Kurigram Polytechnics Institute, Kurigram
Semester plan
Course name : Computer Aided Drafting (8742)

Teachers name : Md. Al-Amin Hossain

No. of week	No. of Class	• General Objective	• Specific Object	Remarks
1	1	• **Set up the drawing environments and drawing aids.**	o Start a CAD package and identify the different areas of CAD graphic screen. o Use menu bar, command prompt area, toolbar and drawing aids. o Use the drawing aids, different menus and dialog boxes of CAD package. o Save the drawing & exit from the file.	
	2			
	3			
2	1	• **Construct the geometrical shape or object.**	o Use the command to draw Line using Cartesian and Polar co-ordinate system. o Draw single and multiple points using point commands. o Draw straight and angular line using line commands. o Connect lines, arcs etc. using snap command. o Erase the object using different erase commands.	
	2			
	3			
3	1	• **Construct the rectangle, circle, polygon, poly line etc.**	o Draw rectangle using rectangle commands. o Draw circles using different method of circle commands. o Draw polygon using different method of polygon commands. o Draw poly line using poly line commands. o Draw poly line and arc together using poly line commands. o Draw different thickness of poly line using poly line commands	
	2			
	3			

4	1	• **Construct the ellipse, arc, donut, offset, array etc.**	o Draw ellipse using center and axis method commands. o Draw arc using different commands of arc. o Draw donut using donut commands. o Draw lines in certain distance using offset commands. o Duplicate an object in a fixed number & fixed distance using the rectangle array commands. o Duplicate an object in a fixed number & rotating distance using the polar array commands.	
	2			
	3			
5	1	• **Construct ray, chamfer, fillet, lengthen, hatch, stretch and scale etc.**	o Draw ray in a certain angular distance using ray command. o Use chamfer & fillet in a given figure. o Use different lengthen command in a given line. o Fill the drawing areas of an object using different pattern of hatch command. o Use stretch command to extend an area. o Use scale command to enlarge or reduce an object in a ratio.	
	2			
	3			
6	1	• **Edit and modify the object.**	o Select and delete the object in various methods. o Duplicate the object using copy. o Use trim command in a given drawing. o Use the extend command in a given drawing. o Use mirror command to create duplicate reverse copy. o Break the line using break command. o Rotate the object in different angle /direction using rotate command.	
	2			
	3			
7	1	• **Set-up the units, limits, layer.**	o Fix-up the units using units command. o Fix-up the drawing limits using limits command. o Select the layer control option. o Create the name of a layer and make it current. o Use freeze, lock option of the layer. o Set the color, line type & line weight for different layer.	
	2			
	3			

8	1	• **Set-up the dimension style and dimensioning.**	o Set-up the dimension style using dimension style manager. o Fix-up the dimension style using modify dimension style. o Fix-up the units, dimension lines and arrows, text, leader & annotations etc. o Put dimension in the object using linear, angular, radius, diameter, ordinate, align, center mark, continuous, base line commands. o Edit dimension.	
	2			
	3			
9			**Class test ,quize test and Mid semester Examination**	
10	1	• **Set-up the Text style.**	o Set the text style using text style commands. o Fix-up the text height & font using text style commands. o Select the text justification using text style command. o Write text by using dtext and multiple text commands. o Edit the text in a given drawing. o Insert text in CAD from other software (i.e. MS Word, Excel etc).	
	2			
	3			
11	1	• **Prepare a drawing in different layer using Auto CAD.**	o Draw a given floor plan of a building using various commands. o Draw an elevation of the building using various commands. o Draw the section of the building using various commands. o Put dimension & write the text or annotation on the floor plan & section. o Create a folder & Save the drawing.	
	2			
	3			
12	1	• **Prepare the 3D objects in Auto CAD.**	o Create simple 3D object in auto CAD. o Draw isometric view using snap & is plan command. o Create 3D surface by using 3D poly Edge surf, Rule surf, Tab surf & Mesh. o Edit / draw 3D object using polar co-ordinate system. o Edit 3D object using different editing command i. e. align, rotate 3D, array 3D, mirror 3D, move, chamfer, fillet, trim etc.	
	2			
	3			

13	1	• **Modify/Edit the 3D objects in Auto CAD.**	○ Create 3D surface/object by using extrude. ○ Edit 3d object using union command ○ Draw 3d object using revolve command. ○ Edit / draw 3D object using intersect command. • Edit 3D object using subtract command.	
	2			
	3			
14	1	• **Set the Layout and plot the drawing.**	○ Create layout for plot. ○ Set up the scale & assign pen (if necessary) for plot. ○ Select the paper & plotter for plotting. ○ Plot the drawing. ○ Set various drawing in different scale in a paper through layout. ○ Set the environment for plotting. ○ Set the drawing at PDF format.	
	2			
	3			
15 & 16			**Class test ,Quize test, Extra class and Semester Final Examination.**	