Course Weekly Outline

Course Name: Semester One

Course Instructor	Ismail Taha Ahmed
E-mail	Ismail.taha@uoanbar.edu.iq
Title	Computer Graphics I
Course Coordinator	
Course Objective	The main objective of this module is to introduce to the students the concepts of computer graphics. It starts with an overview of interactive computer graphics, two dimensional system and mapping, then it presents the most important drawing algorithm, two-dimensional transformation; Clipping, filling.
Course Description	The student's acquisition of the fundamental of computer graphics such as point, pixel, line, polygons, and objects operations such as translation, rotation, scaling and shearing. Then, advanced topic different types of arrays and function are clarified.
Textbook	Shirley, Peter, Michael Ashikhmin, Steve Marschner. Fundamentals of Computer Graphics. 3rd ed. A K Peters/CRC Press, 2009. ISBN: 9781568814698
References	- Procedural Elements for Computer Graphics; 2nd Edn , D. F. Rogers, Tata McGraw-Hill, 2002. - Computer Graphics using OpenGL; 2nd edn; F. S. Hill Jr; Pearson Education, 2003.

	Term Tests	Laboratory	Quizzes	Project	Final Exam
Course Assessments	25%	15%	5%	5%	50%

General Notes	

Republic of Iraq
The Ministry of Higher Education
& Scientific Research

University: Anbar
College: CS &IT
Department: Computer Science
Stage: Third
Instructor name: Ismail Taha Ahmed
Academic status: Assist Prof
Qualification: PhD
Place of work: University of Anbar

Course Weekly Outline

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1	Week 1	Introduction to Computer Graphics	Lecture Programs	
2	Week 2	Elements of pictures created in computer graphics	Lecture Programs	
3	Week 3	Graphics display devices	Lecture Programs	
4	Week 4	Raster Graphics And Vector Graphics	Lecture Programs	
5	Week 5	Drawing Algorithms: Plotting Points	Lecture Programs	
6	Week 6	Line Drawing Algorithms: Naive Line-Drawing Algorithm, and DDA	Lecture Programs	
7	Week 7	Bresenham Line Drawing Algorithm	Lecture Programs	
8	Week 8	**Mid-term Exam**	Lecture Programs	
9	Week 9	Circle Drawing Algorithms: Direct Algorithm and DDA	-	
10	Week 10	Bresenham Circle Drawing Algorithm	Lecture Programs	
11	Week 11	Ellipses Drawing Algorithms	Lecture Programs	
12	Week 12	Two Dimensional Geometric Transformations: Translation and Scaling with various examples	Lecture Programs	
13	Week 13	Rotations with various examples	Lecture Programs	
14	Week 14	Shearing and Reflection with various examples	Lecture Programs	
15	Week 15	**Final Exam**	-	

Instructor Signature: **Dean Signature:**