



**Department of Architectural Engineering**

**College of Engineering**

**Cihan University - Sulaimaniy**

**Subject: Freehand Drawing I**

**Course Book – Stage 2 – Semester 1**

**Lecturer's name: Ass.Professor Binaee Yaseen Raof**

**Academic Year: 2023/2024**

**Course Book**

<b>1. Course name</b>	Freehand Drawing I
<b>2. Lecturer in charge</b>	Binaee Yaseen Raof
<b>3. Department/ College</b>	Architectural Engineering
<b>4. Time (in hours) per week</b>	Practical: (3) hours
<b>5. Office hours</b>	Monday 1:30 PM to 3:30 PM
<b>6. Course code</b>	
<b>7. Teacher's academic profile</b>	Bachelor of architectural engineering / Sulaimani University Msc. Renewable Energy and Architecture
<b>8. Keywords</b>	Station points, Eye level, Board control, Perspective, vanishing points, Measuring the proportions, Freehand sketch, presentation.
<b>9. Course overview:</b>	
<p>A freehand drawing is simply a drawing done by hand without the use of tools or aids such as templates, stencils, etc. This craft is essential for any designer and architect. It is act of drawing that shows how to see and observe. It gives in seeing and recording forms accurately, cultivates the feeling for relative proportions and shapes. It helps develop spatial imagination. It is a method of developing the see critically affects the way of thinking. Freehand drawing trains the eye to believe what it sees as the observer tries to map that in a drawing. Accordingly, the architect must always keep in mind what the actual appearance will be of a form.</p> <p>Besides, it develops the sense of the third dimension. As the architect works out on paper, which has only length and breadth, his designs for buildings, which are to have length, breadth, and thickness. Hence, freehand drawing is obliged to visualize and to see with the mind's eye the thickness of forms.</p> <p>Moreover, freehand drawing is a methodology to learn and develop skills for sketching for architects. The sketch in perspective is vital in design presentations. Hence, it is important in making any kind of a rapid sketch, either of a whole building or interiors or details, whether from nature or in the study of plans and elevations.</p> <p>Furthermore, techniques of presentation by pen and ink are essential to complete the sketch and give the final appearance of a form or design.</p>	
<b>10. Course objective:</b>	
<p>There are essential objectives that shout be accomplished in freehand drawing courses for the second-year students:</p> <ul style="list-style-type: none"> <li>➤ Develop the students' sense of how to see and observe, and then record accurately.</li> <li>➤ Raise the awareness of scale, proportion and dimension of objects.</li> </ul>	

- Cultivate the feeling for relative proportions and shapes in a composition. Use the technique of measuring the proportion of a model by analyzing the location of its lines in relation to each other, and analyzing the angles of the vanishing points.
- Develop students' spatial imagination.
- Learn and develop skills of sketching for architects.
- Learn and develop an appropriate techniques of hatching to show shadow, shade and texture of objects
- Learn and develop techniques of presentations by ink.
- Learn how to use drawings done by hand in architectural design.

### **11. Student's obligation**

The role of students and their obligations throughout the academic year are in respect to their attendance, completion of all tests, exams, and the homework given to them.

#### **11. Forms of teaching**

The students will use boards of freehand drawing inside the studio. A model and buildings images will be formed differently every lecture by the lecturers towards improving and developing the students' skills. Some important notes will be provided for students by the lecturer.

### **12. Assessment scheme**

Course		Homework	Presence and class-works	Final Exam
Assessment		<b>As ( 40 %)</b>	<b>As ( 40%)</b>	<b>As (20%)</b>

### **13. Student learning outcome:**

Throughout freehand drawing course, some learning outcomes should be acquired by the students that meet the objectives of this course:

- The students should be able to observe the shapes and objects, and record the scale and proportion and dimension accurately.
- The students should be able to analyze and measure the relative proportions of the shapes and objects in a composition. They should be able to analyze the location of the lines in relation to each other in the model, and analyze the angles of the vanishing points.
- The students should be able to imagine the spatial composition of the model. Then, this will help the students to imagine their spatial spaces of their design composition.
- The students should be able to draw sketch quickly.
- The students should be able to present their drawing by hatching techniques, besides, show shadow, shade and texture of objects.
- The students should be able to present their drawing using techniques by ink, marker pen, and color pencils.

- The students should be able to use drawings done by hand in architectural design.
- Choose the suitable color plan for the project.
- Learn the basics of mixing the colors.
- Illustrating shades and shadows in the drawing.

#### **14. Course Reading List and References:**

▪Key references:

freehand drawing for architecture, freehand sketch for architecture.

▪Useful references:

- Freehand Drawing For Architects and Interior Designers. by Magali Delgado Yanes, Ernest Redondo Dominguez, Maria Fleming Alvarez (Translator)
- Understanding Architecture Through Drawing, Second Edition. by Brian Edwards
- Architectural Drawing Course: Tools and Techniques for 2D and 3D Representation 1st Edition. by Mo Zell
- Freehand Sketching. by Paul Laseau
- Freehand Sketching an Introduction. by Paul Laseau.
- Architectural Rendering Technique/ A color Reference, by Mike W. Lin
- Rendering in Pen and Ink: The Classic Book on Pen and Ink Techniques for Artists, Illustrators, Architects, and Designers, by Arthur L Guptill, Susan E Meyer
- Color Drawing: Design Drawing Skills and Techniques for Architects, Landscape Architects, and Interior Designers, by Michael E Doyle
- Sketching and Rendering of Interior Spaces, by Ivo Drpic
- Drawing and Sketching in Pencil, by Arthur L Guptill, Howard Greenley
- The Art of Architectural Illustration, by Stephen Knapp
- Design Drawing Experiences, 2000 Edition, by William Kirby Lockard
- Entourage: A Tracing File and Color Sourcebook, by Ernest Burden
- Perspective Sketches, by Theodore D Walker
- Architectural Studies: A Step-By-Step Guide to Rendering and Drawing Techniques Hardcover – February, 1993, by Richard F. Koplak.

#### **15. The Practical Topics:**

This lecture will be given with three hours duration on Wednesday. The lecture will start from 13:30pm until 16:30pm.

**Lecturer's name**

Binaee  
Yaseen  
Raof

no	Topic	Objectives	Date
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1	Review the essential principles of freehand drawing.	<p>Review the principals of freehand drawings that were practiced last year, including:</p> <ul style="list-style-type: none"> <li>•The relation between eye level and station point with the perspective.</li> <li>•Control the board of drawing. By mean, the right way of sitting to observe the model along with controlling the board of drawing without moving the head.</li> <li>•Hold the pen, and sharp it.</li> <li>• Fix the paper on the board in proper height to the eye level.</li> <li>•Analyze the model. Understand the relations and proportion between the lines.</li> <li>•Center the drawing in the paper</li> <li>•Measure the proportion of the lines.</li> <li>•Measure the angles of the vanishing points.</li> <li>•The hatching.</li> </ul> <p>Draw a simple model.</p>	
2	Draw a model by pencil.	<p>Improve the students' skills and understanding of the principals of freehand drawing, and enhance their hatching.</p> <p><u>H.W.:</u> Draw a model and make hatching by pencil.</p>	
3	Draw a model by Pen.	<p>Drawing by pen is hard to areas. Therefore, the objectives are towards:</p> <ul style="list-style-type: none"> <li>•Develop the drawing ability of students and make them more independent.</li> <li>•Motivate them to exert more effort on focusing and analyzing the model.</li> <li>•Learn hatching by pen.</li> </ul>	

4	Draw a building picture by Pen.	Develop the students' skills in controlling the drawing perspective, proportions, and hatching. <u>H.W.:</u> Draw a model and make hatching by pencil.	
5	The essential principles of drawing and presenting by Ink pen.	Besides all the aforementioned objectives, using ink in drawing requires: <ul style="list-style-type: none"> <li>• Understand the ink properties.</li> <li>• Control the line.</li> <li>• Make a sketch by ink.</li> <li>• Analyze the objects of building in the picture.</li> <li>• Understand the relations and proportion between the lines.</li> <li>• Analyze the lights and shade and shadows areas in the drawing.</li> <li>• Learn presentation technique by ink.</li> </ul> <u>H.W.:</u> Draw figures, trees, and clouds by ink.	
6	Ink presentation -hatching technique.	Draw a model by ink and present it by freehand hatching technique. <u>H.W.:</u> Draw a picture of building by ink and present it by freehand hatching technique.	
7	Ink presentation -freehand parallel lines technique.	Draw a model by ink and present it by freehand parallel lines technique. <u>H.W.:</u> Draw a picture of building by ink and present it by freehand parallel lines technique.	
8	Ink presentation -freehand parallel lines technique.	Draw a model by ink and present it by freehand parallel lines technique. <u>H.W.:</u> Draw a picture of building by ink and present it by roller parallel lines technique.	

9	Quiz.	Evaluate the students' performance in ink presentation.	
<b>Midterm Exam</b>			
10	The essential principles of Color Pencil technique	<p>Develop the students' skills by learning a marker pen technique of presentation.</p> <ul style="list-style-type: none"> <li>• Learn the principles of drawing by marker pen, including:</li> <li>• Understand the relation between the light and shade.</li> <li>• Learn the principle of presenting the light.</li> <li>• Draw the trees and clouds.</li> </ul>	
11	Color Pencil technique	<p>Draw a building picture by ink and present it by marker pen.</p> <p><u>H.W.:</u> Presenting a building picture by marker pen.</p>	
12	Color pencil technique	<p>Draw a building picture by ink and present it by marker pen.</p> <p><u>H.W.:</u> Presenting a building picture by marker pen.</p>	
13	Quiz.	Evaluate the students' performance in marker presentation.	
14	The essential principles of using colored pencils. Draw and present a furnished floor plan by colored pencil.	<p>Learn the principals of using colored pencils, including:</p> <ul style="list-style-type: none"> <li>• Determine a color plan.</li> <li>• Mixing the colors.</li> <li>• Rendering the shad and shadows.</li> <li>• Draw the background.</li> <li>• Implement students' understanding of coloring principals and implement it in presenting a model.</li> </ul> <p><u>H.W.:</u> Present a site plan project. Present a simple elevation of project.</p>	
15	Draw and present a site plan by colored pencil.	<ul style="list-style-type: none"> <li>• Determine a color plan.</li> <li>• Mixing the colors.</li> <li>• Rendering the shad and shadows.</li> <li>• Background presentation.</li> </ul>	

	Trees and background presentation.	<ul style="list-style-type: none"> <li>• Trees presentation.</li> <li>• Figures presentation.</li> <li>• Implement students' understanding of coloring principals and implement it in presenting a model.</li> </ul> <p><u>H.W.:</u> Present a perspective of a project including background, trees, and figures.</p>	
16	Draw and present an elevation by colored pencil with details.	<ul style="list-style-type: none"> <li>• Determine a color plan.</li> <li>• Mixing the colors.</li> <li>• Rendering the shad and shadows.</li> <li>• Background presentation.</li> <li>• Trees presentation.</li> <li>• Figures presentation.</li> <li>• Implement students' understanding of coloring principals and implement it in presenting a model.</li> </ul> <p><u>H.W.:</u> Present a perspective of a project.</p>	
<b>Final Exam</b>			
18. Examinations: The exam will be practical inside the studio where the students have to draw and present a given model.			
19. Peer review			