



Philadelphia University
Faculty of Engineering
Department of Architecture
First semester, academic year (2018-2019)

<u>Course syllabus</u>	
Course title: Computer Aided Drafting 2.	Course code: 0660265
Course level: 2 nd year	Course prerequisite (s) and/or corequisite (s): 0660164 - 0660163
Lecture time: 13:00 – 15:00. SUN - TUE	Credit hours: 2 Hours
	Contact hours: 4 Hours
Location: 409	

		<u>Academic Staff Specifics</u>		
Name	Rank	Office number	Office hours	E-mail address
Arch. Sara Taleeb Al-Darawsheh	Lecturer	311	ST 12:00- 1:00 MW 10:15-12:15 Thu 11-12	sdarawsheh@philadelphia.edu.jo

Course description:

As the second course in a series of classes devoted to digital modeling and image processing, this course provides the students to continuing the simulation of their 2D Architectural drawings to 3 dimensional models by Using 3d AutoCAD software. Students will be able to use Autodesk 3DS MAX as modeling software and rendering engine by import the CAD models in to 3DSMax to apply textures and materials, create lighting and camera views, and produce digital renderings scenes.

Content:

It is expected that all students taking the class have had academic practice creating 3d models and 2d imagery from 3d models and digital/analog content. This is an advanced class and thus intermediate or better competency is expected at the beginning of the semester.

Course objectives:

- To learn how to model complex objects and environments.
- To learn how to setup simple dynamic structures in digital 3d space.
- To develop broader range of possibility and more acute control over stylistic and aesthetic properties of digital media .
- To learn new modes of digital presentation .
- **To learn how to teach yourself .**

Course/ resources:

1. Hamad, Munir, (2016) "**AutoCAD 2017 3D Modeling**".
2. <https://www.pdfdrive.com/autodesk-3ds-max-2014-essentials-e33477884.html>
3. <https://www.pdfdrive.com/3ds-max-lighting-e33486063.html>

Teaching Activities:

Lecture, tutorial studios, assignments, and discussions.

Teaching Methodology:

Throughout the semester, lecture and tutorial will be delivered which demonstrate a variety of means and methods for creating digital content in both 3d software (CAD and 3D MAX). From the presented material, assignments will be issued as either isolated exercises or components of final project development.

Learning outcomes:

By the end of the course students will be able to Draw 3 dimensional models by Using 3d AutoCAD software and Professionally rendering their projects on 3D MAX software.

Assessment instruments

- Exams (First, Second Exam).
- Project reviews and evaluation.
- Quizzes.
- Short reports and/ or presentations, and/ or Short research projects.
- Homework assignments.

<u>Allocation of Marks</u>	
Assessment Instruments	Mark
First examination	20
Second examination	20
Projects submissions and developments, quizzes, Class assignments, Attendance	20
Final Exam and Project.	40
Total	100

Course/ Module academic calendar

	Course Program	Calendar	Exams
1	Syllabus + Revision for computer aided 1	Week 1	
2	Getting Started with 3d AutoCAD	Week2	
3	Modeling in 3d AutoCAD: <ul style="list-style-type: none"> • Creating and Editing Solid Models • Creating and Editing Surface Models • Creating and Editing Mesh Models • Navigating 3D Models (Working with Viewports / Using Visual Styles / Layers ...) 	Week (2-7)	
4	First Exam	2-12- 2018	20%
5	Importing AutoCAD project to 3ds Max	Week 8	
6	Getting Started with Autodesk 3ds Max.	Week 8	
7	User Interface (Menu bar, Tool bar, Command Panel & Viewports).	Week 9	
8	Modeling : (Create / modify)	Week 10	
9	Materials	Week 11	
10	Second Exam	6-1-2019	20%
11	Lighting	Week 12	
12	Rendering	Week 13	
13	Camera Animation.	Week 13	
14	Revision	Week 14	
15	Final Submission For Final Project	Week 15	
16	Final Exam	Week 16	40%

Expected workload:

On average students need to spend 4 hours of study and preparation for each 2 hours lecture/tutorial.

Attendance policy:

Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the relevant college/faculty shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

Books:

1. Raker, D. & Rice, H.; (1993). Inside AutoCAD, NRP,UK.
2. Roland W., Solid Modeling with AutoCAD, 2nd E., Ventana.
3. Alf, Yarwood, 2005, Introduction to AutoCAD 2006 2D and 3D.
4. Mark Dix, 2005, Discovering AutoCAD 2006.

