



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Reengineering in logistics

### Course

Field of study

Logistics

Area of study (specialization)

Level of study

First-cycle studies

Form of study

part-time

Year/Semester

3/5

Profile of study

general academic

Course offered in

Polish

Requirements

elective

### Number of hours

Lecture

10

Laboratory classes

8

Other (e.g. online)

Tutorials

10

Projects/seminars

### Number of credit points

4

### Lecturers

Responsible for the course/lecturer:

Ph.D., Eng. Karolina Werner-Lewandowska

Responsible for the course/lecturer:

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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 of reengineering and the correctness of the process approach in logistics; understanding and gaining competence in the application of the principles and tools of reengineering and process management in the area of logistics.

### Course-related learning outcomes

Knowledge



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

#### Skills

1. Student is able to assess and make a critical economic analysis of the selected problem, which is part of the reengineering 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 reengineering 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: Reengineering, reforming business and production processes in an enterprise, process approach in selected management concepts, definition and generic classification of processes, models and standardization of processes, the essence and objectives of process management, methodology of business process management (security), identification and mapping of processes, process design 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.

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

#### Additional

1. Zaini Z., Saad A., Business process reengineering as the current best methodology for improving the business process, Journal of ICT in Education, 6, 2019, s. 66-85.
2. 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.
3. Hammer M., What is business process management? In Handbook on business process management, Springer, Berlin, Heidelberg, 2015, s. 3-16.



4. 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.
5. Maciejczak M., Zarządzanie procesami. Teoria i praktyka. Wydawnictwo PJWSTK, Warszawa, 2012.
6. 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.
7. Kosacka M., Werner-Lewandowska K., Koncepcja zastosowania VSM jako narzędzia doskonalącego proces demontażu samochodów wycofanych z eksploatacji, *Logistyka*, nr 6, 2014, s. 12199-12206.

#### Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,0
Classes requiring direct contact with the teacher	30	1,5
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	70	2,5

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