COURSE SYLLABUS SEMESTER FALL 2022/2023

Name of Course	***PUBLIC UTILITIES***
Course Code	**MSB418ANEP**
Allotment of Hours per Week	**2 Lectures**
Number of Credits	**2**
Program	**Civil Engineer BSc.**
Evaluation	**Exam (with grade)**
Semester	**5nd**
Prerequisites	**Hydrology and Eng.Fluid.Mecha3.**
Department	**Civil Engineering**
Instructor	**Dr. Judit PÁL-SCHREINER**

INTRODUCTION, GENERAL COURSE DESCRIPTION

This course exposes students to an expansive suite of topics and methods within the field of Public Utilities.

LEARNING OBJECTIVES

Engineering networks as a part of technical infrastructure in towns and cities. Public utilities categories, forms of placing, spatial arrangement, forms of construction. Technical requirements for design, structure and operation of public utilities.

Methodology:
Lectures, practice, site visit

Schedule:

Week	Topic of lecture
Week 1	Course description; Orientation
Week 2	Definition of public utilities, preparing planning assignment
Week 3	Grouping and main features of public utilities
Week 4	General overview of water supply
Week 5	Urban drainage systems (types, quality, quantity etc)
Week 6	Waste water loads (infiltraton, domestic, industrial, emission conditions)
Week 7	Calculation methods of public utilities (under pressur systems, gravity systems)
Week 8	Site visit 1
Week 9	Holiday– no classes
Week 10	Traditional building methods (drainage of construction site, conditions)
Week 11	Traditional building methods (machines)
Week 12	Pipe materials and features
Week 13	Site visit 2
Week 14	Exam test

Week 15 Retake exam test (if required)

ATTENDANCE AND GRADING

Attendance:

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.

Grading:

Grading will follow the course structure with the following weight
10% - Class attendance, class activity
20% - Site visit report1
20% - Site visit report2
50% - Examtest
A minimum of 40% is required to pass the exam

Offered exam grade:

Evaluation in percents	Numeric grade
85%-100%	5
70%-84%	4
55%-69%	3
40%-54%	2
0-39%	1

READINGS AND REFERENCE MATERIALS

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

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