

Subject card

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|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|----------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------|-----|
| Subject name and code | Sustainable Urban Mobility Planning, PG_00200449 | | | | | | |
| Field of study | Logistics and Mobility | | | | | | |
| Date of commencement of studies | October 2026 | Academic year of realisation of subject | | | 2027/2028 | | |
| Education level | Master's studies | Subject group | | | Obligatory subject group in the field of study Subject group related to scientific research 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 | | | 3.0 | | |
| Learning profile | academic | Assessment form | | | exam | | |
| Conducting unit | Department of Transport Market -> Faculty of Economics -> Rector | | | | | | |
| Name and surname of lecturer (lecturers) | Subject supervisor | | dr hab. Marcin Wołek | | | | |
| | Teachers | | | | | | |
| Lesson types | Lesson type | Lecture | Tutorial | Laboratory | Project | Seminar | SUM |
| | Number of study hours | 15.0 | 15.0 | 0.0 | 30.0 | 0.0 | 60 |
| | E-learning hours included: 0.0 | | | | | | |
| 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 | 60 | | 0.0 | | 15.0 | 75 |
| Subject objectives | <p>To introduce the student to the concept of sustainable urban mobility.</p> <p>To indicate relations between spatial planning and urban transport.</p> <p>To present the process of planning sustainable urban mobility and selected analytical methods.</p> <p>To introduce the student to the method of monitoring urban mobility plan.</p> | | | | | | |

| Learning outcomes | Course outcome | Subject outcome | Method of verification |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| | [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 assess the most important elements of the sustainable mobility planning process. | [SU1] oral statement/conversation/discussion [SU4] test/exam - oral or written |
| | [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 individual elements included in planning sustainable mobility. | [SU1] oral statement/conversation/discussion [SU4] test/exam - oral or written |
| | [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 | Using economic instruments, the student can critically analyze strategic documents referring to sustainable mobility. | [SK1] oral statement/conversation/discussion [SK4] test/exam - oral or written |
| | [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 prepare a project based on economic theories relating to sustainable development. | [SK1] oral statement/conversation/discussion [SK4] test/exam - oral or written |
| | [LMMU2_W03] has a 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 important connections and stakeholders for sustainable mobility planning. | [SW4] test/exam - oral or written [SW1] oral statement/conversation/discussion |
| | [LMMU2_W07] has a 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 use interdisciplinary knowledge to interpret complex social, economic, and spatial phenomena that are analyzed in the process of planning sustainable mobility. | [SW4] test/exam - oral or written [SW1] oral statement/conversation/discussion |

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 development5.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

| | <p>7.2.Optimisation of traffic</p> <p>7.3.Reducing the environmental impact of car</p> <p>8.Urban logistics and freight</p> <p>8.1.What is urban logistics</p> <p>8.2.New solutions and trends in urban logistics</p> <p>8.3.Freight and the city: the case of harbour cities</p> <p>During the consultation, individual questions from students will be discussed, doubts will be clarified, and additional explanations regarding the content of the subject will be provided.</p> | | | | | | | | |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------|-------------------|-------------------------------|------|-------|--------|
| Prerequisites and co-requisites | Macroeconomics, Market Research and Analysis for Logistics and Mobility | | | | | | | | |
| Assessment methods and criteria | <table border="1"> <thead> <tr> <th data-bbox="453 736 796 768">Subject passing criteria</th> <th data-bbox="799 736 1142 768">Passing threshold</th> <th data-bbox="1145 736 1490 768">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="453 772 796 801">exam</td> <td data-bbox="799 772 1142 801">51.0%</td> <td data-bbox="1145 772 1490 801">100.0%</td> </tr> </tbody> </table> | | | Subject passing criteria | Passing threshold | Percentage of the final grade | exam | 51.0% | 100.0% |
| Subject passing criteria | Passing threshold | Percentage of the final grade | | | | | | | |
| exam | 51.0% | 100.0% | | | | | | | |
| Recommended reading | Basic literature | <p>1. Guidelines for developing and implementing a Sustainable Urban Mobility Plan (2nd edition), available</p> <p>online: https://www.eltis.org/sites/default/files/sump_guidelines_2019_interactive_document_1.pdf</p> <p>2. Jan Gehl: Cities for People. Island Press, 2010</p> <p>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</p> <p>3. Selected articles from journals, including "PLOS One", "Transportation Research", "Journal of Cleaner Production", "Sustainability", "Energies".</p> | | | | | | | |
| | Supplementary literature | <p>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%20Mobility.pdf</p> <p>2. M. Wolek, A. Jagiełło, M. Wolanski: Multi-criteria analysis in the decision-making process on the electrification of public transport in cities in Poland: a case study analysis. "Energies" 2021 vol. 14 nr 19</p> <p>3. R. Papa et. al.: Smart Planning: Sustainability and Mobility in the Age of Change. 2018 Cham: Springer International Publishing</p> | | | | | | | |

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| | eResources addresses | |
| Example issues/ example questions/ tasks being completed | analysing sustainable urban mobility planning process analysing the completeness of the sustainable urban mobility monitoring the basic elements of the stakeholder's analysis process | |
| Work placement | Not applicable | |

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