

COURSE SYLLABUS AND COURSE REQUIREMENTS

ACADEMIC YEAR 2022/2023 SEMESTER 3

<i>Course title</i>	<i>Hydrology</i>
<i>Course Code</i>	MSB429ANEP
<i>Hours/Week: le/pr/lab</i>	1 Lecture, 1 Practice
<i>Credits</i>	2
<i>Degree Programme</i>	Civil Engineering BSc.
<i>Study Mode (TVSZ-ben training schedule)</i>	
<i>Requirements</i>	Exam
<i>Teaching Period</i>	3 rd Semester
<i>Prerequisites</i>	None
<i>Department(s)</i>	Civil Engineering
<i>Course Director</i>	<i>Dr. Judit Pál-Schreiner</i>
<i>Teaching Staff</i>	<i>Dr. Judit Pál-Schreiner / Eng. Lujain Ben Khadra</i>
<i>Hours/Week: le/pr/lab</i>	<i>Every Week</i>

COURSE DESCRIPTION

This course exposes students to an expansive suite of topics and methods within the field of water resources engineering, emphasizes engineering applications of Fluid Mechanics.

SYLLABUS

MSB429ANEP: *Dr. Judit Pál-Schreiner / Eng. Lujain Ben Khadra /Hydrology*

1. GOALS AND OBJECTIVES

Hydrology is explored using fundamental conservation laws and ecologically- based design theory. Concepts include the properties of water, The water Cycle, Precipitation, Runoff, Flood, Infiltration, Evaporation.

2. COURSE CONTENT

	TOPICS
LECTURE	<ol style="list-style-type: none"> 1. <i>The Water Cycle</i> 2. <i>The process of Evaporation</i> 3. <i>The process of Condensation</i> 4. <i>The process of Precipitation</i> 5. <i>The process of Runoff</i> 6. <i>The process of Infiltration</i> 7. <i>Groundwater</i>
PRACTICE	<ol style="list-style-type: none"> 1. <i>Measuring Evaporation</i> 2. <i>Measuring Condensation</i> 3. <i>Measuring Precipitation</i> 4. <i>Measuring Runoff</i> 5. <i>Measuring Infiltration</i>
LABORATORY PRACTICE	<i>None</i>

DETAILED SYLLABUS AND COURSE SCHEDULE

LECTURE

<i>week</i>	Topic	Compulsory reading; page number (from ... to ...)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	The water Cycle	First Presentation	-	-
2.	Water in Motion	First Presentation	-	-
3.	The Process of Evaporation	Second Presentation	-	-
4.	Measuring Evaporation	Second Presentation	First Homework	Week 5
5.	The Process of Condensation	Third Presentation	-	-
6.	Measuring Condensation	Third Presentation	Second homework	Week 7
7.	The Process of Runoff	Fourth Presentation	-	-
8.	Measuring Runoff	Fourth Presentation	Third Homework	Week 10
9.	Autumn Break			
10.	The Process of Infiltration	Fifth Presentation	-	-
11.	Measuring Infiltration	Fifth Presentation	Fourth Home	Week 12
12.	Groundwater	Fifth Presentation	-	-
13.	Oral Exam			
14.	Practical Exam			
15.	Retake			

PRACTICE, LABORATORY PRACTICE

<i>week</i>	Topic	Compulsory reading; page number (from ... to ...)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.				
2.	Water in Motion	First Presentation	-	-
3.				
4.	Measuring Evaporation	Second Presentation	First Homework	Week 5
5.				
6.	Measuring Condensation	Third Presentation	Second homework	Week 7
7.				
8.	Measuring Runoff	Fourth Presentation	Third Homework	Week 10
9.				
10.	Measuring Infiltration	Fifth Presentation	Fourth Home	Week 12
11.				
12.	Groundwater	Fifth Presentation	-	-
13.				
14.	Practical Exam			
15.	Retake			

3. ASSESSMENT AND EVALUATION

Evaluation will be depending on:

- Attendance
- Assignments
- Practice Exam
- Oral Exam

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

Filling the Attendance Sheet during the Semester

ASSESSMENT

Course resulting in mid-term grade

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

Type	Assessment	Ratio in the final grade
Class Attendance	max 10 Points	10%
Assignments Till the Mid-term	max 30 Points	30%

Opportunity and procedure for re-takes

The specific regulations for improving grades and resitting tests must be read and applied according to the general Code of Studies and Examinations. E.g.: all tests and assessment tasks can be repeated/improved at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.

Grade calculation as a percentage

based on the aggregate performance according to the following table

Course grade	Performance in %
excellent (5)	85 % ...
good (4)	70 % ... 85 %
satisfactory (3)	55 % ... 70 %
pass (2)	40 % ... 55 %
fail (1)	below 40 %

The lower limit given at each grade belongs to that grade.

Course-unit with final examination

Mid-term assessments, performance evaluation and their weighting as a pre-requisite for taking the final exam

Type	Assessment	Weighting as a proportion of the pre-requisite for taking the exam
1. Class Attendance	Max 10 points	10 %
2. All Assignments	Max 30 Points	30%
3. Practical Exam	Max 30 Points	30%
4. Oral Exam	Max 30 Points	30%

Requirements for the end-of-semester signature

To fulfil all the requirements above

Re-takes for the end-of-semester signature

The specific regulations for grade betterment and re-take must be read and applied according to the general Code of Studies and Examinations. E.g.: all the tests and the records to be submitted can be repeated/improved each at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.

...

Type of examination (written, oral): Both Oral Exam & Practical Exam

The exam is successful if the result is minimum 15 % in the Oral Exam & 15% in the Practical Exam

Calculation of the grade

The performance at the exam accounts for **60** % in the calculation of the final grade.

Calculation of the final grade based on aggregate performance in percentage.

Course grade	Performance in %
excellent (5)	85 % ...
good (4)	70 % ... 85 %
satisfactory (3)	55 % ... 70 %
pass (2)	40 % ... 55 %
fail (1)	below 40 %

The lower limit given at each grade belongs to that grade.

4. SPECIFIED LITERATURE**COMPULSORY READING AND AVAILABILITY**

[1.] John C. Manning: Applied Principles of Hydrology 3rd Edition ISBN-13