Department of Architecture
College of Engineering
Salahaddin University-Hawler
Subject: Geometric Perspective - Shade& Shadow

Course Book (Year 2)

Staff members:
Hawar Himdad Jamal (Assistant lecturer, MSc Architecture)
Lana Mohammed Hassan (MSc)
Academic Year: 2018/2019

Course Book

1. Course name  Geometric Perspective - Shade& Shadow
2. Lecturer in charge  Hawar Himdad Jamal
3. Department/ College  Architecture/ Engineering
4. Contact  
   e-mail: hawar.jamal@su.edu.krd
5. Time (in hours) per week
   Theory:  1  
   Practical: 2
6. Office hours  Tuesday 9:00-12:30
7. Course code
8. Teacher's academic profile
9. Keywords
10. Course overview:

   *Ist semester: Geometric Perspective*
Perspective drawings give the most realistic or lifelike view of the built environment and the urban landscape on a two-dimensional surface, pictorial views of three dimensional forms can be represented in a visually believable manner using perspective methods.

The intent of this semester is to introduce the theory and methods of constructed architectural perspectives. It stresses the importance of visualizing in parallel (one–point) or angular (two–point) perspective from the plan and the elevation of an object. This, of course, comes with patience, perseverance, and, most of all, practice.

2nd semester: Light, shades, and shadows

"Science is the specialty of finding shade and shadows on the graphics, which is essential for architects, designers and illustrators. This science provides the tools necessary to get the graphics provide a true picture of the scenes."

Shade and shadow refers to the technique of determining areas in shade and casting shadows on surfaces by means of projection drawing. Shades and shadows accent all drawings by adding a sense of clarity and substance to the represented forms.

11. Course objective:

Perspective drawing represents how a construction or environment might appear to the eye of an observer looking in a specific direction from a particular vantage point in space.

1-The main aim of perspective drawing exercises is that it will take you through exploring and learning to follow lines in space, follow contours and explore three-dimensional form and space.

2-Architects use perspectives in both preliminary and final design stages. They utilize both drafting’s traditional construction methods and new computer techniques to generate desired perspective views to aid in the design process.

3-The aim of (Studio works, Home Works) isn’t to create a perfect drawing but to train student’s eye, hand and mind and make your Architectural design ideas more creative.

4- The main aim of shade and shadow exercises to develop your ability to draw and construct shades and shadows in plan, elevation, and perspective drawings as shade is an important element of contemporary.

5- They will then be able to apply this skill when brainstorming, designing, and drawing a real space.

6. They will then apply prior learned knowledge on value to shade the space, thus enhancing the overall three dimensional quality.

12. Student's obligations:
Students are required to do studio and homework according to the teaching program. They are obligated to attend the lecture as this lecture is all related to practicing the main subjects and improving their presentation skills as well as all trail tests and exams. Missing a studio semesters will result in an automatic 2% reduction in your overall grade for each semester. During studio you are expected to participate in discussions and reviews of each other’s work, and to conduct yourselves in a courteous and professional manner.

13. Forms of teaching:

Different forms of teaching will be used to reach the objectives of the course:
- Power point presentations for the head titles, definitions and explanations.
- White Board drawing
- Classroom discussions
- Studio exercises
- Home works.

14. Assessment scheme

Different forms of teaching will be used to reach the objectives of the course:

1. Power point presentations for the head titles, definitions and explanations.
2. White Board drawing
3. Classroom discussions
4. Studio exercises
5. Home works.

Grading:

The students are required to do weekly exercises inside the studio (SW) beside home work (HW) exercises.
Final grade will be based upon the following:

- **First Semester: (30%)**
  - 8% Exercises: (Studio works, Home Works).
  - 4% Day sketch.
  - 16% First Semester Exam.
  - 2% Attendance and class participation.

- **Second Semester: (20%)**
  - 5% Exercises: (Studio works, Home Works).
  - 3% Day sketch.
  - 10% Second Semester Exam.
  - 2% Attendance and class participation.

- **Final Exam: (50%)**
  - Final exam contains two questions:
    1. Perspective question: 30%
    2. Shades and shadows question: 20%
  - Final exam date will be determined by the exam Committee. //20%

15. **Student learning outcome:**

The course will give the students full understanding of drawing perspective in all styles and methods to help them in presenting their ideas and enable them to improve their drafting skills. At the end of the Year the students will be able to practice all types of perspectives.

16. **Course Reading List and References:**

Required books and Resources (main references):

**Ministry of Higher Education and Scientific research**

- Dr. Wasef Momani, “Shade, Shadow & Presentation,” .2004


- "الظل والمنظور"، عماد محمد أزهر البكري

- "الظل والمنظور الهندسي"، م. محمد عبد الله الدراي

**Other useful references:**

- https://www.youtube.com/

### 17. Practical Topics:

<table>
<thead>
<tr>
<th>Week</th>
<th>Curriculum topics</th>
<th>Week</th>
<th>Lectures</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
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<tr>
<td></td>
<td>Terminology in perspective: Vanishing points, station point, cone of vision, horizon line, picture plane, ground line.</td>
<td>Week 1:</td>
<td>Introduction, Historical significance, Basic concepts. Terminology in the vocabulary of Perspective drawing techniques: Vanishing points (V.P), station point (S.P), cone of vision (CV), horizon line (HL), picture plane (PP), ground plane (GP), ground line (GL), measurement line scale (M.L.S), line of sight (LS), horizontal measuring line (HML).</td>
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<td></td>
<td>Type of perspectives: Perspective of line.</td>
<td>Week 2-3:</td>
<td>Types of perspective: Linear perspective, praline perspective, orthographic perspective.</td>
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**Lecturer's name:**

Lecturer's name: Teaching Staff
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<tr>
<td><strong>Week 4-5:</strong></td>
<td>Two- points perspective - measuring points and oblique lines. Measuring points-45/30/60 shortcut.</td>
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<td><strong>Week 6-7:</strong></td>
<td>One-point perspective (office method-object/PP relationship)</td>
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<td><strong>Week 8:</strong></td>
<td>Three- points perspective (office method).</td>
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<td><strong>Week 9:</strong></td>
<td>Oblique vanishing points (left and right sides). Projected depths using diagonals.</td>
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<td><strong>Week 10:</strong></td>
<td>Stair case and constructing diagonal vanishing points.</td>
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<td><strong>Week 11-12:</strong></td>
<td>Perspective of Cylinder, cone, Arcade, curvilinear forms, sloping roof. Pictorial effect :variable orientation ,variable SP, HL</td>
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<td><strong>Week 13:</strong></td>
<td>Interior one-point perspective (Measure method 45).</td>
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<td><strong>Week 14-15:</strong></td>
<td>Two-point interior perspective-pictorial effect. Characteristics of a Good Interior Perspective.</td>
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<td><strong>Week 16:</strong></td>
<td>Practical Exam</td>
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<td><strong>Second Semester</strong></td>
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<td><strong>Week 1:</strong></td>
<td>Introduction, Historical significance, Basic concepts. Terminology in shades and shadows: Light altitude, Azimuth, shade, shadow, shade line, shadow line, vanishing point of sun’s rays, sun’s bearing rays, casting edge, slope angle.</td>
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<td><strong>Week 2-3:</strong></td>
<td>Shadow principles. Shadow of: line, Point, Plane.</td>
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<td>Shadow of cube, multi-face body, group of various bodies.</td>
<td><strong>Week 4-6:</strong> Isometric parallel line shadows. Cylindrical forms shadows.</td>
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<td>Shade and shadow on plans. Elevations of buildings.</td>
<td><strong>Week 7-8:</strong> Shadows in Plan, elevation and site plan. Projection using corresponding points.</td>
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<td>Shade and shadow of staircase and forms.</td>
<td><strong>Week 9-10:</strong> Solid overhang, perforated overhang shadows. Shade and Shadow of the External perspectives in General case (staircase and forms..)</td>
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<td>6</td>
<td>Shadow in perspective.</td>
<td><strong>Week 11-12:</strong> Canopy, Colonnade and Arcade shadows. Shade and Shadow of the external perspectives if light rays parallel picture plane (special case).</td>
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<td>7</td>
<td>Shadow in perspective.</td>
<td><strong>Week 13-14:</strong> Shade and Shadow of the internal perspectives in General case.</td>
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**19. Examinations:**  
All the exams are practical; the theoretical part is included within the practical exams.

**20. Extra notes:**  
None

**21. List of requirements:**
- T-square
- Set square
- Divider
- Drafting pencils (H- B-HB) (0.5 -0.7)
- Eraser (stick)
- Cutter
- Scotch tape
- Drawing paper (70*100 cm)
- Drawing board
- Cleaning brush
- Scale
- Measuring tape

**22. Peer review**
This course book has to be reviewed and signed by a peer. The peer approves the contents of your course book by writing few sentences in this section.  
(*A peer is person who has enough knowledge about the subject you are teaching; he/she has to be a professor, assistant professor, a lecturer or an expert in the field of your subject*).
نهم کورس‌های دبیت ۱۰ لایه‌انگی هاوبی‌بکه باکسی دی‌بای سبز و نوآوریکی دی‌بایکانی کورس‌های پس‌ماده بکات و جنگ و وشته‌یک پوس‌سیت
لایه نوآوریکی کورس‌های و غازووی لایه بکات.
هایه نتو کسی‌میه که زانیاری هموین لایه کورس‌های و دبیت شیوه‌ی زانیاری له ماموستا کامتر نویست.