



Course Outline

Course Instructor	Ali Hassan Hammadie Jowad				
E-mail	Myalihassan80@yahoo.com				
Title	Computer Graphic				
Course Coordinator					
Course Objective	<ul style="list-style-type: none"> • Highlight the student to know between contours computer and graphic computer. • Recognize the mathematical basics and algorithms applied in the computer. • you can Design software tools that it help computer graphics apply its. • Build a simple one that Simulate Computer graphic applications. • Addition that help to explain the cases in this aspect 				
Course Description	<p>Knowledge to the introduction of computer graphics and applications and also Known the principle of the Vectors, we can plot basic geometric shapes with forms design and Transformation figure (moving shapes and rotation and scaled and shearing figure).</p> <p>Knowledge of clipping operations within the display window and Mapping operation.</p> <p>Then go to 3D system and know the deal in the previous cases of Transformation with how ways representation 3D in the computer and plot it into the computer and represent its. And other subject is a curve spline such as: Bezier-Spline, B-Spline, Cubic-Spline.</p>				
Textbook	s				
References	<p>*computer graphics mathematics first step, P. A. Egerto and W. S. Hall, 1998.</p> <p>*Visual Basic game Programming for teens, Jonathan S. Harboor, 2005</p>				
Course Assessment	semester	First Semester	Second Semester	Laboratories	Final Examination
	First Second	15	15	20	50
General Notes	<ul style="list-style-type: none"> • Stage:- 3rd that it is Studying on the Branch (Programmatic , <i>System Information</i> , Artificial Intelligent , <i>Multimedia</i>). • Was amended on Subject in 30/09/2013 by the subject Instructor, and authentication of the Scientific Committee in the Department of Computer 				



Course weekly Outline

week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1	2014/10/6	Introduction Computer Graphic		
2	2014/10/13	Vectors {all Properties}		
3	2014/10/20	Draw Line {equation +DDA}		
4	2014/10/27	Draw Line Bresenham + Study case for all		
5	2014/11/3	Draw Circle equation +Circle Polar		
6	2014/11/10	Draw Circle increment with symmetric + Study Case		
7	2014/11/17	Draw ellipse polynomial + polar		
8	2014/11/24	Draw ellipse increment with symmetric + Study Case		
9	2014/12/1	Arc+ sector Drawing +2D-Translate		
10	2014/12/8	2D-Rotate in origin + 2D-Rotate in point		
11	2014/12/15	2D-Scaling in origin +2D-Scaling in point		
12	2014/12/22	2D-Reflect {X,Y,O} 2D-Reflect{Y= X, Y= -X} 2D-Reflect {point} 2D-Reflect {Y=mX+b}		
13	2014/12/29	2D-Shear-X, 2D-Shear-Y 2D-Shear-XY		
14	2015/1/5	Matrix represent 2D-Transformation {part-1}		
15	2015/1/12	Matrix represent 2D-Transformation {part-2}		
16	2015/1/19	First Semester Examination		
Half-year Break				
17	2015/2/9	Windows+ View port		
18	2015/2/16	Clip point +Clip line		
19	2015/2/23	Polygon +clip polygon		
20	2015/3/2	3D coordinate + Drawing representation 3D		



21	2015/3/9	Transformation { Translate + Scaling } 3D		
22	2015/3/16	Rotation about plate X-axis, Y-axis, Z-axis + arbitrary line		
23	2015/3/23	Matrix represent-Transformation 3D		
24	2015/3/30	Parallel (orthogonal) projection + Matrix represent Parallel projection		
25	2015/4/6	Perspective projection + Matrix represent Perspective projection		
26	2015/4/13	Oblique projection + Matrix represent Oblique projection		
27	2015/4/20	Study case + Curve Spline		
28	2015/4/27	Bezier-Spline + represent in computer		
29	2015/5/4	B-Spline + represent in computer		
30	2015/5/11	Cubic-Spline + represent in computer		
31	2015/5/18	Second Semester Examination		
32	2015/5/25	Build one Computer graphics Application		

Instructor Signature:

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