska M., Kowalczyk J., Mańczak R., Nosal S., Ulbrich D., Inżynieria odnowy pojazdów samochodowych, Tom 2 Inżynieria naprawy Poznań, 2019
4. Cypko J., Cypko E. Podstawy technologii i organizacji napraw pojazdów mechanicznych. Wkił, Warszawa 1989
5. Kostrzewa S., Nowak B. Podstawy regeneracji części pojazdów mechanicznych. WKiŁ, Warszawa, 1986

Additional

1. Nosal S., Tribologia. Wprowadzenie do zagadnień tarcia, zużywania i smarowania, Wyd. Politechniki Poznańskiej, Poznań 2012.
2. Klimpel A., Napawanie i natryskiwanie cieplne. Technologie, WNT, Warszawa, 2000
3. Adamiec P., Dziubiński P., Regeneracja i wytwarzanie warstw wierzchnich elementów maszyn transportowych, Wyd. Pol. Śląskiej, Gliwice, 1999

**Breakdown of average student's workload**

	Hours	ECTS
Total workload	90	4,0
Classes requiring direct contact with the teacher	45	2,0
Student's own work (literature studies, preparation for tutorials, preparation for tests) <sup>1</sup>	45	2,0

<sup>1</sup> delete or add other activities as appropriate