COURSE SYLLABUS
SEMESTER SPRING 2018/2019

Name of Course	**PLANNING OF WATER SUPPLY AND SEWERAGE**
Course Code	**MSB420ANEP**
Allotment of Hours per Week	**1 Lecture, 2 Practice**
Number of Credits	**4**
Program	**Civil Engineer BSc.**
Evaluation	**Exam (with grade)**
Semester	**4nd**
Prerequisites	**Hydrology and Engineering Fluid Mechanics 3.**
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 water supply and sewerage.

LEARNING OBJECTIVES

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

Methodology:

- Lectures: Lectures will give an introduction to the basic knowledge of the water supply and sewerage.
- Practical classes: Students will be able to practice the basic calculations and design through sample examples.
- Exam test: Accumulated knowledge is tested in an exam test.

Schedule:

Week 1	Course description; Orientation
Week 2	Preparing planning assignment
Week 3	Water Supply System, Catchment [presentations], preparing planning assignment
Week 4	Water Treatment, Water Demand [presentations], preparing planning assignment
Week 5	Water Distribution System [presentations], preparing planning assignment
Week 6	Pump stations, Reservoirs and water towers [presentations], preparing planning assignment
Week 7	Classification of Sewer Systems [presentations], preparing planning assignment

Week8	Structures of the Sewer System [presentations], preparing planning assignment
Week 9	Pumping Station [presentations], preparing planning assignment
Week 10	Spring Break-no classes
Week 11	Waste Water Treatment I. [presentations], preparing planning assignment
Week 12	Waste Water Treatment II. [presentations], preparing planning assignment
Week 13	Site visit at Wastewater Treatment Plan in Pécs
Week 14	Exam test
Week 15	Presentation Planning Assignment, 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
30% - Presentation
30% - Planning assignment
30% - Exam test
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/