

DESCRIPTION AND SYLLABUS

Name of the subject in Hungarian:	Building Constructions and Theories
Name of the subject in English:	Bulding Constructions and Theories
Credit value of the subject:	5
The code of the subject in the electronic study system:	BN-BUCOTH-05-GY
Classification of the subject:	Obligatory
Language of instruction (in case of non-Hungarian courses):	English
Institute or department responsible for the subject:	-
Course type and number of contact hours:	Practical, class per week: 4, class per semester: 0
Mode of study: (Full-time / Part-time):	Full-time training
The semester in which the subject is open for registration:	2022/2023 1st semester
Prerequisite(s):	-

THE PURPOSE OF THE SUBJECT, LEARNING OUTCOMES:

The aim is to provide Students a toolkit that includes both theoretical and practical knowledge of the basic elements of architecture (foundation, walls, slabs, roofing, stairs, doors, windows, etc...). The course also highlights not only the technological but also the scheduling and collaborative processes in the making.

SUMMARY OF THE CONTENT OF THE SUBJECT

After a general introduction to building construction and structural classification, the course covers the primary and secondary structures of buildings from the foundation to the roof: foundations, walls, pillars, slabs, stairs, bridges, partitions, windows, cladding, suspended ceilings. The structural and architectural aspects of each structural element are discussed.

In addition to the knowledge of building structure and construction technology, the basic rules of technical-architectural drawing will be covered, and the basic types of plans will be introduced.

STUDENT'S TASKS AND PLANNED LEARNING ACTIVITIES:

1. Practical tasks

Tasks to be completed and handed in on the spot in the practical lesson to help you learn architectural drawing.

To be handed in: downloaded from the Coospace site of the course, printed out and completed in the practical lesson as a pre-edited exercise sheet in pencil, as a hand sketch in scale or as a pencil sketch with a ruler, handed in by the beginning of the next practical.

2. Semester assignment

Students will work individually to produce architectural drawings of a building at different scales and in different levels of detail: plan, section, facade.

They must draw a floor plan, 1 section and 1 elevation of the selected house at 1:200 detail plan, 1 section and 1 façade at 1:100 detail plan, 1 section and 1 façade at 1:100 detail plan, 1 section and 1 façade at 1:100 detail plan and 1 section at 50 detail plan.

Formal requirements: hand-drawn drawing in pencil (optionally in pencil and pencil out) on A/4 or A/3 technical drawing paper.

To be submitted: hand-drawn and edited drawing, delivered in person or online, depending on the location of the outbreak.

Formal checklist:

- structural drawing and material marking is provided - foundation, plinth, wall, roof structure
- are there length measurements?
- are there height dimensions - on plan (level), section, facade
- is there an opening dimension?
- is there a room designation?
- is the installed equipment marked?
- are line thicknesses correct?

Content checklist:

- 1:200 floor plan ready?
- 1:200 section ready?
- 1:200 facade ready?
- 1:100 floor plan ready?
- 1:100 section ready?
- 1:100 facade ready?
- 1:50 section ready?

3. Written exams

During the semester, there will be 2 written Exams, which aim to check the mastery of the general knowledge. In the Examination Paper, will typically be required to prepare scale engineering sketches with explanatory text and answer short answer questions.

EVALUATION OF THE SUBJECT:

Method of course evaluation in case of practical subject:

- Presentation and tasks to be submitted by the deadline

Conditions for completing the course, evaluation criteria in case of a practical subject:

Ticketing is conditional on regular class attendance and the completion of extracurricular activities.

For the classification, a presentation containing the half-yearly portfolio is required.

Criteria for classification:

- class activity, attendance;
- quality of practical tasks;
- quality of semester drawing assignment;
- result of the final examination;
- completion of the above assignments on time.

Points of interest:

- 91-100%: excellent
- 81-90%: good
- 71-80%: satisfactory
- 61-70%: pass
- 0-60%: fail

1. Professional, practical knowledge (60%)

Using tools
Use of software
Workflow planning

2. Theoretical knowledge (20%)

Research

Lexical knowledge
Problem raising
Conclusions

3. Creative skills (10%)

Individual creativity
Innovative thinking
Vocation

4. Soft skills (10%)

Cooperation
Contributing skills
Flexibility
Communication
Presentation
Communication during workflows
Self-assessment

The evaluation is based on the completed work and the documentation and oral report presenting it on unpacking.

The student receives a grade and an oral assessment, and self-reflection exercises take place during the semester.

OBLIGATORY READING LIST:

- Edward Allen and Patrick Rand : Architectural detailing principles: concepts of architectural details, classification of structures, structural systems, 2016
- W.K. Killer: Építőipari képes szakszótár, 2001 (3 language dictionary with very good technical drawings.)