

COURSE SYLLABUS SEMESTER FALL 2021/2022

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, planning, presentation

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, preparing planning assignment and consultation
Week 4	General overview of water supply networks preparing planning assignment and consultation
Week 5	Urban drainage systems (types, quality, quantity etc) preparing planning assignment and consultation
Week 6	Waste water loads (infiltration, domestic, industrial, emission conditions) preparing planning assignment and consultation
Week 7	Calculation methods of public utilities (under pressure systems, gravity systems) preparing planning assignment and consultation
Week 8	Fall Break – no classes
Week 9	Holiday – no classes

- Week 10 Preparing planning assignment ,Traditional building methods (drainage of construction site, conditions) preparing planning assignment and consultation
- Week 11 Traditional building methods (machines) preparing planning assignment and consultation
- Week 12 Pipe materials and features preparing planning assignment and consultation
- Week 13 Presentation of the Plans (1) Submission date
- Week 14 Presentation of the Plans (2) Submission date
- Week 15 Presentation of the Plans (3) Submission date

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
 - 65% - Planning assignment
 - 25% - The Presentation of the Plan
- A minimum of 55% is required to pass the exam

Offered exam grade:

Evaluation in percents	Numeric grade
89%-100%	5
77%-88%	4
66%-76%	3
55%-65%	2
0-54%	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/

