

### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

**Activity Based Costing in Logistics** 

Course

Field of study Year/Semester

Logistics 1/2

Area of study (specialization) Profile of study

Supply Chain Logistics general academic
Level of study Course offered in

Second-cycle studies Polish

Form of study Requirements full-time compulsory

**Number of hours** 

Lecture Laboratory classes Other (e.g. online)

15

Tutorials Projects/seminars

15 15

**Number of credit points** 

4

#### Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

Ph.D., D.Sc., Eng. Agnieszka Stachowiak,

**University Professor** 

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## **Prerequisites**

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



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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].



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## 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.

Project: The skills acquired during the project classes are verified during consultations on individual stages of the project task (20% of the final grade) and on the basis of the provided project documentation prepared in accordance with the guidelines provided by the teacher (50% of the final grade) and the presentation and defense of the project (30% of the final grade). Passing threshold: 50% of points.

### **Programme content**

#### Lecture:

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

#### exercises:

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

# Project:

Development of a cost model for a selected logistics process and its implementation into a spreadsheet.

#### **Teaching methods**

Lecture: informative lecture and chat on solutions presented

Exercises: case studies

Project: project method, project task carried out in groups of 3-4 people in accordance with the guidelines presented during the classes

# **Bibliography**



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### 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                         | 50    | 2,0  |
| Student's own work (literature studies, preparation for tutorials,        | 50    | 2,0  |
| preparation for tests, project preparation and presentation) <sup>1</sup> |       |      |

4

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