

COURSE SYLLABUS SEMESTER 2022-2023/FALL

Name of Course	Hydraulic Engineering
Course Code	MSB432AN
Allotment of Hours per Week	1/2/0
Number of Credits	5
Program	Civil Bsc
Evaluation	nappali
Semester	exam
Prerequisites	Hydrology, Eng.Fluid Mech.3.
Department	Department of Civil Engineering
Instructor	Dr. Pál-Schreiner Judit

INTRODUCTION, GENERAL COURSE DESCRIPTION

This course exposes students to an expansive suite of topics and methods within the field of Hydraulic Engineering. Types and tasks of hydraulic engineering structures with the following topics: Watershed management of lowland and hilly areas. Regulation of lakes and rivers. Reservoirs and storage. Flood control and land drainage. Inland navigation. Water power development. Water intake and pumping stations. Small hydraulic engineering structures. Characteristic environmental impacts of hydraulic engineering structures.

LEARNING OBJECTIVES

Methodology:

Lectures, study cases will give an introduction to the basic knowledge of the hydraulic engineering. Exam test and presentations are tested the accumulated knowledge.

Schedule:

Week	Topic of lecture
Week 1	Course description; Orientation
Week 2	Definition Hydraulic Engineering, preparing project, Case studies 1
Week 3	Case studies 2
Week 4	Case studies 3
Week 5	Examtest
Week 6	Presentations 1 (the Problem)
Week 7	Site visit
Week 8	Consultation
Week 9	Holiday – no classes
Week 10	Presentations 2-(the Technics)
Week 11	Site visit
Week 12	Consultation
Week 13	Consultation
Week 14	Presentations 3-(the Result)
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:

25%- examtest (min 10%)

25%- presentation 1 (min 10%)

25%- presentation 2 (min 10%)

25%- presentation 3 (min 10%)

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

NED H. C. HWANG, ROBERT J. HOUGHTALEN: Fundamentals of Hydraulic Engineering Systems

JOHN A. ROBERSON, JOHN JOSEPH CASSIDY, M. HANIF CHAUDHRY: Hydraulic Engineering

