University of Gdańsk

Subject card

Subject name and code	Sustainable Urban Mobility Planning, PG_00153821		
Field of study	Logistics and Mobility		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2025/2026
Education level	Master's studies	Subject group	Obligatory subject group in the field of study
Mode of study	full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	English
Semester of study	3	ECTS credits	1.0
Learning profile	academic	Assessment form	credit
Conducting unit	Department of Transport Market -> Faculty of Economics -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Marcin Wołek	
	Teachers	dr hab. Marcin Wołek	

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	15.0	0.0	0.0	0.0	15

E-learning hours included: 0.0

Additional information:
A study visit in the public transport operator.

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	15	0.0	0.0	15

Subject objectives

To introduce the student to the concept of sustainable urban mobility.

To indicate relations between spatial planning and urban transport.

To present the process of planning sustainable urban mobility and selected analytical methods.

To introduce the student to the method of monitoring urban mobility plan.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[LMMU2_U08] can independently analyse logistics and mobility processes and systems, and can perform a theoretically deepened assessment of such processes and systems, using appropriately selected research method	The student can assess the completeness of the monitoring process of sustainable mobility planning using properly selected indicators covering the most critical planning areas.	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report
	[LMMU2_K04] is ready to think and act in an entrepreneurial manner; adapts to new situations and conditions; undertakes challenges of creative thinking; acquires resilience to failures; can assess risks and threats and find ways of counteracting their effects	The student can analyze various options related to urban mobility planning, using, among other things, scenario methods and selected monitoring indicators.	[SK1] oral statement/conversation/ discussion [SK2] presentation/project/paper/ report
	[LMMU2_W07] has an in-depth knowledge of economic and financial principles governing the functioning and management of economic entities and organisations, which require logistics support or provide logistics services, as well as of systems of legal, organisational, professional, moral and ethical norms and rules organising public structures and institutions, both in the national and international spheres	The student can make a preliminary assessment of the use of various solutions in the field of sustainable mobility based on economic instruments (including cost-benefit analysis and elements of Life Cycle Cost analysis).	[SW1] oral statement/ conversation/discussion [SW2] presentation/project/paper/ report
	[LMMU2_K03] inspires and organises preparation of projects in the field of logistics and mobility, following the idea of sustainable development, reconciling legal, economic, ecological, political and social requirements	The student can evaluate strategic documents relating to planning sustainable mobility about the idea of sustainable development	[SK1] oral statement/conversation/ discussion [SK2] presentation/project/paper/ report
	[LMMU2_U06] can practically apply various forms and range of acquired knowledge in logistics and mobility, supplementing it with an independent critical analysis of its efficiency and usefulness	The student can critically analyze case studies and perform comparative analyses using properly selected indicators.	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU5] implementation of a problem task
	[LMMU2_W03] has an in-depth knowledge of relations between economic entities and organisations functioning in the national, international and intercultural spheres; understands importance logistics and mobility for their operation	The student can identify the most critical stakeholder groups necessary for planning sustainable mobility and know their scope of competencies.	[SW1] oral statement/ conversation/discussion [SW2] presentation/project/paper/ report

Subject contents	1.Land use planning: a prerequisite for sustainable urban mobility planning 1.1.Climate change - a need for more resilient urban systems 1.2.Relations between land use and mobility: Avoid-Shift-Improve 1.3.Sustainable land use planning 2.What is Sustainable Urban Mobility Planning 2.1.From transport planning to sustainable mobility planning 2.2.The EU regulatory framework 2.3.Sustainable Urban Mobility Plans (SUMP) as a local policy tool 3.The process of the sustainable urban mobility planning 3.1.Stakeholder identification and diagnosis 3.2.Developing scenarios 3.3.Vision, goals, action plan and monitoring 4.Public transport - a backbone of sustainable urban mobility 4.1.Public transport and urban development 4.2.Means of public transport and their features 4.3.New trends in public transport development 5.Cycling 5.1.The nature of cycling 5.2.Infrastructure 5.3.Non-infrastructure measures supporting cycling 6.Walking 6.1.The nature of walking 6.2.Walking and the built environment 6.3.Methods of measuring walking 7.Car in the city

	7.1.Consequences of motorization growth 7.2.Optimisation of traffic 7.3.Reducing the environmental impact of car 8.Urban logistics and freight 8.1.What is urban logistics 8.2.New solutions and trends in urban logistics 8.3.Freight and the city: the case of harbour cities
Prerequisites and co-requisites	General knowledge of economics. Basic analytical competencies

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
project	60.0%	100.0%

Recommended reading

Basic literature	1. Guidelines for developing and implementing a Sustainable Urban Mobility Plan (2nd edition), available online: https://www.eltis.org/sites/default/files/sump_guidelines_2019_interactive_document_1.pdf 2. Jan Gehl: Cities for People. Island Press, 2010 3. M. Wolek et al.: Ensuring sustainable development of urban public transport: a case study of the trolleybus system in Gdynia and Sopot (Poland). "Journal of Cleaner Production" 2021 vol. 279 3. Selected articles from journals, including "PLOS One", "Transportation Research", "Journal of Cleaner Production", "Sustainability", "Energies".
Supplementary literature	1. Planning and Design for Sustainable Urban Mobility: Global Report on Human Settlements 2013. Available online: https://unhabitat.org/sites/default/files/download-manager-files/Planning%20and%20Design%20for%20Sustainable%20Urban%20Mobi 2. M. Wołek, A. Jagiełło, M. Wolanski: Multi-criteria analysis in the decision-making process on the electrification of public transport in cities in Poland: a case studyanalysis. "Energies" 2021 vol. 14 nr 19
eResources addresses	

Example issues/ example questions/ tasks being completed	Assessment of the selected sustainable urban mobility plan. Evaluation of the pedestrian mobility monitoring system. Assessment of the city's development strategy from the point of view of sustainable mobility.
Work placement	Not applicable

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