

Course Code	Course Name	Year/Semester	Theory	Practice	Credits	ECTS
IAED 3104	Material and Construction Techniques for Furniture Design	2024-2025/SPRING	2	2	3	4

Level of Course: Undergraduate

Course Type: Mandatory Course

Language of

Instruction: English

Course time: Wednesday, 13:30-17:30

Course classroom: B2-08 (STD S1)

Mode of Delivery: One on one critique, Class Teaching, Presentation, Assignments.

Prerequisites and

Co-requisites: IAED 1102 – Technical Drawing II (Prerequisite)

Course Coordinator: Asst. Prof. Dr. M.Uğur Kahraman

Name of Lecturer(s): Asst. Prof. Dr. M.Uğur Kahraman
Lec. Gamze Akyol

Course Teaching

Assistant: Res. Asst. Ferhat Koyuncu

Course Objectives: The aim of this course is to learn conventional solid wood joinery methods and their technical drawings. In this course, which covers detailed drawings of furniture and various views, contemporary box furniture corner joinery techniques and bracket applications are also included.

Course Description: This course provides an in-depth exploration of furniture joinery techniques and detailed technical drawing, exclusively through hand-drawing methods. Participants will gain practical skills in creating precise and detailed drawings of furniture joints and designs, emphasizing traditional craftsmanship and manual drafting techniques without the use of digital tools.

Learning Outcomes:

- To learn more about the basic qualities of materials by their direct use
- To develop a design sense which is informed by the fabrication process so that forms, structure and details speak about the methods with which they are made.
- To help the student plan a project that is within the scope of the course in terms of time and technique.
- Develop understanding of the logic of sequence of fabrication.
- To learn the technical, practical and theoretical features of furniture design in terms of materials, design process, construction.

Language:

The studio classes and discussions will be in English. Developing your verbal language skills will be very important in acquiring the disciplinary terminology as well as daily communication at the class.

**Planned Learning
Activities and
Teaching Method:**

Learning/Teaching Method: This is a studio course and students learn about design process by getting directly involved in the process. The studio practice is supported by lectures and group/one-o-one critique sessions. The main teaching medium in studio is individual critiques.

Project Development: Throughout this course, a series of assignments focused on the main topic will be provided. In the first half of the semester, the assignments will primarily concentrate on solid wood furniture joinery techniques. In the second half, the focus will shift to creating detailed drawings of furniture, including various views and perspectives.

Class Participation: Regular attendance of all enrolled classes is expected. Do not be late to the class. **Attendance will be taken through your signature within the first quarter of the class; if you come later you will be considered half-attended.** At the end of the Semester, your attendance will be reported on UBS system. Attendance is compulsory and in case of absenteeism of **more than 20% for the practice and %30 for the theory, the system will automatically grade you "FX"**. If you miss a class, it is your responsibility to 'make up' all work, including items discussed in class.

Academic integrity & plagiarism: Academic integrity is the pursuit of scholarly activity based on the values of: honesty, trust, fairness, respect and responsibility. Practicing academic integrity means never plagiarizing or cheating, never misrepresenting yourself, never falsifying information, never deceiving or compromising the work of others. Basically this means, either intentionally or unintentionally, using the words or ideas of someone else without giving credit, it's strictly forbidden.

Course Text books: There is no specific textbook for this course. Students are required to study the recommended reading text books such as

1. Fine Wood Working on Planes and Chisels, The Taunton Press
2. Designing Furniture by Seth Stern, The Taunton Press
3. Tilley, A.R., Henry Dreyfuss Associates (2002). The Measure of Man and Woman: Human Factoring Design. New York: John Wiley & Sons, Inc. ISBN 0471099554
4. The Art of Making Furniture by John Makepeace, Sterling Publishing Co.
5. The Unknown Craftsman by Soetsu Yanagi
6. Fine Woodworking on Joinery, The Taunton Press
7. The Fine Art of Cabinet Making by James Krenov, Van Nostrand Reinhold Co.

Key Works: In this studio course lectures and assignments mainly focuses on furniture cornering and joints.

Specific Rules:

1. **Be punctual. Punctuality is a sign of respect toward yourself and the others.**
2. Show respect for all the people and property around you.
3. Be responsible for your actions and meet all expectations.
4. Follow directions the first time they are given.
5. Students should use the Internet at school for academic purposes only.
6. It is forbidden to record classes with any type of device.

Communication: Students are encouraged to visit the professor during their Office Hours. If you cannot make it to announced office hours, please make individual arrangements via e-mail. However, do not expect the professor and the research assistant to respond at length via e-mail to questions of content, definition of terms, grading questions etc. If you have a question that requires a substantive response, please set up an appointment to speak with one of us.

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Date	Week	Chapter Topic	Take-home exercise
05.02.25	1	Brief explanation of the course and course materials and groups	N/A
12.02.25	2	In-Class Drawing (Manuel Furniture Drawing) -Technical Representation of Joints and Connections -Technical Drawing Review and Corrections	N/A
19.02.25	3	In-Class Drawing (Manuel Furniture Drawing) -Technical Representation of Joints and Connections -Technical Drawing Review and Corrections	N/A
26.02.25	4	In-Class Drawing (Manuel Furniture Drawing) -Technical Representation of Joints and Connections -Technical Drawing Review and Corrections	N/A
05.03.25	5	In-Class Drawing (Manuel Furniture Drawing) -Technical Representation of Joints and Connections -Technical Drawing Review and Corrections	N/A
12.03.25	6	In-Class Drawing (Manuel Furniture Drawing) -Technical Representation of Joints and Connections -Technical Drawing Review and Corrections	N/A
19.03.25	7	In-Class Drawing (Manuel Furniture Drawing) -Technical Representation of Joints and Connections -Technical Drawing Review and Corrections	N/A
	8	MIDTERM EXAM	N/A
02.04.25	9	In-Class Drawing (Manuel Furniture Drawing) -Section and Elevation Views for Furniture -Dimensioning and Annotation Standards -Detailing Small Components and Fasteners -Technical Drawing Review and Corrections	N/A
09.04.25	10	In-Class Drawing (Manuel Furniture Drawing) -Section and Elevation Views for Furniture -Dimensioning and Annotation Standards -Detailing Small Components and Fasteners -Technical Drawing Review and Corrections	N/A
16.04.25	11	In-Class Drawing (Manuel Furniture Drawing) -Section and Elevation Views for Furniture -Dimensioning and Annotation Standards -Detailing Small Components and Fasteners -Technical Drawing Review and Corrections	N/A

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**Course Contents*:
(Weekly Lecture Plan)**

23.04.25	12	In-Class Drawing (Manuel Furniture Drawing) -Section and Elevation Views for Furniture -Dimensioning and Annotation Standards -Detailing Small Components and Fasteners -Technical Drawing Review and Corrections	N/A
30.04.25	13	In-Class Drawing (Manuel Furniture Drawing) -Section and Elevation Views for Furniture -Dimensioning and Annotation Standards -Detailing Small Components and Fasteners -Technical Drawing Review and Corrections	N/A
07.05.25	14	In-Class Drawing (Manuel Furniture Drawing) -Section and Elevation Views for Furniture -Dimensioning and Annotation Standards -Detailing Small Components and Fasteners -Technical Drawing Review and Corrections	N/A
14.05.25	15	In-Class Drawing (Manuel Furniture Drawing) -Section and Elevation Views for Furniture -Dimensioning and Annotation Standards -Detailing Small Components and Fasteners -Technical Drawing Review and Corrections	N/A

FINAL EXAM

*PLEASE NOTE: Details of the syllabus and course schedule are subject to minor changes that will be announced in class.

Grading: Midterm and final jury responses will be evaluated for accuracy, thoughtfulness and clarity. Assignments will be evaluated for content, quality of ideas and clarity of presentation (including both writing and graphics). **If total assessment grade is lower than 50, student needs to repeat the course.**

**Assessment Methods and
Criteria :**

METHODS	EFFECTS ON GRADING
In-Class Drawings	25%
Midterm Exam	25%
Final Project	50%

ECTS Workload Table :

ACTIVITIES	NUMBER	HOUR	WORKLOAD
Course Teaching Hours	13	4	52
Project Drawings	13	1	13
Midterm Preparation	1	12	12
Midterm Exam	1	4	4
Final Preparation	1	15	15
Final Jury	1	4	4
Total Workload	0	0	100
Total workload/25			100/25
ECTS			4

GRADING AND EVALUATION

The students' progress will be evaluated throughout the semester. Students' grades point **lower than 50** will be considered as failed.
Grade Scale:

GRADE	MARKS	VALUE
A+		
A	95-100	4.00
A-	85-94	3.70
B+	80-84	3.30
B	75-79	3.00
B-	65-74	2.70

GRADE	MARKS	VALUE
C+	60-64	2.40
C	55-59	2.20
C-	50-54	1.70
D+	45-49	1.30
D	40-44	1.00
F	0-39	0.00