

MAT.O4.R0 : - Multimedia Design Principles and Applications

Detailed Syllabus

- 1. Design Overview** **06 Hrs**
Need for design, Human factors, fundamentals of Human perception, Human skill level and behavior, dialogues and tasks, Learning and Learning Modes, Cognitive Domain Learning, Affective and Psychomotor Domain Learning, Multimedia Educational Software Modeling, System Quality, Elements of user Interface.
- 2. Elements of visual design:** **12 Hrs**
Introduction to basic visual elements - Line shape, colour, texture, layout, motion, framing, surfaces, visual hierarchy, typography
Elements of composition, Visual rhetoric, organizing information, factors designers consider when creating illustration and visual design, designing for screen, spatial relationships in the interface, symbols and semiotics in the interface. Visual design methodology: Clarity, consistency, appearance, visual coding layout principles.
- 3. Human Computer Interface Design:** **10 Hrs**
Information design, interaction and sensorial design, guidelines for user interface design, dialogue design, Cognitive Walkthrough- case studies/ examples – Different Android applications, like Talking Tom, Monkey Trap etc.
- 4. Information Architecture:** **08 Hrs**
Definitions of Story, Flowchart, scripts, storyboard. Necessity of the pre-production documentations, Interactive flowchart and storyboard. Examples and case studies
- 5. Animation Design:** **12 Hrs.**
i. Introduction & Learning perspective drawing - Drawing for Animation: Gesture Drawing, Action Drawing, Line of action, Dynamic Poses, Action Sketches (Key Poses)
ii. 2D Design concepts & Composition.
iii. Principles of Animation.
iv. Process of 2D Animation film making.
v. Editing & Animatics.
vi. Input Sound- Sound Effects – Sound Recording.
vii. Designing, Developing Characters (Realistic, Exaggerated & Stylized)
- 6. Visual Effects:** **08 Hrs**
What are visual effects; when to use visual effects, examples of simple visual effects – glare effect, fade-in/ fade-out, motion blur

7. Application Examples/ Case studies:

04 Hrs

Need for design, Design Specifics, Scripts, Storyboards, Advantages and Effectiveness of Storyboards, Flowcharts, Writing a script, Screen Layout Designs. Human Computer Interaction, Hypermedia & navigation.

Laboratory experiments:

Creating website using Flash, Aftereffects, Dreamweaver, Fireworks, Visual InterDev.

MAIN READING

1. Designing Interactive Systems: People, Activities, Contexts, Technologies, by David Benyon
2. Designing Visual Interfaces: Communication Oriented Techniques , by Kevin Mullet and Darrell Sano
3. Show Me the Numbers: Designing Tables and Graphs to Enlighten , by Stephen Few
4. An Introduction to Digital Multimedia by Terry Michael Savage and Karla E Vogel
5. Basics Animation: Digital Animation by Andy Chong
6. Envisioning Information by Edward R. Tufte
7. Thinking with Type: A Primer for Designers: A Critical Guide for Designers, Writers, Editors, & Students by Ellen Lupton
8. Design Basics by David Lauer, Stephen Pentak