

School of Fine Arts Design and Architecture / Architecture

2023 - 2024 Academic Year

TECHNICAL DRAWING I

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
TECHNICAL DRAWING I	MIM1223990	Spring Semester	2+2	3	5
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	Turkish				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Required				
Course Coordinator	Assist.Prof. Gizem CAN				
Name of Lecturer(s)	Lect. Işıkcan KESKİN, Assist.Prof. Gizem CAN, Lect. Selin KESKİNEL, Lect.Dr. İbrahim YILMAZ				
Assistant(s)	Res. Asst. Bengisu Öten				
Aim	<p>Technical Drawing aims to enable students to read and create detailed and accurate architectural drawings competently while developing the mental skills necessary to create these drawings using drawing techniques. Hand drawing is used to ensure hand-eye coordination. Ultimately, the goal is to empower students to produce high-quality drawings and contribute effectively to architectural projects. The Technical Drawing 1 course aims to help students conceptualize a three-dimensional model and accurately transform this model into a two-dimensional drawing using technical drawing equipment. Additionally, it enables the comprehension of two-dimensional drawings in three dimensions. The course also targets the understanding of drawing techniques at scales of 1/100 and 1/200, aiming to develop the skill of creating architectural project sets at these scales.</p>				
Course Content	<p>This course contains; Introduction to technical drawing, Explanation of drawing equipment and materials, Explanation of technical writing and scanning methods, Preparation of the technical drawing layout, Architectural Writing, Standard Paper Sizes, Folding Sheets ,Line thickness, line types, parallel drawing at different angles and hatching exercises, writing exercises & Feedback,Explanation of simple geometric drawing systematics, Orthographic Projection Studies (drawing an elevation) &Feedback ,Orthographic Projection Principles, Drawing a section &Feedback ,Project reading, The reading of plan, section and view and understanding through project example &Feedback, Drawing an elevation from the plan in epure layout ,Project reading, The reading of plan, section and view and understanding through project example &Feedback, Drawing a section from the plan in epure layout ,Project reading, General Feedback, Technical drawing representation and exercises for the profession, Axonometric drawing exercise (Military exercise),Creating a 2D drawing on the epure plane usind a 3D model.,Technical drawing representation and applications for the profession, Learning the required standards of drawing technique at 1/100 scale and reading, understanding, and drawing the floor plan through the architectural preliminary project at 1/100 scale &Feedback, Ground Floor Plan study,Technical drawing representation and applications for the profession, Learning the required standards of drawing technique at 1/100 scale and floor plan drawing on architectural preliminary project at 1/100 scale &Feedback, 1st Floor Plan study+ Roof Plan,Technical drawing representation and applications for the profession, Learning the required standards of drawing technique at 1/100 scale and section drawing-drawing technics on architectural preliminary project at 1/100 scale &Feedback, A-A section & B-B section & C-C section,Technical drawing representation and applications for the profession, Learning the required standards of drawing technique at 1/100 scale and elevation drawing-drawing technics on architectural preliminary project at 1/100 scale &Feedback, Elevation drawings (South-west-east-north),Drawing a site plan in line with the required standards of 1/200 scale drawing technique &Feedback,General Feedback & Questions & Re-drawing related sheets (up to your lecturer's decision).</p>				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
1-Performs hand-eye coordination.			6, 9	E	
8.Creates a project set at a scale of 1/100. At this scale, reads and draws plan/section/elevation drawings.			6, 9	E	
9.Creates a site plan at a scale of 1/200. At this scale, reads and draws plan/section/elevation drawings.			6, 9	E	
1. Employ the necessary technical drawings to illustrate the format of the existing or arising in the mind existing objects			6, 9	F	
2. Visualize an object of his/her own design, using two and three dimensional drawing techniques			6, 9	F	
3. Using his/her professional definitions; express verbally his/her individual works			6, 9	F	
4. Apply the graphic techniques in design			6, 9	F	
5. Develop the ability of working in a studio environment			6, 9	F	
6. Learn to use their drawing skills with professional terms			6, 9	F	
Teaching Methods	6: Experiential Learning, 9: Lecture Method				
Assessment Methods	E: Homework, F: Project Task				
Lecture Schedule					
Sequenc e	Topics	Preliminary Preparation			
1	Introduction to technical drawing, Explanation of drawing equipment and materials, Explanation of technical writing and scanning methods, Preparation of the technical drawing layout, Architectural Writing, Standard Paper Sizes, Folding Sheets				
2	Line thickness, line types, parallel drawing at different angles and hatching exercises, writing exercises & Feedback				
3	Explanation of simple geometric drawing systematics, Orthographic Projection Studies (drawing an elevation) &Feedback				
4	Orthographic Projection Principles, Drawing a section &Feedback				
5	Project reading, The reading of plan, section and view and understanding through project example &Feedback, Drawing an elevation from the plan in epure layout				
6	Project reading, The reading of plan, section and view and understanding through project example &Feedback, Drawing a section from the plan in epure layout				
7	Project reading, General Feedback, Technical drawing representation and exercises for the profession, Axonometric drawing exercise (Military exercise)				
8	Creating a 2D drawing on the epure plane usind a 3D model.				

Lecture Schedule		
Sequenc e	Topics	Preliminary Preparation
9	Technical drawing representation and applications for the profession, Learning the required standards of drawing technique at 1/100 scale and reading, understanding, and drawing the floor plan through the architectural preliminary project at 1/100 scale &Feedback, Ground Floor Plan study	
10	Technical drawing representation and applications for the profession, Learning the required standards of drawing technique at 1/100 scale and floor plan drawing on architectural preliminary project at 1/100 scale &Feedback, 1st Floor Plan study+ Roof Plan	
11	Technical drawing representation and applications for the profession, Learning the required standards of drawing technique at 1/100 scale and section drawing -drawing technics on architectural preliminary project at 1/100 scale &Feedback, A-A section & B-B section & C-C section	
12	Technical drawing representation and applications for the profession, Learning the required standards of drawing technique at 1/100 scale and elevation drawing-drawing technics on architectural preliminary project at 1/100 scale &Feedback, Elevation drawings (South-west-east-north)	
13	Drawing a site plan in line with the required standards of 1/200 scale drawing technique &Feedback	
14	General Feedback & Questions & Re-drawing related sheets (up to your lecturer's decision)	
Evaluation Methods		Weight(%)
Midterm Exam		50
General Exam		50

Resources
<p>To be provided by the instructors</p> <ol style="list-style-type: none"> 1.Öztepe, H. (1997). Teknik Resim I, Eğitim Matbaası, İstanbul 2.Öztepe, H. (1997). Teknik Resim II, Eğitim Matbaası, İstanbul 3.Ching, F.D.K. (1996). Architectural Graphics, Van Nostrand Reinhold, New York 4.Ching, F.D.K. (2010). Design Drawing, John Wiley & Sons, Inc. New York 5.Gürer, L. (2000). Perspektif ve Gölge, Birsen yay. İstanbul 6.Hotan, H. (2000). Mimari Perspektif ve Gölge, YEM, İstanbul 7.Onat, E. (2010). Perspektif ve Perspektifde Gölge Çizimi, Efil yay. İstanbul 8.Şahinler, O. (1990). Mimarlıkta Teknik Resim, Yay, İstanbul