

LESSON PLAN:		
Discipline: IT	Semester: 5th	Name of the Teaching Faculty: Ms. Supriya Mishra
Subject: Computer Graphics & Multimedia	No. Of Days per week class allotted: 4 periods per week (Mon, Tues, Thurs & Fri-1 period each)	Semester: From Date:15-09-2022 To 22-12-2022
WEEK	CLASS DAY	THEORY /PRACTICAL TOPICS
1st	15-09-2022	Syllabus Discussion
	16-09-2022	What is Graphics? 1. Applications of Computer Graphics & Multimedia 1.1 Computer graphics in CAD 1.2 Presentation Graphics 1.3 Computer Art 1.4 Entertainment
2nd	19-09-2022	1.5 Education & Training 1.6 Visualization 1.7 Image Processing 1.8 Graphic User Interface 1.9 Multimedia Concepts
	20-09-2022	Recap of Chapter 1 2. Overview of Graphics System 2.1 Graphics System 2.2 Raster Scan Display
	22-09-2022	2.3 Random Scan Display Diff b/w Raster and Random Scan Display
	23-09-2022	2.4 Graphics Input Devices 2.5 Graphics Software.
3rd	26-09-2022	Recap of Chapter 2 3. Graphics Output primitive 3.1 Points & Lines 3.2 DDA Line Drawing Algorithm
	27-09-2022	3.3 Bresenham's Line drawing Algorithm
	29-09-2022	3.4 Mid Point Circle algorithm
	30-09-2022	3.5 Filled Area Primitives 3.6 Boundary fill algorithm and Flood fill algorithm
4th	03-10-2022 to 08-10-2022	Puja Holiday
5th	10-10-2022	Recap of Chapter 3 4. Two Dimensional Geometric Transformations 4.1 Translation 4.2 Rotation
	11-10-2022	4.3 Scaling 4.4 Reflection
	13-10-2022	4.5 Shear 4.6 Matrix representation and Homogenous coordinate system 4.7 Composite transformation

	14-10-2022	Class Test -1 (Tentative) Recap of Chapter 4
6th	17-10-2022	5. Two Dimensional Viewing 5.1 Viewing pipeline 5.2 Viewing coordinate reference frame 5.3 Window to view port coordinate transformation
	18-10-2022	5.4 Line clipping concept 5.5 Polygon clipping concept Assignment -1
	20-10-2022	Recap of Chapter 5 6. Three Dimensional Object Representations 6.1 Polygon surface 6.2 Polygon table 6.3 Plane equation
	21-10-2022	6.4 Polygon mesh 6.5 Quadric surfaces 6.6 Sphere, Ellipsoid
7th	25-10-2022	6.7 Spline representation 6.8 Bezier curves & Surfaces 6.9 B-Spline curves & surfaces
	27-10-2022	Recap of Chapter 6 7. Three Dimensional Geometric & Modeling Transformations 7.1 Translation 7.2 Rotation 7.3 Scaling 7.4 Reflection
	28-10-2022	7.5 Shear 7.6 Composite transformation 7.7 Modeling & Coordinate transformation. Diff b/w 2d &3d transformations
8th	31-10-2022	Recap of Chapter 7 8. Three Dimensional Viewing 8.1 Viewing pipeline 8.2 Viewing coordinates
	01-11-2022	8.3 Parallel projection 8.4 Perspective projection
	03-11-2022	Diff b/w 2d &3d viewing 8.5 Concept of 3D clipping.
	04-11-2022	Recap of Chapter 8 9. Illumination Model & Surface Rendering Methods 9.1 Different light sources used in 3D modeling Diff b/w illumination model & surface rendering
9th	07-11-2022	9.2 Basic Illumination model 9.3 Ambient light 9.4 Diffuse reflection 9.5 Specular reflection Assignment -2

	10-11-2022	Recap of Chapter 9 10. Introduction to Digital Audio 10.1 Basics of Acoustics, Psychoacoustics 10.2 Musical sound and noise, elementary sound system
	11-11-2022	10.3 Microphones, Amplifiers,
10th	14-11-2022	10.3 Digital audio formats Diff b/w Lossy & lossless compression.
	15-11-2022	10.4 Audio compression (LPC)
	17-11-2022	10.4 Audio compression (Sub Band Encoding)
	18-11-2022	Internal Assessment (To be decided by Institution)
11th	21-11-2022	Diff b/w LPC and SBE Flowcharts (LPC and SBE) Recap of Chapter 10
	22-11-2022	11. Introduction to Digital Image 11.1 Vector and raster Graphics 11.2 Digital representation of image, colour, 16 bit, 24 bit colour depth
	24-11-2022	11.3 Colour Characteristics-Hue, saturation, Luminance 11.4 Colour Palette
	25-11-2022	11.5 Image formats-JPEG, TIFF, BMP, GIFF)
12th	28-11-2022	11.6 Image evaluation
	29-11-2022	11.7 Layers
	01-12-2022	11.8 Filters
	02-12-2022	11.9 Image manipulation-scaling, cropping, rotation
13th	05-12-2022	Recap of Chapter 11 12. Introduction to Video 12.1 Video in Multimedia
	06-12-2022	12.2 Basics of Motion-Video
	08-12-2022	12.3 Sources of Motion-Video
	09-12-2022	12.4 Video formats, lines, frames, fields
14th	12-12-2022	12.5 TV Broadcast standards-PAL, NTSC, SECAM
	13-12-2022	12.6 MPEG Compression
	15-12-2022	Recap of Chapters 1,2 and 3
	16-12-2022	Recap of Chapters 4,5 and 6
15th	19-12-2022	Recap of Chapters 7,8 and 9
	20-12-2022	Recap of Chapters 10,11 and 12
	22-12-2022	Last Date for submission of Notes by students