



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Activity Based Costing in Logistics

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

Number of hours

Lecture

15

Laboratory classes

Tutorials

15

Projects/seminars

15

Other (e.g. online)

Number of credit points

4

Lecturers

Responsible for the course/lecturer:

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

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.

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



Basic

Cost & Effect: Using Integrated Cost Systems to Drive Profitability and Performance, Robert S. Kaplan, Robin Cooper, Harvard Business Press, 1998

Harvard Business Press, 1998 Time-Driven Activity-Based Costing: A Simpler and More Powerful Path to Higher Profits Robert S. Kaplan, Steven R. Anderson, Harvard Business Review Press; , 2007

A case study on influence of T - D ABC on realization of Lean Management strategy / Irena Pawłyszyn (WIZ), Izabela Kudelska (WIZ), Agnieszka Stachowiak (WIZ) // Logistics and Transport - 2013, vol. 17, no. 1, s. 41-52

Additional

Activity-Based Cost Management: An Executive's Guide, Gary Cokins, Wiley 2001

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) ¹	55	2,0

¹ delete or add other activities as appropriate