# COURSE SYLLABUS AND COURSE REQUIREMENTS ACADEMIC YEAR 2024/2025 SEMESTER 1.

Course title	Urban Transport
Course Code	SZB027AN
Hours/Week: le/pr/lab	2/0/0
Credits	2
Degree Programme	Civil Engineering BSc
Study Mode	full time
Requirements	mid-term mark
Teaching Period	autumn
Prerequisites	-
Department(s)	Civil Engineering
Course Director	
Teaching Staff	Gulyás András PhD

# **COURSE DESCRIPTION**

A short description of the course (max. 10 sentences).

Neptun: Instruction/Subjects/Subject Details/Basic data/Subject description

Role and development of urban transport in the practice of urbanism and town management. Main goal of advanced transport infrastructure is to provide sustainable mobility in liveable cities. Main parts of the curricula: urban transport network and its planning, design and operation of sustainable urban transport modes, urban related elements of road transport (within that input data of transport planning and relations, network hierarchy, traffic engineering design and solutions, traffic engineering, traffic calming, design of intersections, traffic safety, urban village planning ), role of railway, water and air transport in cities. Theory is supplemented by presenting recently implemented urban transport development as well as numerical examples to help understanding

# **SYLLABUS**

Neptun: Instruction/Subjects/Subject Details/Syllabus

## 1. GOALS AND OBJECTIVES

Goals, student learning outcome.

Neptun: Instruction/Subjects/Subject Details/Syllabus/Goal of Instruction

Basic knowledge of urban transport and traffic engineering

# 2. COURSE CONTENT

Neptun: Instruction/Subjects/Subject Details/Syllabus/Subject content

## **TOPICS**

## **LECTURE**

- 1. Basic ideas
- 2. Motorisation, Traffic planning 1
- 3. Traffic planning 2, Networks
- 4. Public transport
- 5. Pedestrians, cycling
- 6. Bypass roads, urban sections
- 7. Traffic calming, Sustainable Urban Mobility Plans
- 8. Intersections, Traffic signals
- 9. Roundabouts, Urban village planning

- 10. Traffic safety, Safety audit
- 11. Parking, Traffic engineering
- 12. Rail, water, air traffic in cities, Mid-term exam test

## **DETAILED SYLLABUS AND COURSE SCHEDULE**

ACADEMIC HOLIDAYS INCLUDED

# LECTURE

week	Торіс	Compulsory reading; page number (from to)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	Basic ideas	Presentation UT1		
		Notes pp 3-5		
2.	Motorisation, Traffic planning 1	Presentation UT2		
		slides 1-48		
		Notes pp 5-13		
3.	Traffic planning 2, Networks	Presentations UT2		
		slides 49-71, UT3		
		Notes pp 13-21		
4.	Public transport	Presentation UT4		
		Notes pp 21-30		
5.	Pedestrians, cycling	Presentation UT5		
		Notes pp 30-42		
6.	Bypass roads, urban sections	Presentation UT6		
		Notes pp 42-49		
<i>7.</i>	Traffic calming, Sustainable Urban Mobility	Presentations UT7,		
	Plans	UT8 Notes pp 49-61		
8.	Intersections, Traffic signals	Presentations UT9,		
		UT10		
		Notes pp 61-72		
9.	Roundabouts, Urban village planning	Presentations UT11,		
		UT12 Notes pp 73-76		
10.	Traffic safety, Safety audit	Presentation UT13		
		Notes pp 80-89		
11.	Parking, Traffic engineering	Presentations UT14,		
		UT15 Notes pp 89-98		
12.	Rail, water, air traffic in cities	Presentation UT16		
		Notes pp 99-104		
12.	Mid-term test	All presentations	Mid-term test	4 December 2024
		Lecture notes		

# 3. ASSESSMENT AND EVALUATION

(Neptun: Instruction/Subjects/Subject Details/Syllabus/Examination and Evaluation System)

## **ATTENDANCE**

In accordance with the Code of Studies and Examinations of the University of Pécs, Article 45 (2) and Annex 9. (Article 3) a student may be refused a grade or qualification in the given full-time course if the number of class absences exceeds 30% of the contact hours stipulated in the course description.

**Method for monitoring attendance** (e.g.: attendance sheet / online test/ register, etc.)

Attendance sheet

#### **ASSESSMENT**

Cells of the appropriate type of requirement is to be filled out (course-units resulting in mid-term grade or examination). Cells of the other type can be deleted.

Course resulting in mid-term grade (PTE TVSz 40§(3))

Mid-term assessments, performance evaluation and their ratio in the final grade (The samples in the table to be deleted.)

Туре	Assessment	Ratio in the final grade
Mid-term test	max 16 points	100 %

## Opportunity and procedure for re-takes (PTE TVSz 47§(4))

The specific regulations for improving grades and resitting tests must be read and applied according to the general Code of Studies and Examinations. E.g.: all tests and assessment tasks can be repeated/improved at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.

Mid-term test re-take in the first week of the exam period.

Unsuccessful mid-term test re-take in the second week of the exam period.

### Grade calculation as a percentage

based on the aggregate performance according to the following table

Course grade	Performance in %
excellent (5)	85 %
good (4)	70 % 85 %
satisfactory (3)	55 % 70 %
pass (2)	40 % 55 %
fail (1)	below 40 %

The lower limit given at each grade belongs to that grade.

## 4. SPECIFIED LITERATURE

In order of relevance. (In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature)

## **COMPULSORY READING AND AVAILABILITY**

- [1.] András Gulyás: Presentations (UT1 UT16) 2024
- [2.] András Gulyás: Urban Transport Lecture Notes 2023

## RECOMMENDED LITERATURE AND AVAILABILITY

[3.] Sustainable Urban Mobility Plan (SUMP) Guidelines. On-line version <a href="https://urban-mobility-plans/sump-guidelines-and-decision-makers-summary">https://urban-mobility-plans/sump-guidelines-and-decision-makers-summary</a> en

[4.] Transport Planning and Traffic Engineering ed. by C.A. O'Flaherty ELSEVIER BUTTERWORTH-HEINEMANN 2006