COURSE DESCRIPTION CARD - SYLLABUS

Course name
Food supply chains [S2MiBP1-PCh>ŁDŻ]

Course

Field of study
Mechanical and Automotive Engineering

Year/Semester
2/3

Area of study (specialization)
Refrigerated Vehicles

Profile of study
general academic

Level of study
second-cycle

Course offered in
Polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
15

Laboratory classes
0

Other (e.g. online)
0

Tutorials
15

Projects/seminars
0

Number of credit points

3,00

Coordinators

dr inż. Natalia Idaszewska
natalia.idaszewska@put.poznan.pl

Lecturers

Prerequisites

Knowledge: the student has a basic understanding of mathematics and operations research Skills: the student is able to integrate the obtained information, interpret it, draw conclusions, formulate and justify opinions, the ability to perceive, associate and interpret phenomena Social competences: the student is aware of the importance and understands the non-technical (especially economic and social) aspects and effects of activities related to the transport of food and the decisions made within it

Course objective

Preparing students to manage the food supply chain with the use of quantitative tools (methods of optimization and decision support), allowing for rational and effective management of the functioning of enterprises with a fleet of refrigerated vehicles.

Course-related learning outcomes

Knowledge:
1. Has an extended knowledge of physics in the field of contemporary physical problems determining progress in technical sciences: solid state physics, nonlinear optics, nuclear physics and new research methods used in physics.

2. Has a basic knowledge of quality management systems.
3. Knows the main development trends in the field of machine construction.

Skills:
1. Can write user manual and safety manual for designed work machine or vehicle.
2. Can estimate the cost of making a working machine or a vehicle with a high degree of complexity from a selected group of machines.
3. Can develop a technical description, offer and design documentation for a complex machine from a selected group of machines.

Social competences:
1. Is ready to recognize the importance of knowledge in solving cognitive and practical problems and to consult experts in case of difficulties in solving the problem on its own.
2. Is ready to initiate actions for the public interest.
3. Is willing to think and act in an entrepreneurial manner.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:
Lecture: Presence and activity during classes
Classes: Solution and presentation of the results of selected case studies.

Programme content

The concept of the supply chain and supply chain management. Legal regulations for the transportation of perishable goods. Practical cases of food supply chain management. Food supply chain integration. Short food supply chains. Choosing how to deliver food.
Possibilities of improving management processes in the food supply chain.

Course topics

Teaching methods

Lecture: Multimedia presentation
Classes: Solving practical tasks

Bibliography

Basic
1. Madej B., Michniak J., Madej R., Kurcz J.: Przewozy artykułów zywnościowych. Biblioteka Akademii Transportu i Przedsiębiorczości, Warszawa 2014
2. Witkowski J.: Zarządzanie łańcuchem dostaw: koncepcje, procedury, doświadczenia,Polskie Wydawnictwo Ekonomiczne, Warszawa 2003
3. Sikora W. (red.): Badania operacyjne. Polskie Wydawnictwo Ekonomiczne, Warszawa 2008
Additional
1. Łańcuchy dostaw na wybranych rynkach rolnych w Polsce Elżbieta Jadwiga Szymańska, Piotr Bórawski, Ireneusz Żuchowski Wydawnictwo SGGW

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	3,00
Classes requiring direct contact with the teacher	30	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	20	1,00