

COURSE SYLLABUS AND COURSE REQUIREMENTS

2023/24 SEMESTER 2

Course title	Building Construction 2
Code	MSB025ANEP
Hours/Week: le/pr/lab	3/1/0
Credits	5
Degree Programme	Civil Engineering Bsc
Study Mode	Full time
Requirements	End-term grade
Semester	4th
Prerequisites	Building Constructions 1
Department	Department of Civil Engineering
Course Director	SZÉLL Judit
Teaching Staf	DÁNYI Tibor Zoltán PhD, assistant professor
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COURSE DESCRIPTION

During the previous semester students learned about the construction methods of load-bearing wall structures. In this semester students will learn about the constructional solutions of slab structures, roof structures, waterproofing in the ground, flat roofs, and frame buildings.

The course includes:

- There are lectures on the topics of the course, each week. The theoretical knowledge will be deepened on practical lessons delivered by the teacher. The students need to prepare the following drawings during the semester:
- **Slab plan**
- **Roof structure plan**
- **Waterproofing in the ground**
- **Flat roof**
- **Frame building's drawings**
- Students should take 2 tests on topics studied on lectures. Can not be used any note.
- During the semester the students can prepare a study according to the topics of lectures for maximum 10 extra points. The theme of the study must be approved by the teacher. These extra points count only if at least 50 points have been obtained from 2 tests and the drawings.
- Kahoot minutes: Maximum 10 extra points earned with Kahoot! count only if at least 50 points have been obtained from 2 tests and the drawings.

During the lectures and practical sessions, students get to know the effects on building structures and their system of requirements, their spatial construction methodology, and their design principles. In addition to the acquisition of basic knowledge, the goal is to acquire the correct and modern engineering way of thinking and behavior.

SYLLABUS

1. GOALS AND OBJECTIVES

The aim of the semester is for the students to get to know the building structures that belong to the main topic of the semester. They learn how to create them. We present the factors that influence their selection. They get to know the design principles and detailed solutions of structures.

2. COURSE CONTENT

During the lectures, students learn about the features and design principles of the following building structures:

- slab structures
- roof shapes, traditional and modern roof structures
- waterproofing in the ground
- flat roofs
- frame buildings

Drawing tasks are developed in the practical classes based on the acquired theoretical knowledge and individual and group consultations. During the group session, the instructors help you master the design process of building structures through blackboard editing exercises and consultation of drawing tasks.

	TOPICS
LECTURE	<ol style="list-style-type: none">1. slab structures2. roof shapes, traditional and modern roof structures3. waterproofing in the ground4. flat roofs5. frame buildings
PRACTICE	<ol style="list-style-type: none">1. Slab plan2. Roof structures3. Waterproofing in the ground4. Flat roofs5. Frame buildings

DETAILED SYLLABUS AND COURSE SCHEDULE

Formal requirements:

The semester drawings must be submitted on landscape A/2; A/3 drawing sheets or on tracing paper fixed drawing sheets. Each drawing sheet is framed (outlined 5 mm from the edge of the sheet with 0.5 ink), with a drawing stamp in the lower right corner.

Content of the drawing stamp:

- Subject name
- Name, Neptune code
- Name of the drawing
- Scale of the drawing
- Number of the drawing sheet
- Date of creation

Drawings to be submitted

Slab plan (floor plan and 2 sections (1:50) 3 pcs. detail drawing (1:10) on drawing sheet A/2)

Roof structure plan (floor plan and 2 sections (1:50) 3 pcs. detail drawing (1:10) on drawing sheet A/2)

Waterproofing in the ground (detail drawings (1:10) on drawing sheet A/2 or A/3)

Flat roof (detail drawings (1:10) on drawing sheet A/2 or A/3)

Frame building (floor plan and 2 sections (1:100) on drawing sheet A/2 or A/3)

LECTURES

Week	Topic	Compulsory reading	Required tasks	Completion date, due date
Wednesday 9.30-12.00 A317				
1. 07.02.	Site visit at the new Pécs Markethall	Meeting point at the Markethall at the fountain at the time of the class		
2. 14.02.	Traditional and up-to-date roof structures	[1.] Chapter one 1-24		
3. 21.02.	Kahoot! minutes Hagyományos fa fedélszerkezetek, tetőidom	[2.] 250-264		
4. 28.02.	Kahoot! minutes Fedélszerkezetek és rétegrendjei	[1.] Chapter one 25-31		
5. 06.03.	Kahoot! minutes Dampproofing, waterproofing in the ground	[2.] 238-239		
6. 13.03.	Kahoot! minutes Dampproofing, waterproofing in the ground	[2.] 239-243		
7. 20.03.	1st test Rajzkiadás		1st test	
8. 27.03.	Kahoot! minutes Flat roofs	[3.] 7.09		
9. 03.04.	Kahoot! minutes	[3.] 1.11 [2.] 455-464		
10. 10.04.	Kahoot! minutes Flat roofs	[3.] 1.11		
11. 17.04.	Kahoot! minutes Skeleton buildings	[2.] 466-475		
12. 24.04.	Kahoot! minutes Skeleton buildings	[3.] 5.26, 5.29		
13. 01.05.	Bank holiday			
14. 08.05.	2nd test		2nd test	

PRACTICE

<i>Week</i> <i>Wednesday</i> <i>12.00-12.45</i> <i>A317</i>	Topic	Compulsory reading	Required tasks	Completion date, due date
1. 07.02.	Site visit at the new Pécs Markethall	Meeting point at the fountain at the Markethall at the time of the class		
2. 14.02.	1st. slab plan			5th week
3. 21.02.	Consultation			
4. 28.02.	Consultation, 1st drawing signature			
5. 06.03.	1st drawing submission 2nd drawing description		Slab plan drawing submission	7th week
6. 13.03.	Consultation, 2nd drawing signature			
7. 20.03.	2nd drawing submission 3rd drawing description		Roof structure drawing submission	9th week
8. 27.03.	Consultation, 3rd drawing signature			
9. 03.04.	3rd drawing submission 4th drawing description		Damp proofing drawing submission	11th week
10. 10.04.	Consultation, 4th drawing signature			
11. 17.04.	4th drawing submission 5th drawing description		Flat roof drawing submission	14th week
12. 24.04.	Consultation, 5th drawing signature			
13. 01.05.	Bank holiday			
14. 08.05.	5th drawing submission		Skeleton building drawing submission	

3. ASSESSMENT AND EVALUATION

ATTENDANCE

Attendance at the practical classes is verified by presenting the current drawings indicated in the syllabus! The practice leaders keep an attendance sheet, with an entry that has appeared and completed, as well as not appeared or not completed. All issued drawing assignments must be presented in the practical classes, the absence of any drawing assignment means an uncompleted entry.

Attendance at the lecture and practice is mandatory.

Method for monitoring attendance:

Attendance sheet

ASSESSMENT

Drawings:

1. **Slab plan** (födémtervi alaprajz és 2db metszet 1:50, 3db. csomópont 1:10 A/2 rajzlapon)
2. **Roof structure** (fedélszék alaprajz és 2db metszet 1:50, 3db. csomópont 1:10 A/2 rajzlapon)
3. **Waterproofing in the ground** (A/3vagy A/2-es rajzlap, kiadott részletek 1:10)
4. **Flat roof** (A/3vagy A/2-es rajzlap, kiadott részletek 1:10)
5. **Skeleton building** (A/3vagy A/2-es rajzlap, alaprajz, metszet 1:100)

All drawing assignments must be presented at the time of the practical classes, in the weeks specified in the syllabus. The practice leader evaluates the task and records its result. A drawing task can be evaluated if at least 40% of all parts of the drawing task are completed.

Tests

Accountability of the knowledge given or referred to in the lectures. Notes cannot be used. The test is written on pre-framed and papers. It will be possible to upgrade the tests in the first week of the exam period. Additional retaking in the second week of the exam period if necessary.

Course resulting in end-term grade (PTE TVSz 40§(3))

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

Type	Assessment	Ratio in the final grade
1st test	20 p (min. 8 points)	20 %
2nd test	20 p (min. 8 points)	20 %
1st drawing: slab plan	12p (min. 6 points)	12 %
2nd drawing: roof structure	12p (min. 6 points)	12 %
3rd drawing: damp proofing/waterproofing	12p (min. 6 points)	12 %
4th drawing: flat roof	12p (min. 6 points)	12 %
5th drawing: skeleton building	12p (min. 5 points)	12%

The condition for obtaining a signature:

- Obtaining a registration with at least 70% in lectures and practical classes.,
- Submission of the drawing assignments, (the assignment is considered to be evaluable if all drawing elements reach 40% completion)
- Completing the test and achieving a result of at least 40%.

When these are met, the signature will be given and the subject will be graded.

Opportunity and procedure for re-takes (PTE TVSz 47§(4))

Those who did not present their assignment at the time specified in the syllabus can make up for it the following week for a reduced score. Those who presented their assignment at the time specified in the syllabus can correct it to increase points the following week at the latest. Those who did not attend the presentation with proof (medical certificate or permission from the subject supervisor) can make up for it in the next class.

It will be possible to correct/re-submit the last assignment until the end of the second week of the exam period at the time announced by the supervisor.

Grade calculation as a percentage

Course grade	Performance in %
Excellent (5)	85 % ...
Good (4)	70 % ... 84 %
Satisfactory (3)	55 % ... 69 %
Pass (2)	40 % ... 54 %

4. SPECIFIED LITERATURE

COMPULSORY READING AND AVAILABILITY

- [1.] R. Barry: THE CONSTRUCTION OF BUILDINGS Volume 4 (https://www.academia.edu/19561839/construction_of_building_barry_4)
- [2.] Andrea Deplazes: CONSTRUCTING ARCHITECTURE (http://www.sze.hu/~eptansz/Deplazes_Constructing_Architecture.pdf)
- [3.] Francis D. K. Ching : Building construction illustrated (PTE MIK Library)

RECOMMENDED LITERATURE AND AVAILABILITY

- [4.] Alexander Reichel, Kerstin Schultz: SUPPORT/MATERIALIZE (PTE MIK Library)