

STUDY GUIDE

SUSTAINABLE MOBILITY

Organised by

Poznan University of Technology



1. IDENTIFYING DATA.

· Course Name.	<i>Sustainable mobility</i>
· Coordinating University.	<i>Poznan University of Technology</i>
· Partner Universities Involved.	-
· Course Field(s).	<i>Transport</i>
· Related Study Programme.	<i>IT for Smart & Sustainable Mobility</i>
· ISCED Code.	<i>1041 Transport services</i>
· SDG.	<i>Sustainable cities and communities</i>
· Study Level.	<i>Master (M)</i>

· Number of ECTS credits allocated.	4
· Mode of Delivery.	<i>Online live</i>
· Language of Instruction.	<i>English</i>
· Course Dates.	<i>From Sep 27, 2024 to 29 Nov, 2024 27/09, 4/10, 11/10, 18/10, 25/10, 8/11, 15/11, 22/11, 29/11</i>
· Schedule of the course.	<i>The precise schedule of the lectures is to be confirmed. Students enrolled into this course will receive it by email before the first lecture. Lectures 24 hours, Practice 12 hours</i>
· Key Words.	<i>mobility, sustainability, transport planning</i>
· Catchy Phrase.	<i>The most sustainable way of mobility is immobility, but is this even possible?</i>

· Prerequisites and co-requisites.	<i>English B2 or higher level</i>
· Number of EUNICE students that can attend the Course.	20
· Course inscription procedure(s).	<i>Application through the EUNICE website</i>

2. CONTACT DETAILS.

· Department.	<i>Institute of Transport</i>
· Name of Lecturer.	<i>Pawel Zmuda-Trzebiatowski, PUT</i>
· E-mail.	pawel.zmuda-trzebiatowski@put.poznan.pl
· Other Lecturers.	<i>Szymon Fierek, PUT</i>



	<p>Maciej Bieńczyk, PUT Waldemar Walerjańczyk, PUT</p>
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3. COURSE CONTENT.

In a sustainable mobility course, students consider a broad spectrum of topics revolving around transportation and its impacts on the environment, society, and economy.

The first part of the course focuses on definition of sustainable mobility, understanding its principles, and recognizing its importance in contemporary contexts. Then, students explore diverse transportation systems including multimodal mobility solutions, micromobility, sustainable movement of freight within urban areas.

Students also receive principles of urban planning and design of strategies for urban development and transportation networks conducive to walking, cycling, and public transit infrastructure. Methods for making these modes of transportation more sustainable in the city or traffic generator are considered, including transport policies, land use policies as well as incentives affecting user behavior. Moreover, the course explore basic methods of assessment of the sustainability level of transport systems, e.g. based on CO2 emission calculations, as well as problems and limitations related to these methods.

4. LEARNING OUTCOMES.

LO1: Design, develop and deploy software solutions for sustainable mobility taking into account the legislative context and an ethical perspective;

- *Physically observe, collect and analyses new social demands, territory needs and requirements aiming at proposing an information system-based solution with the goal of deploying sustainable and resilient turn key solutions*

LO2: Create and produce smart solutions for resilient sustainable mobility

- *Collect and analyze mobility data*

5. OBJECTIVES.

To provide knowledge in the field of sustainable mobility, which is necessary to develop IT solutions or to plan sustainable transport systems

6. COURSE ORGANISATION.

UNITS	
1.	Introduction to Sustainable Mobility
2.	Sustainable mobility planning





3.	<i>Green Public Procurement & Mobility</i>
4.	<i>Rational car use</i>
5.	<i>Public transport</i>
6.	<i>Micromobility and pedestrian commuting</i>
7.	<i>Multimodal mobility</i>
8.	<i>Other mobility best practices</i>
9.	<i>Sustainable urban logistics</i>
LEARNING RESOURCES AND TOOLS.	
<i>PDF files with course handouts, collaboration tools</i>	
PLANNED LEARNING ACTIVITIES AND TEACHING METHODS.	
<i>Lectures, individual work, group work</i>	

7. ASSESSMENT METHODS, CRITERIA AND PERIOD.
<i>Group project</i>
OBSERVATIONS.

8. BIBLIOGRAPHY AND TEACHING MATERIALS.
<i>Rodrigue J.-P.: The Geography of Transport Systems, FIFTH EDITION, 2020, New York: Routledge</i> <i>Gonzalez-Feliu J., Semet F., Routhier J. (eds.) (2014) Sustainable urban logistics: concepts, methods and information systems. Springer Science+Business Media. Springer-Verlag</i> <i>U-MOB Training Course. Sustainable Mobility Management at Universities</i>

