



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Activity Based Costing in Logistics

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### Course

Field of study

Logistics

Area of study (specialization)

Logistics Systems

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

1/2

Profile of study

general academic

Course offered in

english

Requirements

compulsory

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### Number of hours

Lecture

15

Laboratory classes

Tutorials

15

Projects/seminars

15

Other (e.g. online)

### Number of credit points

4

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### Lecturers

Responsible for the course/lecturer:

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Wydział Inżynierii Zarządzania

ul. Jacka Rychlewskiego 2

60-965 Poznań

Responsible for the course/lecturer:

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### Prerequisites

Knowledge of logistics processes and their course. The ability to use quantitative methods to



characterize logistics processes and make decisions in the field of logistics. Knowledge of economic dependencies in logistics.

### Course objective

Providing students with knowledge in determining logistics costs using the Activity Costing methodology. Developing skills in building cost models for logistics processes and making decisions in the field of logistics based on settlement results.

### Course-related learning outcomes

#### Knowledge

1. Student knows the dependencies governing costs and their relationship with logistics [P7S\_WG\_01]
2. Student knows the conditions of logistics processes implemented in the enterprise and within the supply chain [P7S\_WG\_05]
3. Student knows the detailed methods, tools and techniques specific to cost accounting [P7S\_WK\_01]
4. Student knows the best practices in logistics and minimizing the costs of logistics processes [P7S\_WK\_04]

#### Skills

1. Student is able to search based on the literature on the subject and other sources and in an orderly manner present information on the cost accounting of activities in enterprise logistics and supply chains [P7S\_UW\_01]
2. Student is able to make a critical analysis in terms of cost of technical solutions used in the analyzed logistics system (in particular in relation to devices, facilities and processes) [P7S\_UW\_04]
3. Student is able to design a cost model for a selected logistics process using properly selected means [P7S\_UK\_01]
4. Student is able to prepare in Polish and English at B2 level of the European Language Training Description System a well documented development of problems in the field of Cost Accounting in Logistics [P7S\_UK\_02]
5. Student is able to identify changes in requirements, standards, regulations, technical progress and the reality of the labor market affecting the costs of logistics and understanding and the need to update knowledge [P7S\_UU\_01]

#### Social competences

1. Student correctly identifies and resolves dilemmas related to the profession of logistics manager, observing the principles of professional ethics and respecting the diversity of views and cultures [P7S\_KK\_02]
2. Student is able to plan and manage creative business ventures using cost analysis [P7S\_KO\_01].



### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Knowledge acquired as part of the lecture is verified by the final test carried out during the last lecture. The test consists of 15 test questions (including open and closed, single and multiple choice). Passing threshold: 50% of points.

Skills acquired as part of the classes are verified on the basis of the tasks solved in class. Students solve tasks in groups of 2-3 people. Task scores vary depending on the level of difficulty. Passing threshold: 50% of points.

### Programme content

Lecture:

1. Logistic costs - the essence
2. Activity costing - the origin and essence of the methodology
3. Activity costing for logistics processes - examples, benefits, problems
4. Resource costs and unused resource costs
5. Customer service costs
6. Activity-based costing
7. Implementation of the ABC in enterprises

exercises:

1. Basic elements in the ABC cost model - resource cost drivers, activity cost drivers
2. Comparison of cost settlement using the traditional method and the activity costing method
3. Identification of distribution network customer service costs
4. Identification of unused resource costs in order processing processes
5. Time-based activity costing - picking problem

### Teaching methods

Lecture: multimedia presentation

Exercises: a multimedia presentation illustrated with examples given on a blackboard and performing tasks given by the teacher - practical exercises.

### Bibliography



Basic

1. Rachunek Kosztów Działań w Logistyce, A.Stachowiak, Wydawnctwo Politechniki Poznńskie, Poznań, 2011
2. Projektowanie rachunku kosztów działań, R. Piechota, Difin, 2005

Additional

1. Rachunek kosztów i rachunkowość zarządcza, red. I. Sobańska, C.H. Beck, Warszawa 2006
2. Zarządzanie kosztami i efektywnością, R.S. Kaplan, R. Cooper, Dom wydawniczy ABC, Kraków 2000

**Breakdown of average student's workload**

	Hours	ECTS
Total workload	100	4,0
Classes requiring direct contact with the teacher	45	2,0
Student's own work (literature studies, preparation for tutorials, preparation for tests, project preparation and presentation) <sup>1</sup>	55	2,0

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