



Bharati College (University of Delhi)

Janak Puri, Delhi- 100058 www.bharaticollege.du.ac.in

Lesson Plan (Core, Semester IV, Jan to April 2022)

Name of Teache r	Dr Sarita Kadian	Department	Computer Science
Course	B.A prog	Semester	IV
Paper	Multimedia Systems and Applications (BACS04)	Academic Year	2022-2023

Learning Objectives

The course provides an overview of fundamentals of multimedia systems. The students will be taught how to represent, process and retrieve multimedia data such as text, images, sound, video and animation.

Learning Outcomes

On successful completion of this course, a student will be able to:

- 1. Enumerate and describe the multimedia components.
- 2. Generate, manipulate, and use images in multimedia projects using bitmap, vector and 3-D images.
- 3. Create basic animations.

Lesson Plan

Week No.	Theme/Curriculum	Any Additional Information
1	Multimedia: Introduction to multimedia, components, uses of multimedia, multimedia applications, virtual reality	
2	Text: Fonts and faces, using text in multimedia, font editing and design tools, hypermedia and hypertext.	
3	Images: Still images – bitmaps, vector drawing, 3D drawing and rendering.	
4	Images (contd.): Natural light and colors, computerized colors, color palettes, image file formats.	

Sound, Video and Animation: Digital Audio, MIDI audio, MIDI vs digital audio.	
Sound, Video and Animation (contd.): Audio file formats, how video works, analog video, digital video.	
Sound, Video and Animation (contd.): Video file formats, video shooting and editing.	
Sound, Video and Animation (contd.): Principles of animation, animation file formats.	
Sound, Video and Animation (contd.): Animation techniques.	
Internet and Multimedia: WWW and HTML, Multimedia on the web.	
Internet and Multimedia (contd.): Web servers, web browsers, web page makers and site builders.	
Making Multimedia: Stages of a multimedia project, requirements to make good multimedia.	
Making Multimedia (contd.): Hardware peripherals - connections, memory and storage devices.	
Making Multimedia (contd.): Multimedia software and authoring tools.	
	MIDI audio, MIDI vs digital audio. Sound, Video and Animation (contd.): Audio file formats, how video works, analog video, digital video. Sound, Video and Animation (contd.): Video file formats, video shooting and editing. Sound, Video and Animation (contd.): Principles of animation, animation file formats. Sound, Video and Animation (contd.): Animation techniques. Internet and Multimedia: WWW and HTML, Multimedia on the web. Internet and Multimedia (contd.): Web servers, web browsers, web page makers and site builders. Making Multimedia: Stages of a multimedia project, requirements to make good multimedia. Making Multimedia (contd.): Hardware peripherals - connections, memory and storage devices. Making Multimedia (contd.): Multimedia software

References

1. Vaughan, T. (2017). Multimedia: Making It Work (9th edition). McGraw Hill Education.

Additional Resources

- 1. Andleigh, K.., & Thakkar, K. (2015). *Multimedia System Design* (1st edition). Pearson Education India.
- 2. Keyes, J. (2000). The Ultimate Multimedia Handbook. TMH.
- 3. Steinmetz, R., & Naharstedt, K. (2012). *Multimedia Computing, Communications Applications*. Pearson.