

**School of Fine Arts Design and Architecture / Architecture (English)**  
**2023 - 2024 Academic Year**  
**MATERIAL and TECHNOLOGY**  
**Syllabus**

<b>Course Description</b>					
<b>Name</b>	<b>Code</b>	<b>Semester</b>	<b>T+A Hour</b>	<b>Credit</b>	<b>ECTS</b>
MATERIAL and TECHNOLOGY	ARC1223890	Spring Semester	2+0	2	2
<b>Prerequisites Courses</b>					
<b>Recommended Elective Courses</b>					
<b>Language of Instruction</b>	English				
<b>Course Level</b>	First Cycle (Bachelor's Degree)				
<b>Course Type</b>	Required				
<b>Course Coordinator</b>	Assist.Prof. Mustafa Adil KASAPSEÇKİN				
<b>Name of Lecturer(s)</b>	Assist.Prof. Mustafa Adil KASAPSEÇKİN				
<b>Assistant(s)</b>					
<b>Aim</b>	This course aims to inform students on different types of materials by means of focusing on the inter-relationships between products, material technologies and material performance.				
<b>Course Content</b>	This course contains; Metal technologies ,Metal product examples,Plastic material technologies ,Plastic product examples,Ceramic material technologies,Ceramic product examples,Midterm exam,Leather,Nano materials,Wood and other cellulose based materials,Paints and protectors,Paints and protectors,Material selection,Material selection.				
<b>Course Learning Outcomes</b>			<b>Teaching Methods</b>	<b>Assessment Methods</b>	
1. Gain knowledge on engineering and design materials.			16, 18, 9	A, E	
2. Can make material selection for design projects.			16, 18, 9	A, E	
3. Can relate their designs with different materials and manufacturing techniques.			16, 18, 9	A, E	
4. Gain knowledge on technological developments, standards, environmental and recycling issues.			16, 18, 9	A, E	
<b>Teaching Methods</b>	16: Question - Answer Technique, 18: Micro Teaching Technique, 9: Lecture Method				
<b>Assessment Methods</b>	A: Traditional Written Exam, E: Homework				
<b>Lecture Schedule</b>					
<b>Sequence</b>	<b>Topics</b>	<b>Preliminary Preparation</b>			
1	Metal technologies				
2	Metal product examples				
3	Plastic material technologies				
4	Plastic product examples				
5	Ceramic material technologies				
6	Ceramic product examples				
7	Midterm exam				
8	Leather				
9	Nano materials				
10	Wood and other cellulose based materials				
11	Paints and protectors				
12	Paints and protectors				
13	Material selection				
14	Material selection				
<b>Evaluation Methods</b>		<b>Weight(%)</b>			
Midterm Exam		50			
General Exam		50			

<b>Resources</b>
<p>Students are expected to take notes.Fındık, F. (2010) Malzeme ve Tasarım Bilgisi. Seçkin Yayınevi-Ankara.  Akkurt, S. (2007) Plastik Malzeme Bilimi Teknolojisi ve Kalıp Tasarımı. Birsen Yayınevi- İstanbul.  Ashby, M, Johnson. K. (2002) Materials and Design: The art and science of materials, Butterworth-Heinemann, Burlington.  Lefteri, C. (2014) Materials for Design. Lawrence King Publishing, London.  Lefteri, C. (2004) Metals-Materials for Inspirational Design, Rota Vision.  Lesko, J. (1998) Materials and Manufacturing Guide Industrial Design, John Wiley</p>