

BUILDING CONSTRUCTION III.
2020/21. 2. SEMESTER

BASICS		
COURSE NAME	Épületszerkezetek III.	Building Construction III.
COURSE CODE(S)	SGYMESESZ33	
DEPARTMENT	Óbuda University Ybl Miklós Faculty of Architecture, Institute of Architecture	
PROGRAMME, TRAINING	Architect BSc	full time
COURSE INSTRUCTOR (Instructor managing the course)	Dr. Gergely Norbert VIZI PhD, Assistant Professor vizi.gergely.norbert@ybl.uni-obuda.hu	consulting hours: by prior arrangement
INSTRUCTORS, LECTURERS	Erika Soltész soltesz.erika@uni-obuda.hu	consulting hours: by prior arrangement
PRE-REQUIREMENT	- at least one semester of building construction (<i>subject name and code, if any</i>) - Architectural / engineer drawing skills with ruler/ computer - engineering thinking	
HOURS OF LECTURES (WEEKLY)	2 hours (2x 45')	
HOURS OF CLASSROOM PRACTICE/ LAB EXERCISE (WEEKLY)	2 hours (2x45')	
FIELD AND TRAINING (WEEKLY)	0 hours	
ASSIGNMENT	Midterm assignment, tests and exam	
CREDITS	4 credits (ECTS)	
AIM OF THE COURSE, BRIEF DESCRIPTION	<ul style="list-style-type: none"> To get to a common knowledge on basic building structures and systems in Central Europe such as foundation-, wall-, slab, roof- and wall cladding structures. To learn the requirements and applicability of this structures and To get familiar with the required form and content of an execution plan with the help of the end term plan 	
RECOMMENDED LITERATURE		
REQUIRED TECHNICAL APPLIANCES/ SOFTWARE	The use of mobile phones is prohibited during the examinations. In the case of online education: Contact: Neptun, E-learning and E-mail. Education materials: According to E-learning Lessons: E-learning, Zoom	

SCHEDULE OF THE SEMESTER				
WEEK	LECTURE	LECTURER	FORM OF PRACTICE	PROGRAM OF PRACTICE
1 08 Sept.	Introduction Getting to know each other DICTIONARY DESIGNING LAYER ORDER			Designing layer order for wall, slab, floor, footing Handing out Project work #1 (execution plan)
2	Light weighted construction, wood and steel frame			
3	FOUNDATIONS, FOOTING, WALLS, LINTEL BEAMS. • Design questions, External envelope impacts and requirements			Wall section S=1:20- sketch #1
4	Student presentations: „Foundations, footings, walls, lintels in my home country”			Consultation, workshop
5	ROOF STRUCTURES, HABITABLE ATTICS I.			Roof structures 1:50 sketch #2
6	ROOF STRUCTURES, HABITABLE ATTICS II.			Consultation, workshop
7	ROOF STRUCTURES, HABITABLE ATTICS III.			Habitable Attics 1:10 Chalkboard task #1
8	ROOF STRUCTURES, HABITABLE ATTICS IV.			1st. TEST (wall structures and habitable attics)
9	WALL CLADDING KITS I. • Design questions, systems Substructure systems			Planar coordination of doors and windows, placement solutions in layered walls Chalkboard task #2 Handing out Project work #2 Consultation, workshop
10	WALL CLADDING KITS II. • Design questions, systems Substructure systems			Views and sections of walls with back-ventilated cladding, design rules - sketch #3
11				
12	WALL CLADDING KITS III. • Design questions, systems Substructure systems			Detail design
13	CURTAIN WALL STRUCTURES Design questions, systems			2nd. TEST (Wall claddings, window and door constructions)
14	Review, conclusion. Corrective test			Handing in the Project works (End Term Plan) Evaluation

REQUIREMENTS FOR THE COMPLETION OF THE SEMESTER			
MID-SEMESTER TASKS AND TESTS			
Requirement	Description	Value (point, %, grade)	
PARTICIPATION AT LESSONS	The practice lessons can be missed up to three times (see § 46 ETVSZ)	-	
IN CASE OF ABSENCE FROM LESSONS AND EXAMINATIONS	Absence is considered to be justified with a medical certificate presented.	-	
Short description of the TASKS END of TERM PLAN	The task is to draw a construction plan and detail of a family house with habitable attic (Project work #1) and an external wall with back-ventilated cladding (Project work #2) on A3 and A2 size papers. The sketches have to be prepared by pencil; the drawings can be drawn by CAD program.	<ul style="list-style-type: none"> • Habitable attic/roof structure floor plan (part) 1:50, 1:25 • Wall section 1:50, 1:25 • View of wall with back-ventilated cladding 1:50, 1:25 • Details, min 2x2pcs, 1:10, 1:5, 1:2 • Sketches 	50 points (min. 30)
CHALKBOARD TASK	These tasks give a practical implementation of lectures they give method and help in the End of Term Plan. These tasks should be done in the class and should be handed in at the end of the lecture.	Structural details of habitable attics End of class, on A3 paper	5 points (min.3)
CHALKBOARD TASK	The teacher will mark the tasks, and hand it back at the next class and if they worth less than min. point the student should re-do it at home and hand it in the next time.	Planar coordination of doors and windows, placement solutions in layered walls End of class, on A3 paper	5 points (min.3)
TEST	The goal of the TWO TESTS is to check the general knowledge acquired from the subject. In the test, we will basically require drawings worthy of an engineer with explanatory text. You should acquire 60% in the test to pass it.		2x20=40 points (min. 2x12)
exam	Like in the tests, there will be tasks where you have to draw and questions where you have to give written answer.		
TOTAL			100 points

SEMESTER CLOSING REQUIREMENTS					
CONDITIONS FOR OBTAINING A SIGNATURE	You have to do all of the tasks and have at least the minimum points from all of them separately. You have not skipped lectures and/or practice more than 3 times				
SEMESTER GRADE	0-59 Point	60-69	70-79	80-89	90-100
	1 - FAIL	2 - PASS	3 - SATISFACTORY	4 - GOOD	5 - EXCELLENT
CONDITIONS FOR OBTAINING AN OFFERED GRADE	16 out of the 20 points has to be reached in the tests and at least 80 points together with the semester tasks.				
	80-89 Point			90-115 Point	
	4 - GOOD			5 - EXCELLENT	
CONDITIONS FOR ADMISSION TO THE EXAM	Only students who have already obtained a signature can take the exam. During the exam period, the student has to register for the exam in the Neptun. The test is a 60-minute written test with a total value of 100 points.				
EXAM GRADE	0-59 Point	60-69	70-79	80-89	90-100
	1 - FAIL	2 - PASS	3 - SATISFACTORY	4 - GOOD	5 - EXCELLENT
FINAL GRADE	0-119 Point	120-139	140-159	160-179	180-200
	1 - FAIL	2 - PASS	3 - SATISFACTORY	4 - GOOD	5 - EXCELLENT