COURSE SYLLABUS AND COURSE REQUIREMENTS
2023/2024 1. SEMESTER

Course title

Course Code	**EPB107AN**
Hours/Week: le/pr/lab	**3/_/_**
Credits	**3**
Degree Programme	**Építőmérnök BSc**
Study Mode	**Nappali**
Requirements	**Félévközi jegy**
Teaching Period	**2023/24 ősz**
Prerequisites	**Épületszerkezetek Stúdió 4**
Department	
Course Director	***Dr. Perényi*** *László,* ***docens***
Teaching Staff	***Dányi*** *Tibor Zoltán PhD,* ***adjunktus*** iroda: Boszorkány u. 2. B-322 E-mail: danyi.tibor@mik.pte.hu munkahely: +36 72 503650/23818 fogadóóra: kedd 15.00-16.00

COURSE DESCRIPTION

During the previous four semesters, the students learned about load-bearing walls and monolithic rc. frame construction from the foundation to the roof structures. In this semester, we will deal with prefabricated frames, transparent building structures, layered walls and facade coverings, as well as false ceilings. We hold weekly lectures on the topics of the semester. The theoretical knowledge is deepened by the students during the practical lessons held by the teacher.
Students must complete 2 tests from the topics learned in the lectures. No notes can be used.
During the semester, students can prepare a study corresponding to the topics of the lectures for 10 extra points. The subject of the study must be approved by the teacher. These extra points only count if you get at least 40 points from 2 tests and the drawings.
Kahoot minutes: A maximum of 10 extra points can be earned with Kahoot! it only counts if you scored at least 40 points from 2 tests and the drawings.

SYLLABUS

1. GOALS AND OBJECTIVES

The aim of the subject is for the students to get to know the discussed building structures, to learn their application and selection, the factors influencing them, the design principles and detailed solutions of the structures. In addition to the acquisition of basic knowledge, the goal is to acquire the correct and modern engineering way of thinking.

2. COURSE CONTENT

	TOPICS
LECTURE	1. *Prefabricated reinforced concrete frame buildingsAcélvázas építés* 2. *Wooden constructionTranszparens épületszerkezetek* 3. *Openings* 4. *Curtain walls* 5. *Facade wall structures, layered wallsFémlemez burkolatok* 6. *False ceilings*

During the semester, we teach the principles of structural design with prefabricated frames, the design principles of door and window structures, the design principles of installed facade coverings and the design principles of suspended ceilings.

DETAILED SYLLABUS AND COURSE SCHEDULE

LECTURE

Okta-tási hét	**Topic**	**Compulsory reading; page number (from … to …)**	**Required tasks (assignments, tests, etc.)**	**Completion date, due date**
1.	07.09: Prefabricated reinforced concrete frames, UNIVÁZ Precast reinforced concrete frames, 1st blackboard exercise: UNIVÁZ		UNIVÁZ drawings	3. Week
2.	14.09.: Kahoot minutes, Prefabricated reinforced concrete frames, BVM, 2nd. blackboard exercise: BVM	[2.] 5-41 [1.] IV. 186-187		
3.	21.09.: Prefabricated reinforced concrete frames, Kahoot minutes, steel frame structures	[2.] 5-41	BVM drawings	5. Week
4.	28.09.: Kahoot minutes, wooden frame structures	[1.] IV. 188-189		
5.	05.10.: Kahoot minutes, Openings / traditional and contemporary solutions / metal and plastic structures – shadings	[5.] 17-22. [1.] 403-405		
6.	12.10.: Kahoot minutes, inner doors	[1.] 401-403		
7.	19.10.: 3rd blackboard practice: openings 19.10.: 1st test		Drawings of openings 1st test	9. Week 7. Week

8.	26.10.: Kahoot minutes, Curtainwalls, Curtainwalls			
9.	02.11.: Kahoot minutes, glass walls Curtainwalls, 4th blackboard practice: Curtainwalls, facade coverings	[5.] 79-82. [1.] 406.	Curtain walls and facade drawings	11. Week
10.	09.11.: Kahoot minutes, roof windows and skylights	[5.] 141-149.		
11.	16.11.: Kahoot minutes, Facade systems, layered structures Brick and stone facades			
12.	23.11.: Kahoot minutes, Fibercement and resin facade coverings			
13.	30.11.: Kahoot minutes, Metal claddings, False ceilings 2nd test	[4.]	2nd test	15. Week

3. ASSESSMENT AND EVALUATION

ATTENDANCE ACCORDING TO THE REGULATIONS OF SECTION 45 (2) OF TVSZ PTE AND SECTION 3 OF ANNEX NO. 9, THE STUDENT MAY BE DENIED A GRADE OR QUALIFICATION FOR THE GIVEN SUBJECT ONLY DUE TO ABSENCE IF, IN THE CASE OF A FULL-TIME SUBJECT, THE SESSIONS PROVIDED FOR IN THE SUBJECT THEME ARE MORE THAN 30% OF THEM WERE MISSING

Method for monitoring attendance

The conditions for successful completion of the semester are active class attendance, preparation and presentation of assignments by the deadline, and compliance with formal requirements. An attendance sheet is prepared to confirm the presence of the students, which must be signed by all students present. A delay of more than 30 minutes is considered an absence.

ASSESSMENT

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

Type	Asses	Ratio in the final grade

1st test	*max*	*20 %*
2nd test	*max*	*20 %*
UNIVÁZ	*max*	*12,5 %*
BVM	*max*	*12,5 %*
Openings	*max*	*12,5 %*
Curtain walls and facade systems	*max*	*12,5 %*

Attendance and activity	*max*	*10 %*
Kahoot! minutes and case study	*max*	

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

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

The special rules regarding repair, repetition and replacement must be interpreted and applied together with the general rules of the TVSz.

Both tests and drawing assignments can be made up or corrected once during the first week of the exam period.

Grade calculation as a percentage

based on the aggregate performance according to the following table

Course	**Performance in %**
excellen	85 % ...
good (4)	70 % ... 84 %
satisfact	55 % ... 69 %
pass (2)	40 % ... 54 %
fail (1)	Below 40 %

4. SPECIFIED LITERATURE

In order of relevance. (In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature)

COMPULSORY READING AND AVAILABILITY

[1.] Ernst Neeufert: Architects' data, https://www.uceb.eu/DATA/CivBook/03. Architect_s Data.pdf, PTE library
[2.] Andrea Deplazes: Constructing Architecture,
http://www.sze.hu/~eptansz/Deplazes_Constructing_Architecture.pdf, PTE library
[3.] KNAUF: Ceiling solutions,
https://www.knaufceilingsolutions.com/fileadmin/knaufceilingsolutions/01_products/06_suspension_system/brochure/BR_Knauf_Ceiling_Solutions_System_Solutions_EN.pdf
[4.]RHEINZINK: SP-LINE szerelési útmutató (https://www.rheinzink.com/fileadmin/redaktion/RHEINZINK_GLOBAL/Downloads/Technical-Documents/installation-instructions-sp-line-105217-v001-int.PDF)
[5.] Francis D. K. Ching: Building Construction Illustrated