Zarqa University

Faculty of Engineering
Department: Architecture
Course title: Computer Drawing (2)
0908227

Prerequisite Computer Drawing (1)
0908226
Instructor:
Lecture's time:
Semester:
Office Hours:

Course description:
The course aims at using the computer to prepare 3D drawings and models (solid and surface), processing materials, preparing objects and surfaces, in addition to the preparation of lighting, backgrounds and others.

Aims of the course:
1. Define and maintain user-defined coordinate systems to aid in the construction of 3D objects.
2. Create and use model space viewports.
3. Create a standard engineering layout.
4. Extract two-dimensional views from a three-dimensional model for detail drafting.
5. Create and edit simple 2D regions and 3D solid models.
6. Use a variety of 3D display techniques.
7. Create 3D surface models using a variety of techniques.
8. Identify the various types of surface meshes and applications for each.
9. Generate 3D text and dimensions.
10. Render a 3D model with a variety of lights and materials.

Intended Learning Outcomes (ILOs):
1. Explain; identify the fundamentals of AutoCAD drawing (2) commands.
2. Ability to link between AutoCAD (1) and AutoCAD (2).
3. Analyze the same Techniques of 3D models in AutoCAD (2) and other Projects Such as Revit Architecture.

Course structures:

Week	C. Hrs	ILOs	Topics	Teaching Procedure	Assessment methods
2	12	1	• 3D viewing techniques • Working with the User Coordinate System	Lab	Assignments
3	18	1	• Working with simple and composite solids • Editing solids	Lab	Assignments
2	12	1	• Creating	Lab	Assignments

			complex solids and surfaces		
2	12	2	• Creating 2D drawings from 3D models	Lab	Assignments, first exam
1	6	3	• Creating sections, camera perspectives.	Lab	Assignments
3	18	3	• Setting up a rendering with materials and lights	Lab	Assignments, second exam
1	6	4	• Introduction to Revit Architecture	Lab	Project submission

References:

الرسم الهندسي بإستخدام الحاسوب (الاوتوكاد) ، المهندس محمد القاضي وآخرون، جامعة البلقاء التطبيقية، مكتبة المجتمع العربي
AutoCAD Tutorial, Autodesk.

Assessment Methods:

Methods	Grade	Date
First Exam	20%	23/03/2020
Second Exam	20%	22/04/2020
Project Submission	20%	04/05/2020
Final Exam	40%	13/05/2020