

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

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

COURSE DESCRIPTION CARD - SYLLABUS

Course name

City Logistics

Course

Field of study Year/Semester

Logistics 1/1

Area of study (specialization)

Profile of study

Level of study general academic

Course offered in

Second-cycle studies english

Form of study Requirements

full-time elective

Number of hours

Lecture Laboratory classes Other (e.g. online)

15

Tutorials Projects/seminars

30

Number of credit points

5

Lecturers

Responsible for the course/lecturer: Responsible for the course/lecturer:

Agnieszka Stachowiak

e-mail: agnieszka.stachowiak@put.poznan.pl

Wydział Inżynierii Zarządzania

ul. Jacka Rychlewskiego 2

60-965 Poznań

Prerequisites



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Knowledge of logistics processes and their course. Knowledge about the impact of economic processes on the environment and society.

Course objective

Providing students with knowledge of urban logistics and best practices in the field of urban logistics. Equipping students with skills in modeling logistics systems taking into account the city limits. Equipping students with skills in improving logistics systems operating in the city.

Course-related learning outcomes

Knowledge

- 1. Student knows the relationships between elements of the city system and their relationship with logistics [P7S WG 01]
- 2. Student knows issues in the field of production engineering and their relationship with logistics processes implemented in the city system [P7S_WG_02]
- 3. Student knows the issues of process mapping, process orientation in urban logistics and simulation of logistics processes implemented in the city and for the needs of the city [P7S WG 03]
- 4. Student knows the extended interpretations of transport, storage and material flow processes in the context of city logistics [P7S_WG_05]
- 5. Student knows the detailed methods, tools and techniques characteristic of urban logistics [P7S_WK_01]

Skills

- 1.Student is able to gather based on the literature and other sources (in Polish and English) and provide information on urban logistics issues in an orderly manner [P7S_UW_01]
- 2. Student is able to communicate using properly selected means in the field of urban logistics with stakeholders involved in its processes [P7S_UW_02]
- 3.Student is able to make a critical analysis of technical solutions used in the city logistics system (in particular in relation to devices, facilities and processes) [P7S_UW_04]
- 4. Student is able to assess the usefulness and possibility of using new achievements (techniques and technologies) in the field of urban logistics [P7S_UW_06]
- 5. Student is able to design, using properly selected means, the urban logistics subsystem or a solution to improve the implementation of urban logistics processes [P7S_UK_01]
- 6. Student is able to formulate and solve problem tasks in the field of urban logistics through interdisciplinary integration of knowledge from the fields and disciplines used to design logistics systems [P7S_UO_01]



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7. Student is able to identify changes in requirements, standards, regulations, technical progress and reality of the labor market in the field of urban logistics, and on their basis to determine the need to supplement own knowledge and other [P7S_UU_01]

Social competences

- 1. Student recognizes the cause-and-effect relationships in achieving the objectives and grades the significance of alternative or competitive tasks, taking into account the requirements and constraints of individual stakeholders [P7S_KK_01]
- 2. Student is aware of the responsibility for own work and readiness to comply with the rules of teamwork and taking responsibility for jointly implemented tasks and projects [P7S KR 01]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Knowledge obtained during lectures is verified by a colloquium conducted in the last class. The colloquium includes 5 open questions, evenly scored. The paasing theshold is 50% of points.

Skills obtained during project classes are verified during consultations regarding subsequent stages of the project (20% of the grade) and on the basis of the delivered project documentation prepared in accordance with the guidelines (50% of the grade) as well as the presentation and defense of the project (30% of the grade). The passing the shold is 50% of points.

Programme content

Lecture:

- 1. City definition, city characteristics, types of cities
- 2. Urban logistics definition
- 3. The flow of goods / materials in the city
- 4. The flow of people in the city
- 5. Waste flow in the city
- 6. Strategies for sustainable urban development
- 7. Modern technologies in urban logistics

Project:

Development of a solution for a selected problem in the field of urban logistics.

Teaching methods

Lecture: multimedia presentation



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Project: project method, project tasks implemented in groups of 3-4 people in accordance with the guidelines presented during the classes

Bibliography

Basic

City Logistics 1: New Opportunities and Challenges, Eiichi Taniguchi, Russell G. Thompson, Wiley 2018

City Logistics 2: Modeling and Planning Initiatives, Eiichi Taniguchi, Russell G. Thompson, Wiley 2018

Additional

Urban Logistics, Michael Browne, Sönke Behrends, José Holguin-Veras, Genevieve Giuliano, Johan Woxenius Kogan Page, 2018

Breakdown of average student's workload

| | Hours | ECTS |
|---|-------|------|
| Total workload | 125 | 5,0 |
| Classes requiring direct contact with the teacher | 45 | 2,0 |
| Student's own work (literature studies, preparation for project, | 80 | 3,0 |
| preparation for tests, project preparation and presentation) ¹ | | |

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¹ delete or add other activities as appropriate