

Basic data of the subject	
Academic Unit:	Faculty of Architecture, Design and Wood Technology
Program:	Green Architecture and Interior Design
Subject title:	Modeling with 3D Technologies
Study level:	Master
Subject status:	Mandatory
Years of study:	I
Number of hours per week:	3
Value of credits - ECTS:	5
Time / location:	UASF
Lecturer of the subject:	Bashkim Çerkini
Contact details:	bashkim.cerkini@ushaf.net
Subject description:	
	Familiarizing with 3D scanning technologies, knowing the 3D printing technologies, materials used in 3D printing technologies advanced knowledge of 3D Modeling and its concepts, Identification and selection of software programs used in 3D scanning and printing. Intervention in scanned design through software programs. Scanning different objects, changing shape and size, print redesigned objects.
Purpose of subject:	
	Familiarizing with 3D scanning technologies, materials for 3D printing technology advanced knowledge in 3D Modeling and its Concepts, Identification and selection of software programs used in 3D scanning and 3D printing. Intervention in scanned design through software programs. Scanning different objects, changing shape and size, Print redesigned objects.
Expected learning outcomes:	
	After successful completion of this subject, students will be able to: <ul style="list-style-type: none"> • Classify the appropriate programs for 3D scanning and printing, • Scanning 3D objects and Printing 3D objects • To gain knowledge for materials used in 3D printing, • Optimize scanned objects, change them by interfering with various programs.

Contribution to student workload (which should correspond to the students learning outcomes)			
Activity	Hours	Days/week	Total
Lectures	2	13	26
Theoretical / laboratory exercises	2	12	24
Practical work	4	4	16
Contacts to the Lecturer / Consultations	1	5	5
Field exercises	3	3	9
Tests, student seminars	2	2	4
Home work	4	5	20
Time of self-study (in the library or home)	2	9	18
Time spent in assessment (tests, quiz, final exam)	4	1	4
Projects, presentations, etc.	4	1	4
Total			125
Teaching methodology:	Lectures and exercises with project assignments combined with case analyzes and classroom discussions		
Assessment methods:	For students that have access examination Projects 50%, Written exam 50%		
Literature			
Basic literature:	<ol style="list-style-type: none"> 1. 3D Photorealistic Rendering: Interiors & Exteriors with V-Ray and 3ds Max, Jamie Cardoso 2. HAMAD M.; AutoCAD 2019 3D Modeling, 3. DESIGN FOR 3D PRINTING Samuel N. Bernier, Bertier Luyt, and Tatiana Reinhard 		
Additional literature:			

Designed plan of teaching:	
Weeks	Lecture to be held
Week 1:	Introduction to subject and syllabus description
Week 2:	Modeling theory 3D

Week 3:	Modeling of interior objects (chairs, armchairs, ladders etc.
Week 4:	Parametric modeling (Modeling of interior objects through parametric design)
Week 5:	Modeling of complex objects with 3D softwares
Week 6:	Introduction on 3D scanning
Week 7:	3D Scanning
Week 8:	First intermediate test
Week 9:	3D Scanning
Week 10:	Principals of 3D print
Week 11:	Materials used for 3D printing
Week 12:	Design printing (modeled and scanned on 3D)
Week 13:	Second intermediate test
Week 14:	Project presentations
Week 15:	Project presentations

Academic Policies and Rules of Conduct:
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<i>Regular attendance, keeping calm and active engagement in dialogue during lectures and exercises is mandatory.</i>
