COURSE SYLLABUS AND COURSE REQUIREMENTS
2024/25 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

(Neptunban: Oktatás/Tárgyak/Tárgy adatok/Tárgytematika/Oktatás célja rovat)

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	**1. slab structures** **2. roof shapes, traditional and modern roof structures** **3. waterproofing in the ground** **4. flat roofs** **5. frame buildings**
PRACTICE	**1. Slab plan** **2. Roof structures** **3. Waterproofing in the ground** **4. Flat roofs** **5. 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

<u>Drawings to be submitted</u>

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 Wednesday 7.15-10.15 A317	**Topic**	**Compulsory reading**	**Required tasks**	**Complation date, due date**
1. 05.02.	Site visit at the new Pécs Markethall	Meeting point at the Markethall at the fountain at the time of the class		
2. 12.02.	Traditional and up-to-date roof structures	[1.] Chapter one 1-24		
3. 19*.02.*	Kahoot! minutes Traditional and up-to-date roof structures	[2.] 250-264		
4. 26.02.	Kahoot! minutes Layers of roof structures	[1.]Chapter one 25-31		
5. 05.03.	Kahoot! minutes Dampproofing, waterproofing in the ground	[2.] 238-239		
6. 12.03.	Kahoot! minutes Dampproofing, waterproofing in the ground	[2.] 239-243		
7. 19*.03.*	**1st test** Drawing description		**1st test**	
8. 26.03.	Kahoot! minutes Flat roofs	[3.] 7.09		
9. 02.04.	Kahoot! minutes Flat roofs	[3.] 1.11 [2.] 455-464		
10. 09*.04.*	Kahoot! minutes Flat roofs	[3.] 1.11		
11. 16.04.	Kahoot! minutes Skeleton buildings	[2.] 466-475		
12. 23.04.	Spring Holiday			
13. 30.04.	Kahoot! minutes Skeleton buildings	[3.] 5.26, 5.29		
14. 07.05.	**2nd test**		**2nd test**	

PRACTICE

Week Wednesday 10.15-11.00 A317	**Topic**	**Compulsory reading**	**Required tasks**	**Complation date, due date**
1. 05.02.	Site visit at the new Pécs Markethall	Meeting point at the fountain at the Markethall at the time of the class		
2. 12.02.	**1st. drawing: slab plan**			**5th week**
3. 19.02.	Consultation			
4. 26.02.	Consultation, 1st drawing signature			
5. 05.03.	**1st drawing submission** **2nd drawing: Roof structure description**		**Slab plan drawing submission**	**7th week**
6. 12.03.	Consultation, 2nd drawing signature			
7. 19.03.	**2nd drawing submission** **3rd drawing: waterproofing in the ground description**		**Roof structure drawing submission**	**9th week**
8. 26.03.	Consultation, 3rd drawing signature			
9. 02.04.	**3rd drawing submission** **4th drawing: flat roof description**		**Damp proofing drawing submission**	**11th week**
10. 09.04.	Consultation, 4th drawing signature			
11. 16.04	**4th drawing submission** **5th drawing: frame building description**		**Flat roof drawing submission**	**14th week**
12. 23.04.				
13. 30.04.	**Consultation, 5th drawing signature**			
14. 07.05.	**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** (slab plan and 2 sections 1:50, 3 detail drawings 1:10 A/2 size)
2. **Roof structure** (roof structure floor plan and 2 sections 1:50, 3 detail drawings 1:10 A/2 size)
3. **Waterproofing in the ground** (A/ or A/2 size, details in 1:10 scale)
4. **Flat roof** (A/3 or A/2 size, details in 1:10 scale)
5. **Skeleton building** (A/3 or A/2 size, floor plan, section 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 %
Fail (1)	below 40 %

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)