

## Subject card

|                                             |                                                                            |                                                          |                                         |                                     |                                                                          |            |     |
|---------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------|-----------------------------------------|-------------------------------------|--------------------------------------------------------------------------|------------|-----|
| Subject name and code                       | Sustainable Urban Transport and Mobility , PG_00178096                     |                                                          |                                         |                                     |                                                                          |            |     |
| Field of study                              | Economics, International Economic Relations                                |                                                          |                                         |                                     |                                                                          |            |     |
| 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<br>Optional subject group |            |     |
| 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                            |                                     | 5.0                                                                      |            |     |
| Learning profile                            | academic                                                                   |                                                          | Assessment form                         |                                     | credit                                                                   |            |     |
| Conducting unit                             |                                                                            |                                                          |                                         |                                     |                                                                          |            |     |
| Name and surname of lecturer (lecturers)    | Subject supervisor                                                         |                                                          | dr Aleksander Jagiello                  |                                     |                                                                          |            |     |
|                                             | Teachers                                                                   |                                                          | dr Aleksander Jagiello                  |                                     |                                                                          |            |     |
| Lesson types                                | Lesson type                                                                | Lecture                                                  | Tutorial                                | Laboratory                          | Project                                                                  | Seminar    | SUM |
|                                             | Number of study hours                                                      | 30.0                                                     | 0.0                                     | 0.0                                 | 0.0                                                                      | 0.0        | 30  |
|                                             | 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                                                      | 30                                                       |                                         | 0.0                                 |                                                                          | 0.0        | 30  |
| Subject objectives                          | To provide specific knowledge on sustainable urban transport and mobility. |                                                          |                                         |                                     |                                                                          |            |     |

| Learning outcomes | Course outcome                                                                                                                                                                                                                                              | Subject outcome                                                                                                                                                                                                                                                                                                                      | Method of verification                                                                          |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|                   | [MSGMU2_W01] has an in-depth and structured knowledge of economic sciences, in particular economics, its place in the system of sciences, its relations with other sciences and fields of knowledge                                                         | The student has in-depth and systematic knowledge in the field of economic sciences, in particular transport economics, its place within the system of sciences, and its relations with other sciences and fields of knowledge.                                                                                                      | [SW1] oral statement/<br>conversation/discussion<br>[SW2] presentation/project/paper/<br>report |
|                   | [MSGMU2_U01] can creatively interpret and explain complex and atypical economic phenomena and the relations occurring between them, using the acquired knowledge in economics, finance and international economic relations                                 | The student is able to creatively interpret and explain complex and atypical economic phenomena and the relationships between them, using the acquired knowledge in economics, finance, international economic relations, and transport economics.                                                                                   | [SU1] oral statement/conversation/<br>discussion<br>[SU2] presentation/project/paper/<br>report |
|                   | [EKONMU2_K01] recognises the importance of knowledge in the field of economics in the process of identifying and solving economic problems and of consulting experts when having difficulties in solving them independently                                 | The student acknowledges the importance of knowledge in the field of economics in the process of identifying and solving economic problems in the area of mobility, and seeks expert opinions when facing difficulties in solving them independently.                                                                                | [SK1] oral statement/conversation/<br>discussion<br>[SK2] presentation/project/paper/<br>report |
|                   | [EKONMU2_W01] has an in-depth knowledge of the nature of social sciences and their place in the system of sciences; understands the differences between contemporary trends in economic thought; knows the claims of contemporary economic theories         | The student has in-depth knowledge of the nature of social sciences and their place within the system of sciences; he/she understands the differences between contemporary schools of economic thought, is familiar with the propositions of modern economic theories, and has knowledge of the fundamentals of transport economics. | [SW1] oral statement/<br>conversation/discussion<br>[SW2] presentation/project/paper/<br>report |
|                   | [MSGMU2_K01] is ready to recognise the importance of knowledge of economics in the process of identifying and solving problems in the area of international economic relations and to consult experts in case of difficulties in solving them independently | The student is ready to acknowledge the importance of knowledge in the field of transport economics in the process of identifying and solving problems in the area of international economic relations, as well as to seek expert opinions when facing difficulties in solving them independently.                                   | [SK1] oral statement/conversation/<br>discussion<br>[SK2] presentation/project/paper/<br>report |
|                   | [EKONMU2_U01] can creatively interpret and explain economic and social phenomena and relations between them, using acquired knowledge of economics, finance and management sciences                                                                         | The student is able to creatively interpret and explain economic and social phenomena and the relationships between them, using the acquired knowledge in economics, finance, management sciences, and transport economics.                                                                                                          | [SU1] oral statement/conversation/<br>discussion<br>[SU2] presentation/project/paper/<br>report |

|                  |                                                                                                             |
|------------------|-------------------------------------------------------------------------------------------------------------|
| Subject contents | 1.The city as an area of sustainable transport and mobility                                                 |
|                  | 1.1. Urbanisation: global and local context                                                                 |
|                  | 1.2. Spatial accessibility                                                                                  |
|                  | 1.3. Transport and smart city concept                                                                       |
|                  | 2.Urban transport market: supply                                                                            |
|                  | 2.1.Market organisation and structure                                                                       |
|                  | 2.2. Stakeholders on urban transport market                                                                 |
|                  | 2.3. Supply of urban transport services                                                                     |
|                  | 3.Urban electromobility                                                                                     |
|                  | 3.1.The concept of electromobility                                                                          |
|                  | 3.2.New trends in electromobility in cities                                                                 |
|                  | 3.3.Electromobility: case studies                                                                           |
|                  | 4.Case study on electromobility: a study visit in the trolleybus operator (PKT Gdynia sp. z o.o.) in Gdynia |
|                  | 5.Urban transport market: demand                                                                            |
|                  | 5.1.The nature of demand in transport                                                                       |
|                  | 5.2.Consumer behavior on urban transport market                                                             |
|                  | 5.3.Segmentation of the passenger urban transport market                                                    |
|                  | 6. Marketing research on urban transport market                                                             |
|                  | 6.1. The proces of marketing research                                                                       |
|                  | 6.2. Main challenges for the research on urban transport market                                             |
|                  | 6.3. Selected case studies                                                                                  |
|                  | 7.Case study on marketing research: a study visit in ZKM Gdynia (a Public Transport Authority for Gdynia)   |
|                  | 8. Costs and pricing on urban transport market                                                              |
|                  | 8.1. Costs: a perspective of public transport operator                                                      |
|                  | 8.2. External costs in public transport                                                                     |

|                                                                |                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                               |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
|                                                                | <p>8.3. Pricing of urban transport services</p> <p>9. Urban transport and mobility policy</p> <p>9.1. Factors determining transport policy</p> <p>9.2. Sustainable Urban Mobility Plans (SUMP) as a local policy tool</p> <p>9.3. Selected case studies</p> <p>10. Presentations of selected case studies prepared by students</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                               |
| Prerequisites and co-requisites                                | Knowledge of basic economics issues and basics of transport economics.                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                               |
| Assessment methods and criteria                                | Subject passing criteria                                                                                                                                                                                                                                                                                                           | Passing threshold                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Percentage of the final grade |
|                                                                | group presentation                                                                                                                                                                                                                                                                                                                 | 51.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 50.0%                         |
|                                                                | classroom activities                                                                                                                                                                                                                                                                                                               | 51.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 50.0%                         |
| Recommended reading                                            | Basic literature                                                                                                                                                                                                                                                                                                                   | <p>1. SUMP for Cities Sustainable Development. Editors: M. Burinskiene, R. Uspalyte-Vitkuniene. MDPI, Basel 2021. Link to download: <a href="https://www.mdpi.com/books/pdfdownload/book/3574">https://www.mdpi.com/books/pdfdownload/book/3574</a></p> <p>2. S. Schonfelder, K.W. Axhausen, Urban Rhythms and Travel Behaviour, Routledge, London New York 2010.</p> <p>3. A. Jagielło, Economic Efficiency of Sustainable Public Transport: A Literature Review on Electric and Diesel Buses, Energies, 2025</p> <p>4. M. Wolek et al.: Integration of a multilevel transport system model into sustainable urban mobility planning "Sustainability" 2018</p> |                               |
|                                                                | Supplementary literature                                                                                                                                                                                                                                                                                                           | <p>1. J. Shaw, et al. Towards Transport Net Zero (Transport and Sustainability Book 20), Emerald Publishing Limited 2025.</p> <p>2. by L. Hansson, C. Hedegaard Sørensen, T. Rye, Public Participation in Transport in Times of Change (Transport and Sustainability Book 18), Emerald Publishing Limited 2023.</p>                                                                                                                                                                                                                                                                                                                                             |                               |
|                                                                | eResources addresses                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                               |
| Example issues/<br>example questions/<br>tasks being completed | Evaluation of SUMPs in terms of their objectives, actions, and the monitoring and evaluation systems applied.                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                               |
| Work placement                                                 | Not applicable                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                               |

Document generated electronically. Does not require a seal or signature.