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Assessment methods of study outcomes

Preparation of two projects related to urban logistics:

1. Analysis of CO2 emissions related to students' access to the university

2. A project utilizing GIS systems (choose from, e.g. analysis of the service area of selected logistic facilities)

Course description

1. Geographic Information Systems in urban transport and logistics: definitions, applications

2. Urban logistics: basic definitions (urban transport and logistics, physical internet), delivering methods, typical problems of urban logistics, tools of impact on urban logistics owned by municipal administration

3. Cargo transport in the city - "last mile" logistics: definitions, CEP sector, e-commerce, and delivery in cities

4. Non-motorized transport: basic characteristics, impact of non-motorized transport in relation to other modes of transport, non-motorized transport infrastructure, non-motorized travel planning, pedestrian traffic and people with disabilities, e-bikes and e-scooters

5. Transport and logistics projects appraisal: definitions, stakeholders, impacts and fairness of their distribution, risk in transport projects

Basic bibliography:

1. Szczepanek R., Zmuda-Trzebiatowski P.: Systemy Informacji Geograficznej z QGIS

Additional bibliography:

1. Kauf S., Tłuczak A.: Logistyka miasta i regionu. Difin, Warszawa 2014

- 2. Kiba-Janiak M., Witkowski J. (red.): Modelowanie logistyki miejskiej. PWE, Warszawa 2014
- 3. Szołtysek J.: Podstawy logistyki miejskiej. wyd. AE Katowice, Katowice 2009

4. Szołtysek J.: Logistyka miasta. Wyd. PWE, Warszawa 2016

5. Szymczak M.: Logistyka miejska. wyd. AE Poznań, Poznań 2008

6. Zmuda-Trzebiatowski P.: Partycypacyjna ocena miejskich projektów transportowych. Wyd. PP, Poznań 2016

Result of average student's workload

Activity	Time (working hours)				
1. Participation in classes (according to plan)	18				
2. Preparation for exam	21				
3. Preparation for classes	21				
Student's workload					
Source of workload	hours	ECTS			
Total workload	60	2			
Contact hours	18	1			
Practical activities	45	1			