

APPLIED STUDIES I.
2021/22. 1. SEMESTER

BASIC DATA		
COURSE NAME	Alkalmazott stúdiók I.	Applied Studies I.
COURSE CODE(S)	SGYMEZASD1	
DEPARTMENT	Óbuda University Ybl Miklós Faculty of Architecture, Institute of Architecture	
PROGRAMME, TRAINING	Architect MSc	full time
COURSE INSTRUCTOR (Instructor managing the course)	András HORKAI, Assistant Lecturer	horkai.andras.laszlo@ybl.uni-obuda.hu
INSTRUCTORS, LECTURERS	Dr. Viktória SUGÁR PhD, Associate Professor	sugar.viktoria@ybl.uni-obuda.hu
PRE-REQUIREMENT	knowledge of CAD programs, 3D modeling programs, digital visualisation	
HOURS OF LECTURES (WEEKLY)	2 hours	
HOURS OF CLASSROOM PRACTICE/ LAB EXERCISE (WEEKLY)	2 hours	
FIELD AND TRAINING (WEEKLY)	0 hours	
ASSIGNMENT	Midterm assignment and exam	
CREDITS	4 credits (ECTS)	
AIM OF THE COURSE, BRIEF DESCRIPTION	The aim of the course is to get students acquainted with technologies that help us better explore our built and natural environment.	
RECOMMENDED LITERATURE	<ul style="list-style-type: none"> materials uploaded to the E-Learning page of the course Kensek, K. M. (2014.). Building Information Modeling. New York: Routledge. Biljecki, F., Ledoux, H., & Stoter, J. (2016). An improved LOD specification for 3D building models. Computers, Environment and Urban Systems, 59, 25-37. Biljecki, F., Stoter, J., Ledoux, H., Zlatanova, S., & Çöltekin, A. (2015.). Applications of 3D City Models: State of the Art Review. International Journal of Geo-Information, 4., 2842-2889. 	
REQUIRED TECHNICAL APPLIANCES/ SOFTWARE	The use of mobile phones is prohibited during the examinations. In the case of online education: <ul style="list-style-type: none"> 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	Introduction Basic BIM.	A. HORKAI, V. SUGÁR		-
2	BIM-compatible Building Element Classification Systems. Information Modelling – LOD-levels. Building models, city models.	A. HORKAI, V. SUGÁR		Description of Project Task.
3	How to create city models in ArchiCAD? Step by step guideline	A. HORKAI, V. SUGÁR		Forming of 2+2 groups deadline.
4	-	A. HORKAI, V. SUGÁR		Modelling, consultation on request
5	Milestone 1: Discussion of the chosen simulation topic + possible software / applications per each group.	A. HORKAI, V. SUGÁR		-
6	-	A. HORKAI, V. SUGÁR		Modelling, consultation on request
7	Milestone 2: Presentation of the chosen simulation topic (group) + chosen software / applications (subgroup)	A. HORKAI, V. SUGÁR		-
8	-	A. HORKAI, V. SUGÁR		Simulations, consultation on request
9	Milestone 3: Presentation of city models (subgroup)	A. HORKAI, V. SUGÁR		-
10	-	A. HORKAI, V. SUGÁR		Simulations, consultation on request
11	Milestone 4: Presentation of software application on city models (subgroup)	A. HORKAI, V. SUGÁR		
12	-	A. HORKAI, V. SUGÁR		Presentation, consultation on request
13	FINAL PRESENTATION	A. HORKAI, V. SUGÁR		

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.	-
PROJECT TASK	<ul style="list-style-type: none"> In a team, Students construct a Building Information Model (BIM) of a designated building / building block with different LOD-s (Level of Details) based on field measurements and existing documentation. During the semester 1 project task must be completed. A task with a minimum score of 50% is considered to be successful. The task can be replaced at one time by a replaced submission. 	100 points
TOTAL		100 points

SEMESTER CLOSING REQUIREMENTS					
CONDITIONS FOR OBTAINING A SIGNATURE	Preparation of the Project Task. The point obtained for the task must reach the available point min. 50%.				
SEMESTER GRADE	0-49 Point	50-62	63-75	76-89	90-100
	1 - FAIL	2 - PASS	3 - SATISFACTORY	4 - GOOD	5 - EXCELLENT