POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name
Work standardization [N1Log2>NP]

Course

Field of study
Logistics

Year/Semester
2/3

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
part-time

Requirements
compulsory

Number of hours

Lecture
8

Laboratory classes
0

Other (e.g. online)
0

Tutorials
10

Projects/seminars
0

Number of credit points

2,00

Coordinators

dr inż. Agnieszka Grzelczak
agnieszka.grzelczak@put.poznan.pl

Lecturers

Prerequisites

The student starting this course should have basic knowledge of management. He should also have the ability to perceive, associate and interpret phenomena in the field of management basics, as well as in the field of social competences, the ability to work in a group.

Course objective

Presentation of the principles of good work organization at the position level and familiarization with the methods of research and work standardization.

Course-related learning outcomes

Knowledge:
1. Student knows the basic concepts for standardizing work and its detailed issues in connection with production and logistics processes [P6S_WG_05]
2. Student knows the basic issues in the life cycle of socio-technical systems specific to work standardization [P6S_WG_06]
3. Student knows the basic relations between the technical and economic spheres characteristic of the organization of the work position (system) [P6S_WK_01]

4. Student knows the basic phenomena and contemporary trends characteristic of work standardization methods [P6S_WK_05]

Skills:
1. Student is able to use appropriate experimental and measurement techniques to solve a problem, including computer simulation as part of research and work standardization methods [P6S_UW_03]
2. Student is able to design, using appropriate methods and techniques, an object, system and/or production and logistic process that meets the requirements within the scope of work standardization [P6S_UW_07]
3. Student is able to identify and formulate design (engineering) tasks of a practical nature, characteristic of time and work analysis [P6S_UO_01]
4. Student is able to select appropriate tools and methods for solving a problem within the scope of research and work standardization, as well as use them effectively [P6S_UO_02]

Social competences:
1. Student is aware of the importance of knowledge in the area of research on work methods and standardization in solving cognitive and practical problems [P6S_KK_02]
2. Student is aware of cooperation and team work to solve problems within logistics and production management in the context of work and time standards [P6S_KR_02]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: The knowledge acquired during the lectures is verified by the college at the last class and / or through tests (quizzes) at individual classes (via the Moodle platform). Passing threshold: 50% of points.
Tutorials: Skills acquired during tutorials are verified on the basis of two projects: one carried out individually, and the other - in groups of 2 to 3 people. Passing threshold: 50% of points.

Programme content

Labor standards. Standard time. Basic techniques in examining work methods and standardizing.

Course topics

Lecture: Systemic approach to organization. Building effective organization of the company from the workplace level. Workplace as a work system. Work standards, time standards. Basic techniques in examining work methods and standardizing. Methods of determining unit time. Analyzing and setting follow-up time. Analyzing and setting rest times. Methodology of designing and organizing work stations. Increasing the efficiency of the organization. IT support systems for research and work standardization. Contemporary trends in work standardization and shaping of workplaces.
Exercises: Basic techniques in examining work methods and standardizing work. Timing. Method of elementary movements. Snapshot observation. Working day photography.

Teaching methods

Lecture: informative (conventional) lecture - providing information in a structured way, supported by a multimedia presentation, illustrated with examples and tasks, and the case study method - analysis of specific illustrative (illustrative) or problematic (problem identification) cases.
Tutorials: project method - individual and team implementation of a large, multi-stage cognitive or practical task, the effect of which is the creation of a work.
Remote learning methods indicated on the ekursy.put.poznan.pl platform.

Bibliography

Basic:
1. Grzelczak A., Projektowanie procesów pracy, Wydawnictwo Politechniki Poznańskiej, Poznań 2013.
2. Rzeszotarska-Wyrwicka M., Organizowanie systemów pracy. Materiały pomocnicze, Wydawnictwo Politechniki Poznańskiej, Poznań 1998.
3. Strzelecki T.J., Organizacja i normowanie pracy, Wydawnictwo Politechniki Warszawskiej, Warszawa 1992.
4. Grzelczak A., Norma czasu a zarządzanie produkcją w aspekcie pracy wielostanowiskowej [w:] Knosala

R. (red.), Innowacje w zarządzaniu i inżynierii produkcji, t. 1, Oficyna Wydawnicza Polskiego Towarzystwa Zarządzania Produkcją, Opole, 2018, s. 432-440.
5. Grzelczak A., Werner-Lewandowska A., Eliminating Muda (Waste) in Lean Management by Working Time Standardization, Arabian Journal for Science and Engineering, vol. 6, iss. 3, 2016, s. 1000216-1-1000216-11.

Additional:
1. Mikołajczyk Z., Techniki organizatorskie w rozwiązywaniu problemów zarządzania, Wydawnictwo Naukowe PWN, Warszawa 1998.
2. Martyniak Z., Metody organizacji i zarządzania, Wydawnictwo AE, Kraków 1999.
3. Mreła H.,Technika organizowania pracy, Wiedza Powszechna, Warszawa 1975.
4. Baraniak B., Metody badania pracy, Wydawnictwo Akademickie i Profesjonalne, Warszawa 2009.

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	18	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	32	1,00