

# COURSE SYLLABUS AND COURSE REQUIREMENTS

## ACADEMIC YEAR 2022-2023 SEMESTER SPRING

### Course title

Course Code	MSB420ANEP
Hours/Week: le/pr/lab	1/2/0
Credits	4
Degree Programme	Civil Engineering BSc.
Study Mode (training schedule)	Full-time schedule
Requirements	exam
Teaching Period	Semester 4
Prerequisites	Hydrology and Engineering Fluid Mechanics 3.
Department	Civil Engineering Department
Course Director	Dr. Judit PÁL-SCHREINER
Teaching Staff	Dr. Judit PÁL-SCHREINER

## COURSE DESCRIPTION

Engineering networks as a part of technical infrastructure in towns and cities. Water supply and sewerage types, categories, forms of placing, spatial arrangement, and forms of construction. Technical requirements for design, structure, and operation of water supply and sewerage.

## SYLLABUS

### 1. GOALS AND OBJECTIVES

This course exposes students to an expansive suite of topics and methods within the water supply and sewerage field.

### 2. COURSE CONTENT

#### TOPICS

#### LECTURE

- The water supply system, the elements of public water supplies.
- Classification of public sewer systems, based on the operation of the sewer and based on the type of collection and conduct.
- Various pipe materials for water supply system and for sewer, and their pros and cons;
- Urban drainage systems (types, quality, quantity etc)
- Calculation methods of public utilities (under pressure systems, gravity systems)
- Pumps at water supply system. Sewage pumping station
- Traditional building methods (drainage of construction site, conditions)
- Traditional building methods (machines)
- Pipe materials and features

#### PRACTICE

Students practice the basic calculations and design through sample examples and planning assignment a sewer system.

## DETAILED SYLLABUS AND COURSE SCHEDULE

### LECTURE

week	Topic	Compulsory reading; page number	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	Course description; Orientation	[1]		
2.	The water supply system, the elements of public water supplies I.	[1]		
3.	The water supply system, the elements of public water supplies II.	[1]		
4.	The water supply system, the elements of public water supplies III.	[1]		
5.	Classification of public sewer systems, based on the operation of the sewer and based on the type of collection and conduct I.	[1]		
6.	Classification of public sewer systems, based on the operation of the sewer and based on the type of collection and conduct II.	[1]		
7.	Classification of public sewer systems, based on the operation of the sewer and based on the type of collection and conduct III.	[1]		
8.	Various pipe materials for water supply system and for sewer, and their pros and cons	[1]		
9.	Spring holiday			
10.	Urban drainage systems	[1]		
11.	Pumps at water supply system	[1]		
12.	Sewage pumping station	[1]		
13.	Traditional building methods	[1]		
14.	Exam test		Exam test	week 14
15.	Retake exam test		Retake exam test	week 15

### PRACTICE

week	Topic	Compulsory reading; page number (from ... to ...)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	Preparing planning assignment			
2.	Preparing planning assignment			
3.	Preparing planning assignment			
4.	Preparing planning assignment			
5.	Preparing planning assignment			
6.	Preparing planning assignment			
7.	Preparing planning assignment			
8.	Preparing planning assignment			
9.	Spring Holiday			
10.	Preparing planning assignment			
11.	Preparing planning assignment			
12.	Consultation			
13.	Consultation			
14.	Consultation			
15.	Submission date			week15

### 3. ASSESSMENT AND EVALUATION

#### **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. Online attendance is not available.

Attending is required in all classes and will impact the grade (max. 10%). To be in class at the beginning time and stay until the scheduled end of the lesson is required, a delay of more than 20 minutes will be counted as an absence. In the case of an illness or family emergency, the student must present a valid excuse, such as a doctor's note.

#### ***Method for monitoring attendance***

Attendance will be monitored by attendance lists. All relevant university regulations apply.

#### **ASSESSMENT**

There will be one examtest and one planning assignment project work. Exam test date is 14th week. The exact

The planning assignment will be assigned on the 1th week and must be submitted in by the final week. No late submission is accepted.

No test scored below 40% can be accepted and must be repeated.

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#### ***Course-unit with final examination***

#### ***Mid-term assessments, performance evaluation and their weighting as a pre-requisite for taking the final exam***

Type	Assessment	Weighting as a proportion of the pre-requisite for taking the exam
Exam Test	26%	26%
Planning Assignment	64%	64%
Class attendance	10%	10%

#### ***Requirements for the end-of-semester signature***

Exam test must score 10% or beyond and planning assignment must score 25% or beyond.

Regular attendance as per the Code of Studies.

#### ***Re-takes for the end-of-semester signature*** (PTE TVSz 50§(2))

A retake-test is available on the 15th week.

**Type of examination:** written

#### ***Calculation of the grade*** (TVSz 47§ (3))

#### ***Calculation of the final grade based on aggregate performance in percentage.***

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**

### **COMPULSORY READING AND AVAILABILITY**

[1.] Electric material in TEAMS

### **RECOMMENDED LITERATURE AND AVAILABILITY**

[2.] Hamada, M. et al (2014): Critical Urban Infrastructure Handbook, CRC Press ISBN-13:978-1466592049 ISBN-10:1466592044

[3.] Every Drop Counts-Environmentally Sound Technologies for Urban and Domestic Water Use Efficiency URL://[www.unep.or.jp/](http://www.unep.or.jp/)