

**UNIVERSITY COLLEGE OF ENGINEERING, BIT-CAMPUS,  
ANNA UNIVERSITY, TIRUCHIRAPPALLI.  
DEPARTMENT OF IT/CSE  
LESSON PLAN**

Sub Name: GRAPHICS AND MULTIMEDIA  
Class : B.TECH - IT

Sub Code: IT6501  
Year & Sem: **III & V**

S.NO	TOPICS TO BE COVERED	NO OF PERIODS	BOOKS REFERRED
<b>UNIT I - OUTPUT PRIMITIVES</b>			
Basic – Line – Curve and ellipse drawing algorithms – Examples – Applications - Attributes – Two-Dimensional geometric transformations – Two-Dimensional clipping and viewing – Input techniques			
1	Basic Line	1	T1
2	Curve	1	T1
3	Ellipse drawing algorithms Examples	1	T1
4	Applications	1	T1
5	Attributes	1	T1
6	Two- Dimensional geometric transformations	1	T1
7	Two-Dimensional clipping	1	T1
8	Viewing	1	T1
9	Input techniques	1	T1
<b>UNIT II - THREE-DIMENSIONAL CONCEPTS</b>			
Three - Dimensional object representations – Three-Dimensional geometric and modeling transformations – Three-Dimensional viewing – Hidden surface elimination – Color models – Virtual reality - Animation.			
10	Three - Dimensional object representations	1	T1
11	Three-Dimensional geometric	1	T1
12	Modeling	1	T1
13	Transformations	1	T1
14	Three-Dimensional viewing.	1	T1
15	Hidden surface elimination	1	T1
16	Color models	1	T1
17	Virtual reality	1	T1
18	Animation	1	T1

<b>UNIT III - MULTIMEDIA SYSTEMS DESIGN</b>			
Multimedia basics – Multimedia applications – Multimedia system architecture – Evolving technologies for multimedia – Defining objects for multimedia systems – Multimedia data interface standards – Multimedia databases.			
19	Multimedia basics	1	T2
20	Multimedia applications	1	T2
21	Multimedia system architecture	1	T2
22	Evolving technologies for multimedia	1	T2
23	Defining objects for multimedia systems	1	T2
24	Multimedia data interface standards	1	T2
25	Multimedia databases	1	T2
<b>UNIT IV - MULTIMEDIA FILE HANDLING</b>			
Compression and decompression – Data and file format standards – Multimedia I/O technologies – Digital voice and audio – Video image and animation – Full motion video – Storage and retrieval technologies.			
28	Compression and decompression	1	T2
29	Data and file format standards	1	T2
30	Multimedia I/O technologies	1	T2
31	Digital voice	1	T2
32	Audio	1	T2
33	Video image and animation	1	T2
34	Full motion video	1	T2
35	Storage	1	T2
36	Retrieval technologies.	1	T2
<b>UNIT V - HYPERMEDIA</b>			
Multimedia authoring and user interface – Hypermedia messaging – Mobile messaging – Hypermedia message component – Creating hypermedia message – Integrated multimedia message standards – Integrated document management – Distributed multimedia systems.			
37	Multimedia authoring	1	T2
38	User interface	1	T2
39	Hypermedia messaging	1	T2
40	Mobile messaging	1	T2
41	Hypermedia message component	1	T2
42	Creating hypermedia message	1	T2
43	Integrated multimedia message standards	1	T2
44	Integrated document management	1	T2
45	Distributed multimedia systems	1	T2

**TEXT BOOKS:**

- T1. Donald Hearn and M. Pauline Baker, “Computer Graphics C Version”, Pearson Education, 2003.  
T2. Andleigh, P. K and Kiran Thakrar, “Multimedia Systems and Design”, PHI, 2003.

**REFERENCES:**

- R1. Judith Jeffcoate, “Multimedia in practice: Technology and Applications”, PHI, 1998.  
R2. Foley, Vandam, Feiner and Huges, “Computer Graphics: Principles and Practice”, 2<sup>nd</sup> Edition, Pearson Education, 2003

**Signature of the Faculty**

**Signature of the HOD**