

LESSON PLAN:		
Discipline: IT	Semester: 5th	Name of the Teaching Faculty: Mrs. Supriya Mishra
Subject: Computer Graphics & Multimedia	No. Of classes allotted per week : 4 periods per week (Mon, Tues, Thurs & Fri – 1 period each)	Semester: From Date: 01-07-2024 To 08-11-2024
WEEK	CLASS DAY	THEORY /PRACTICAL TOPICS
1st	01-07-2024	Introduction to Computer Graphics & Syllabus Discussion
	02-07-2024	What is Graphics? 1. Applications of Computer Graphics & Multimedia 1.1 Computer graphics in CAD 1.2 Presentation Graphics 1.3 Computer Art
	04-07-2024	1.4 Entertainment 1.5 Education & Training 1.6 Visualization
	05-07-2024	1.7 Image Processing 1.8 Graphic User Interface 1.9 Multimedia Concepts
2nd	08-07-2024	Recap & Discussion of Important Questions of Chapter 1 2. Overview of Graphics System 2.1 Graphics System 2.2 Raster Scan Display
	09-07-2024	2.3 Random Scan Display Diff b/w Raster and Random Scan Display
	11-07-2024	2.4 Graphics Input Devices 2.5 Graphics Software.
	12-07-2024	Recap & Discussion of Important Questions of Chapter 2 3. Graphics Output primitive 3.1 Points & Lines 3.2 DDA Line Drawing Algorithm
3rd	15-07-2024	3.3 Bresenham's Line drawing Algorithm
	16-07-2024	3.4 Mid Point Circle algorithm
	18-07-2024	3.5 Filled Area Primitives 3.6 Boundary fill algorithm
	19-07-2024	3.6 Flood fill algorithm
4th	22-07-2024	Recap & Discussion of Important Questions of Chapter 3 4. Two Dimensional Geometric Transformations 4.1 Translation 4.2 Rotation
	23-07-2024	4.3 Scaling 4.4 Reflection
	25-07-2024	4.5 Shear 4.6 Matrix representation and Homogenous coordinate system 4.7 Composite transformation
	26-07-2024	Recap & Discussion of Important Questions of Chapter 4 5. Two Dimensional Viewing

		5.1 Viewing pipeline 5.2 Viewing coordinate reference frame
5th	29-07-2024	5.3 Window to view port coordinate transformation
	30-07-2024	5.4 Line clipping concept 5.5 Polygon clipping concept Recap & Discussion of Important Questions of Chapter 5
	01-08-2024	6. Three Dimensional Object Representations 6.1 Polygon surface 6.2 Polygon table 6.3 Plane equation
	02-08-2024	6.4 Polygon mesh 6.5 Quadric surfaces 6.6 Sphere, Ellipsoid
6th	05-08-2024	6.7 Spline representation
	06-08-2024	6.8 Bezier curves & Surfaces
	08-08-2024	6.9 B-Spline curves & surfaces Recap & Discussion of Important Questions of Chapter 6
	09-08-2024	Class Test-1 (Tentative)
7th	12-08-2024	7. Three Dimensional Geometric & Modeling Transformations 7.1 Translation 7.2 Rotation
	13-08-2024	7.3 Scaling 7.4 Reflection
	16-08-2024	7.5 Shear
8th	20-08-2024	7.6 Composite transformation 7.7 Modeling & Coordinate transformation. Diff b/w 2d & 3d transformations
	22-08-2024	Recap & Discussion of Important Questions of Chapter 7
	23-08-2024	8. Three Dimensional Viewing 8.1 Viewing pipeline
9th	27-08-2024	8.2 Viewing coordinates
	29-08-2024	8.3 Parallel projection 8.4 Perspective projection
	30-08-2024	Diff b/w 2d & 3d viewing 8.5 Concept of 3D clipping.
10th	02-09-2024	Recap & Discussion of Important Questions of Chapter 8
	03-09-2024	9. Illumination Model & Surface Rendering Methods 9.1 Different light sources used in 3D modeling Diff b/w illumination model & surface rendering
	05-09-2024	9.2 Basic Illumination model 9.3 Ambient light 9.4 Diffuse reflection 9.5 Specular reflection
	06-09-2024	Recap & Discussion of Important Questions of Chapter 9

11th	09-09-2024	Internal Assessment (To be decided by Institution)
	10-09-2024	
	12-09-2024	
	13-09-2024	
12th	17-09-2024	10.3 Microphones, Amplifiers,
	19-09-2024	10.3 Digital audio formats Diff b/w Lossy & lossless compression.
	20-09-2024	10.4 Audio compression (LPC)
13th	23-09-2024	10.4 Audio compression (Sub Band Encoding)
	24-09-2024	Diff b/w LPC and SBE Flowcharts(LPC and SBE) Recap & Discussion of Important Questions of Chapter 10
	26-09-2024	11. Introduction to Digital Image 11.1 Vector and raster Graphics 11.2 Digital representation of image, colour, 16 bit, 24 bit colour depth
	27-09-2024	11.3 Colour Characteristics-Hue, saturation, Luminance 11.4 Colour Palette
14th	30-09-2024	11.5 Image formats-JPEG, TIFF, BMP, GIFF)
	01-10-2024	11.6 Image evaluation
	03-10-2024	11.7 Layers
	04-10-2024	11.8 Filters
15th	07-10-2024	Puja Holiday
	08-10-2024	
16th	14-10-2024	10.9 Image manipulation-scaling, cropping, rotation
	15-10-2024	Recap & Discussion of Important Questions of Chapter 11
	17-10-2024	12. Introduction to Video 12.1 Video in Multimedia
	18-10-2024	12.2 Basics of Motion-Video
17th	21-10-2024	12.3 Sources of Motion-Video
	22-10-2024	12.4 Video formats, lines, frames, fields
	24-10-2024	12.5 TV Broadcast standards-PAL, NTSC, SECAM
	25-10-2024	12.6 MPEG Compression
18th	28-10-2024	Recap & Discussion of Important Questions of Chapter 12
	29-10-2024	Class Test-2 (Tentative)
	01-11-2024	Discussion of Important Questions of Chapters 1,2,3
19th	04-11-2024	Discussion of Important Questions of Chapters 4,5,6
	05-11-2024	Discussion of Important Questions of Chapters 7,8, 9
	07-11-2024	Discussion of Important Questions of Chapters 10,11,12
	08-11-2024	Last Date for submission of Notes by students