# POZNARO POZNAR

#### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Process management in logistics [S1Log2>ZPwL]

Course

Field of study Year/Semester

Logistics 3/5

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

first-cycle Polish

Form of study Requirements

full-time elective

**Number of hours** 

Lecture Laboratory classes Other

15 15 0

Tutorials Projects/seminars

15 0

Number of credit points

4,00

Coordinators Lecturers

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# **Prerequisites**

When starting this subject, the student should have basic knowledge of the scope, basics of management, basics of logistics, logistics processes and operational management in logistics and project management. He should also have the ability to obtain information from indicated sources and be ready to cooperate as part of the team.

#### Course objective

Providing students with knowledge of the essence and correctness of the process approach in logistics; understanding and gaining competence in the application of principles and tools of process management in the area of logistics.

## Course-related learning outcomes

#### Knowledge:

- 1. Student knows the basic concepts and detailed issues for the management of processes in logistics and management of props in the supply chain [P6S\_WG\_05]
- 2. Student knows the basic issues of managing processes characteristic for logistics and supply chains [P6S\_WG\_08]

#### Skills:

- 1. Student is able to assess and make a critical economic analysis of the selected problem, falling within the framework of process management in logistics and its specific issues and supply chains [P6S\_UW\_06].
- 2. Student is able to design, using appropriate methods and techniques, an object, system or process that meets the requirements of logistics and its specific issues and supply chain management [P6S\_UW\_07]

#### Social competences:

- 1. Student is aware of the importance of knowledge in the area of process management in logistics and supply chain in solving cognitive and practical problems [P6S\_KK\_02]
- 2. Student is aware of the responsibility for their own work and willingness to submit to the rules of teamwork and responsibility for jointly performed tasks [is aware of the responsibility for their own work and readiness to submit to the rules of teamwork and responsibility for jointly performed tasks] [P7S KR 01]

## 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 exam and / or by tests (quizzes) in individual classes (via the Moodle platform).

Tutorials: Partial evaluations of the progress of the project stages, final evaluation. Passing threshold: 50% of points.

Laboratory classes: Partial assessments of the progress in the implementation of tasks, final assessment. Passing threshold: 50% of points.

# Programme content

Lecture: Functional and process orientation in organization management, process approach in selected management concepts, Reengineering, definition and generic classification of processes, models and standardization of processes, the essence and objectives of process management, methodology of economic process management (security), identification and mapping of processes, design process and implementation of changes, process management, methods and techniques of process improvement and management, implementation of the process approach in logistics, forms of process organization. BPMN notation.

Tutorials: Modern tools and techniques for process modeling, ie VSM, Swimline, SIPOC, IDEF0. Process analysis - defining goals and effects, owners and recipients as well as process analysis criteria. Process mapping in accordance with the given notation.

Laboratory classes: Designing processes and information flow in business processes in the Webcon IT environment.

### Course topics

Lecture: Functional and process orientation in organisational management, process approach in selected management concepts, Reengineering, definition and type classification of processes, models and standardisation of

and standardisation of processes, essence and objectives of process management, methodology of economic process management

(security) process management methodology, process identification and mapping, process design and implementation of change, process management, methods and techniques for process improvement and management,

implementation of the process approach in logistics, forms of process organisation. BPMN notation.

Exercises: Modern process modelling tools and techniques, i.e. VSM, Swimline, SIPOC, IDEF0.

Process analysis - defining objectives and effects, owners and recipients and process analysis criteria. Process mapping according to a given notation.

Laboratory: Process design and information flow in business processes.

# **Teaching methods**

Lecture: information lecture with multimedia presentation, didactic films, talk, business stories, case

#### study.

Tutorials: brainstorming, case study.

Laboratory classes: computer programmed method.

# **Bibliography**

#### Basic:

- 1. Szczepańska K., Bugdol M., Podstawy zarządzania procesami, Difin, Warszawa, 2016.
- 2. Trzcieliński S., Adamczyk M., Pawłowski E., Procesowa orientacja przedsiębiorstwa, Wydawnictwo Politechniki Poznańskiej, Poznań, 2013.
- 3. Pacholski L., Cempel W.A., Pawlewski P., Reengineering: Reformowanie procesów biznesowych i produkcyjnych, Wydawnictwo Politechniki Poznańskiej, Poznań, 2009.
- 4. Harmon P., Business Process Change: A Business Process Management Guide for Managers and Process Professionals, Morgan Kaufmann, 2014.
- 5. Grajewski P., Organizacja procesowa. Projektowanie i konfiguracja, PWE, Warszawa, 2007.
- 6. Jeston J., Business Process Management: Practical Guidelines to Successful Implementations, Taylor & Francis, 2018.
- 7. von Rosing M., von Scheel H., Scheer A.W., The Complete Business Process HandbookBody of Knowledge from Process Modeling to BPM, Volume 1, Morgan Kaufmann, 2014.

#### Additional:

- 1. Maciejczak M., Zarządzanie procesami. Teoria i praktyka. Wydawnictwo PJWSTK, Warszawa, 2012.
- 2. Golińska-Dawson P., Kosacka M., Werner-Lewandowska K., Gdzie i jak usprawnić procesy? Identyfikacja potencjałów optymalizacyjnych przez analizę marnotrawstw (muda) w perspektywie zrównoważonego wykorzystania zasobów, Logistyka, nr 2, 2015, s. 167-178.
- 3. Kosacka M., Werner-Lewandowska K., Koncepcja zastosowania VSM jako narzędzia doskonalącego proces demontażu samochodów wycofanych z eksploatacji, Logistyka, nr 6, 2014, s. 12199-12206.
- 4. Cabanillas C., Di Ciccio C., Mendling J., Baumgrass A., Predictive Task Monitoring for Business Processes. Proceedings of the International Conference on Business Process Management (BPM). Lecture Notes in Computer Science, Vol. 8659, 2014, s. 424-432.
- 5. Van Der Aalst W. M., La Rosa M., Santoro F. M., Business process management, Business & Information Systems Engineering, nr 58.1, 2016, s. 1-6.
- 6. Hammer M., What is business process management? In Handbook on business process management, Springer, Berlin, Heidelberg, 2015, s. 3-16.
- 7. Viriyasitavat W., Da Xu L., Bi Z., Sapsomboon A., Blockchain-based business process management (BPM) framework for service composition in Industry 4.0, Journal of Intelligent Manufacturing, 31(7), 2020, s. 1737-1748.

# Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
Classes requiring direct contact with the teacher	47	2,00
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)	53	2,00