

COURSE SYLLABUS AND COURSE REQUIREMENTS

ACADEMIC YEAR 2022/23 SEMESTER 2

<i>Course title</i>	<i>Transport Networks</i>
<i>Course Code</i>	SZB075AN
<i>Hours/Week: le/pr/lab</i>	2 le / 1 pr
<i>Credits</i>	2
<i>Degree Programme</i>	Civil Engineering BSc (elective)
<i>Study Mode</i>	full time
<i>Requirements</i>	mid-term mark
<i>Teaching Period</i>	spring
<i>Prerequisites</i>	-
<i>Department(s)</i>	Civil Engineering
<i>Course Director</i>	
<i>Teaching Staff</i>	Eller Balázs, Dr. Gulyás András

COURSE DESCRIPTION

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

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

Characteristics and specialties of transport networks and transport connections. Principles of network planning and their practical application, road network and traffic planning methods, railway network and traffic planning methods.

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 in the field of transport networks.

2. COURSE CONTENT

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

TOPICS

LECTURE

1. Spatial structure and transport networks
2. Transport policy, strategies, road network development
3. Road network hierarchy, network planning
4. Traffic planning of road networks
5. Network characteristics, trans-European networks
6. Network connections, multimodality
7. Public transport networks
8. Freight transport, water and air networks
9. International railway networks
10. High-speed railway networks
11. Railway network development
12. Urban rail networks
13. Mid-term test
14. Mid-term test retake

PRACTICE

1-2. Comparison of project alternatives
3-6. Road network traffic planning
7-8. Urban traffic planning
9-12. Railway traffic planning

DETAILED SYLLABUS AND COURSE SCHEDULE

ACADEMIC HOLIDAYS INCLUDED

LECTURE

week	Topic	Compulsory reading; page number (from ... to ...)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	Spatial structure and transport networks	Presentation 1	...	08 February
2.	Transport policy, strategies, road network development	Presentation 2		15 February
3.	Road network hierarchy, network planning	Presentation 3		22 February
4.	Traffic planning of road networks	Presentation 4		01 March
5.	Network characteristics, trans-European networks	Presentation 5		08 March
6.	National holiday			15 March
7.	Network connections, multimodality	Presentation 6		22 March
8.	Public transport networks	Presentation 7		29 March
9.	Spring break			05 April
10.	Freight transport, water and air networks	Presentation 8		12 April
11.	International railway networks	Presentation 9		19 April
12.	High-speed railway networks	Presentation 10		26 April
13.	Railway network development	Presentation 11		03 May
14.	Urban rail networks	Presentation 12		10 May
15.	Mid-term test	All presentations	Mid-term test	17 May

PRACTICE, LABORATORY PRACTICE

week	Topic	Compulsory reading; page number (from ... to ...)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	Comparison of project alternatives	1-2 Practice 1-26 slides	worksheet filling	08 February
2.	Comparison of project alternatives	1-2 Practice 27-55 slides	worksheet filling	15 February
3.	Road network traffic planning	3-6 Practice 1-29 slides	worksheet filling	22 February
4.	Road network traffic planning	3-6 Practice 30-49 slides	worksheet filling	01 March
5.	Road network traffic planning	3-6 Practice 50-61 slides	worksheet filling	08 March
6.	National holiday			15 March
7.	Road network traffic planning	3-6 Practice 62-73 slides	worksheet filling	22 March
8.	Urban traffic planning	7-8 Practice 1-27 slides	worksheet filling	29 March
9.	Spring break			05 April
10.	Urban traffic planning	7-8 Practice 28-38 slides	worksheet filling	12 April
11.	Railway traffic planning + Homework upload	9-11 Practice 1-30 slides	drawing	19 April
12.	Railway traffic planning	9-11 Practice 2-60 slides	drawing	26 April
13.	Railway traffic planning	9-11 Practice 61-90 slides	drawing	03 May
14.	Student presentations for plus points		attendance	10 May
15.	Student presentations for plus points		attendance	17 May

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.)

Type	Assessment	Ratio in the final grade
Mid-term test	max 18 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.

First week of the exam period (24 May)

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.] Presentations (Teams, Neptun Meet Street, witch)

RECOMMENDED LITERATURE AND AVAILABILITY

[2.] Rodrigue, J-P et al. (2020) The Geography of Transport Systems, Hofstra University, Department of Global Studies & Geography, <https://transportgeography.org/>