Course title	Municipal Water Management
Course Code	MSB114ANEP
Hours/Week: le/pr/lab	2/3/0
Credits	6
Degree Programme	Civil Engineering BSC
Study Mode	Full-time schedule
Requirements	Mid-semester grade
Teaching Period	Semester 6
Prerequisites	Hydrology and Fluid Mechanics 3.
Department(s)	Civil Engineering
Course Director	Dr. Pál-Schreiner Judit
Teaching Staff	Dr. Pál-Schreiner Judit

#### COURSE DESCRIPTION

Within the framework of the course, the water supply system, the types and general characteristics of sewerage, the design and sizing guidelines are described; as well as structures of the water supply system and sewerage, construction technologies. Pipe materials, pipe embedding methods, main structures and fittings. Scaling principles and methods. Drawing markings, blueprint representation. Operation. Environmental aspects.

#### **SYLLABUS**

### 1. GOALS AND OBJECTIVES

The aim of the course is to provide students graduating from the programme with sufficient knowledge in the field of municipal water management planning.

#### 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	Completion date, due date
1.	Course description; Orientation			

2.	Main parts of municipal waters supply system 1.	[2.]	
3.	Main parts of municipal waters supply system 2.	[2.]	
4.	Main parts of municipal waters supply system 3.	[2.]	
5.	Test1 (water supply)		07-09-25
6.	Municipal Sewer systems	[2.]	
7.	Waste-water treatment process	[2.]	
8.	Holiday – no classes		
9.	Cross sections of gravity-type sewers,	[2.]	
10.	Structures of the Sewer System	[2.]	
11.	Test2 (sewer)		18-11-25
12.	Public Utilities Tunnel		
13.	Integrated water management 1	[2.]	
14.	Integrated water management 2	[2.]	

# **PRACTICE**

wee k	Topic	Compulsory reading	Required tasks	Completion date, due date
1.	Preparing planning assignment	[2.]		
2.	Preparing planning assignment, Consultation	[2.]		
3.	Preparing planning assignment, Consultation	[2.]		
4.	Preparing planning assignment, Consultation	[2.]		
5.	Preparing planning assignment, Consultation			
6.	Preparing planning assignment, Consultation	[2.]		
7.	Preparing planning assignment, Consultation	[2.]		
8.	Holiday – no classes			
9.	Preparing planning assignment, Consultation	[2.]		
10.	Preparing planning assignment, Consultation	[2.]		
11.	Preparing planning assignment, Consultation			
12.	Preparing planning assignment, Consultation			
13.	Consultation			
14.	Submission deadline			09-12-2025

# 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.

# Method for monitoring attendance

Attendance sheet. Attending is required all classes, and will impact the grade (max. 10%). Unexcused absences will adversely affect the grade, and in case of absence from more than 30% of the total number of lesson will be grounds for failing the class. To be in class at the beginning time and stay until the scheduled

end of the lesson is required, tardiness 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.

#### **ASSESSMENT**

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

Mid-term assessments, performance evaluation and their ratio in the final grade

Туре	Assessment	Ratio in the final grade
Test 1	22(mi12)	22%
Test 2	22(mi12)	22%
Planning assignment	46(min 19)	46%
Class attendance	10(min4)	10%

# 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.

Participation in site visits is mandatory, with a maximum allowance of one absence. Each individual assessment must be at least 40% on its own.

## Grade calculation as a percentage

based on the aggregate performance according to the following table

Course grade	Performance in %
excellent (5)	85 %-100%
good (4)	70 % - 84 %
satisfactory (3)	55 % - 69 %
pass (2)	40 % - 54 %
fail (1)	below 40 %

#### 4. SPECIFIED LITERATURE

# COMPULSORY READING AND AVAILABILITY

- [1.] KNOLMÁR-FÜLÖP-DARABOS: PUBLIC WORKS 2014- ONLINE BOOKLET
- [2.] LECTURE NOTES PPT.

# RECOMMENDED LITERATURE AND AVAILABILITY

- [3.] Hamada, M. et al (2014): Critical Urban Infrastructure Handbook, CRC Press ISBN-13:978-1466592049 ISBN-10:1466592044
- [4.] Every Drop Counts-Environmentally Sound Technologies for Urban and Domestic Water Use Efficiency URL://www.unep.or.jp/