Course Code	UCA20D07J	Course Name	Multimedia Design Principles and Applications	Course Category	D	Discipline Specific Elective Course	L	T	P	C
							4	0	4	6

Pre-requisite Courses	Nil	Co-requisite Courses	Nil	Progressive Courses	Nil
Course Offering Department	Computer Applications		Data Book / Codes/Standards	Nil	

Course Learning Rationale (CLR):	The purpose of learning this course is to:
CLR-1 :	Enable graduates to excel in multimedia technology by adapting to rapid advances in newer technologies.
CLR-2 :	Provide graduates a proper foundation of multimedia fundamentals to solve real world problems.
CLR-3 :	Teach the use of visually rich and dynamic graphics elements to enhance web pages and sites.
CLR-4 :	Provide a basic knowledge about processing and editing of multimedia content with more emphasis on image and videos
CLR-5 :	Train graduates with good scientific, multimedia technologies and solve real time problems
CLR-6 :	Allow students to o projects and apply the multimedia principles of web design to their own sites

Course Learning Outcomes (CLO):	At the end of this course, learners will be able to:	Learning			Program Learning Outcomes (PLO)														
		1	2	3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		Level of Thinking (Bloom)	Expected Proficiency (%)	Expected Attainment (%)	Fundamental Knowledge	Application of Concepts	Link with Related Disciplines	Procedural Knowledge	Skills in Specialization	Ability to Utilize Knowledge	Skills in Modeling	Analyze, Interpret Data	Investigative Skills	Problem Solving Skills	Communication Skills	Analytical Skills	ICT Skills	Professional Behavior	Life Long Learning
CLO-1 :	Formulate a working definition of interactive multimedia	3	80	70	L	H	-	H	L	-	-	-	L	L	-	H	-	-	-
CLO-2 :	Demonstrate the use of animation, digitized sound, video control, and scanned images	3	85	75	M	H	L	M	L	-	-	-	M	L	-	H	-	-	-
CLO-3 :	Evaluate the role of multimedia technologies in the online and web environment;	3	75	70	M	H	M	H	L	-	-	-	M	L	-	H	-	-	-
CLO-4 :	Define the characteristics of each media type and describe their application	3	85	80	M	H	M	H	L	-	-	-	M	L	-	H	-	-	-
CLO-5 :	Create and design multimedia projects	3	85	75	H	H	M	H	L	-	-	-	M	L	-	H	-	-	-
CLO-6 :	Do graphics design and animation	3	80	70	L	H	-	H	L	-	-	-	L	L	-	H	-	-	-

Duration (hour)		24	24	24	24	24
S-1	SLO-1	Need to learn design	*Introduction to basic visual elements*	*Information to design*	*Introduction to Learning perspective drawing*	*Introduction to visual effects*
	SLO-2	Understand information architecture (IA), industrial design (ID), visual (or graphic) design, user experience design,	Understand the utility of visual elements	*Understand specific audiences in specific situations to meet defined objectives.*	Understand the horizon lines on paper	Understand the visual effects and usage
S-2	SLO-1	Human Factors	*Line shape, colour, texture, layout*	*interaction and sensorial design*	*Drawing for Animation*	*when and where to use visual effects*
	SLO-2	Understand the *products conform to the limitations of the human body, both physically and psychologically*	Characteristics of visual elements	*Understand the the sensory perceptions of a product,*	Understand the creatures, things to draw	special effects *used to give depth to the* visual *representation of the story*
S-3	SLO-1	*fundamentals of Human perception*	*motion, framing, surfaces*	*guidelines for user interface design*	*Gesture Drawing*	*examples of simple visual effects*
	SLO-2	Perception of design	Concepts of motion, framing and	Understand the visibility, user	Study about to *capturing the*	Unity cube, morphing face

			surfaces	control	*essence of the pose and line of action through quick sketching*	
S-4	SLO-1	Human skill level and behavior	visual hierarchy	dialogue design	Action Drawing,	fade-in/ fade-out, motion blur
	SLO-2	*Understating the human skill ability*	*Understand the arrangement of presentation*	*Understand the analytical approach*	*Human actions, sketch based actions*	*Learning to apply visual effect*
S 5-8	SLO-1 SLO-2	*Introduction to Design tool: Figma-UI and Desktop*	*Figma components*	*Working with frames*	*Layer blend in figma*	*Design a story board*
S-9	SLO-1	dialogues and tasks	typography Elements of composition ,Visual rhetoric	Cognitive Walkthrough	Line of action	Application Examples/ Case studies
	SLO-2	*Performance of task*	*Understand the visual structures*	*Examine the usability of the product*	*Understand the direction and motion of a characters body*	*Apply to grass wind, butterflies*
S-10	SLO-1	Learning and Learning Modes	organizing information	Different Android applications	Dynamic Poses	Need for design
	SLO-2	*Ability learn the learning models*	*Leaning the physical or conceptual organization of things*	*Understand the consistency of the platform*	*Creation of the posture in movement*	*Understand the importance for design for multimedia*
S-11	SLO-1	Cognitive Domain Learning	factors designers consider when creating illustration and visual design	Information Architecture	Action Sketches (Key Poses)	Design Specifics
	SLO-2	*Understand the domain learning*	*Understanding the geometry of the object*	*Understand the visual representation of the product*	*Action related sketch to create character*	*Learning to apply respective task*
S-12	SLO-1	Psychomotor Domain Learning	designing for screen	Definitions of Story	2D Design concepts	Scripts, Storyboards
	SLO-2	*Understand the psychomotor learning*	*Learn the graphical user interface*	*Understand the emotions of the character and plot*	*Understand the 2Ddesign principles*	*Learning to create story board*
S 13-16	SLO-1 SLO-2	*Frame Vs Slicing tool*	*Figma Constrains*	*Working with shapes*	*Blur effects in figma*	*Design a mood board*
S-17	SLO-1	Multimedia Modeling	Understand spatial relationships in the interface	Flowchart, scripts	Composition.	Advantages and Effectiveness of Story boards
	SLO-2	*Multimedia modeling concepts*	symbols and semiotics in the interface	*Understand the algorithm development and flow charts*	*Learning of composition of animation*	*Explore the created characters*
S-18	SLO-1	Multimedia Educational Software Modeling	Visual design methodology: Clarity	Story board.	Principles of Animation	Flowcharts, Writing a script, Screen Layout Designs
	SLO-2	*Understand the educational software modeling*	*Understand the design methodology*	*Understand the ideas through visual stories*	*Understand the principles of animation*	*Developing algorithm*
S-19	SLO-1	System Quality	Design consistency	Necessity of the pre-production documentations	Process of 2D Animation film making	Human Computer Interaction Different Android applications
	SLO-2	*Understand the system quality and quality measures*	*Understand to make the effective design*	*Understand the collage of information*, capture a feeling , theme, or design	Editing & Animators	*Develop the HCI*
S-20	SLO-1	Elements of user Interface	Appearance, visual coding layout principles	Interactive flowchart and storyboard	Input Sound- Sound Effects	Hypermedia & navigation
	SLO-2	*Usage of User interface*	*Understand the visual coding layout principles*	Examples and case studies	SoundRecording. Designing, Developing Characters (Realistic, Exaggerated & Stylized)	Understand the cognitive style, spatial orientation and computer expertise on hypertext *navigation* patterns

S 21-24	SLO-1	*Drawing vector shapes and pen tool*	*Shadows and other effects-Figma*	*Adding and formatting text*	*Creating prototypes*	*Design a graphics and Animation*
	SLO-2					

Learning Resources	1. David Benyon, "Designing Interactive Systems: People, Activities, Contexts, and Technologies" 2. Kevin Mullet and Darrell Sano, "Designing Visual Interfaces: Communication Oriented Techniques" 3. Andy Chong, "Basics Animation: Digital Animation"	4. Edward R. Tufte, "Envisioning Information" 5. Ellen Lupton, "Thinking with Type: A Primer for Designers: A Critical Guide for Designers, Writers, Editors, & Students" 6. David Lauer, Stephen Pentak, "Design Basics"

Learning Assessment

Level	Bloom's Level of Thinking	Continuous Learning Assessment (50% weightage)								Final Examination (50% weightage)	
		CLA – 1 (10%)		CLA – 2 (10%)		CLA – 3 (20%)		CLA – 4 (10%)#			
		Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice
Level 1	Remember	20%	20%	15%	15%	15%	15%	15%	15%	15%	15%
	Understand										
Level 2	Apply	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
	Analyze										
Level 3	Evaluate	10%	10%	15%	15%	15%	15%	15%	15%	15%	15%
	Create										
	Total	100 %		100 %		100 %		100 %		100 %	

CLA – 4 can be from any combination of these: Assignments, Seminars, Short Talks, Mini-Projects, Case-Studies, Self-Study, MOOCs, Certifications, Conf. Paper etc.,

Course Designers		
Experts from Industry	**Experts from Higher Technical Institutions**	**Internal Experts**
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