

Basic course data	
Academic unit:	Faculty of Architecture, Design and Wood Technology
Program:	Design and Construction of Wooden Products
Course title:	Wood gluing
level:	Bachelor
Course status:	Mandatory
Year of studies:	II
Number of hours per week:	3
Value on credit - ECTS:	4
Subject teacher:	Prof. As. Dr. Ramadan Topuzi
Contact details:	ramadan.topuzi@ushaf.net
Course description:	
	The course deals with the knowledge about wood gluing and wood-based materials, including the physico-chemical principles of gluing. Classification of adhesives and their selection. Factors that condition the quality of the adhesive. Physical properties of adhesives, including health and safety aspects. Viscosity and rheology of the adhesive. Types of adhesives and the technological process of gluing. Application of adhesive and its quality control based on various tests according to standards.
Course objectives:	
	The course aims to prepare students with the necessary knowledge about wood gluing and wood-based materials. Knowledge of physico-chemical principles of gluing. Classification of adhesives and their proper selection for various wooden constructions. Assessment of adhesive quality.
Expected learning outcomes:	
	After the successful completion of this course, student will be able to: <ul style="list-style-type: none"> • Physico-chemical principles of gluing; • Adhesion, cohesion and hardening of the adhesive; • Adhesive properties and selection criteria; • Natural adhesives and the main types of artificial ones;

	<ul style="list-style-type: none"> • Preparation of adhesive material, adhesive and main ways of gluing; • Ways of mechanical and chemical testing of the adhesive; • Adhesive quality assessment and standards. • The way of their professional realization. 		
Contribution to student workload corresponding to student learning outcomes			
Activity	Hours/Day	Week	Total
Lectures	2	14	28
Theoretical / laboratory exercises	1	14	14
Practical work	3	1	3
Contacts with the teacher / consultations	1	11	11
Field exercises	3	1	3
Test			
Homework	2	2	4
Student's own study time (in the library or at home)	2	10	20
Final preparation for the exam	2	7	14
Time spent on assessment (final exam)	1	2	2
Projects, presentations, etc.	1	1	1
Total			100
Teaching methodology:	Lectures and exercises combined with analysis cases and class discussions		
Evaluation method:	Seminar paper (Project Course) 30% Final exam 70% The exam is held with open questions		
Literature			
Basic literature:	<ol style="list-style-type: none"> 1. Ajdinaj D., Marku P. Ngjitja e Drurit (2008) 2. Bajraktari A, Marku P, Përpunimi sipërfaqësor i drurit (2006) 3. Lato E, Quku D, Studim druri (Struktura makroskopike dhe vetitë e drurit) 2008 		
Additional literature:	<ol style="list-style-type: none"> 4. Dimoshi S. Makinat dhe instrumentat 		

	prerës (2006) 5. Diomoshi S, Konica A, Materiale ndihmëse në industrinë e drurit (1998)
Designed lesson plan:	
Week	The lecture that will take place
First week:	General knowledge
Second week:	Physico-chemical principles of gluing
Week third:	Adhesion, cohesion and hardening
Week four:	Wood surface properties and physical properties
Week fifth:	Properties of adhesives and their selection
Week sixth:	Natural adhesives
Week seven:	Aminoplastic and phenolic adhesives
Week eight:	Epoxy and polyurethane adhesives (PU)
Week ninth:	Hot Melt adhesives
Week ten:	Preparation of material, adhesive and application
Week eleven:	Pressure regime, equipment and machinery
Week twelve:	Ways of gluing: microwave, veneering, mixed gluing
Week thirteen:	Familiarity with gluing technology in practice
Week fourteen:	Ways of mechanical and chemical testing of gluing
Week fifteen:	Assessment of gluing quality and standards
Academic policies and etiquette:	
Regular attendance, keeping calm and active engagement in dialogue during lectures and exercises is mandatory.	