

**SCHEME OF EXAMINATION  
&  
SYLLABUS  
of  
UG Programme (Interdisciplinary)  
B.Sc. Graphics & Animation (Honours)  
&  
(Honours with Research)  
Scheme: D  
As per National Education Policy 2020  
(Multiple Entry-Exit, Internships and Choice Based Credit System)  
w.e.f. Academic Session: 2025-2026**

~~



**INSTITUTE OF MASS COMMUNICATION &  
MEDIA TECHNOLOGY  
Kurukshetra University, Kurukshetra  
(A+ Grade NAAC Accredited)  
under  
Faculty of Commerce and Management,  
Kurukshetra University, Kurukshetra**

**Scheme of Examination of UG Programme (Interdisciplinary)**  
**B.Sc. in Graphics & Animation (Honours) Scheme: D in accordance with NEP**  
**2020 (Multiple Entry-Exit, Internships and Choice Based Credit System)**  
**w.e.f. Academic Session 2025-26**

**Semester-VII**

Course Code	Course Title	Course Type	Contact Hours				Credits				Marks				Duration of Exam	
			L	T	P	Total	L	T	P	Total	T	IA (T)	P	IA (P)		Total
B23-GAG-701	Story, Script & Storyboarding	CC-H1	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
B23-GAG-702	Graphic Design	CC-H2	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
B23-GAG-703	Multimedia Technologies	CC-H3	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
B23-GAG-704	History of Indian Art	DSE-H1 (Choose any one)	3	1	-	4	3	1	-	4	70	30	-	-	100	3 Hours
B23-GAG-705	History of Western Art		3	1	-	4	3	1	-	4	70	30	-	-	100	
B23-GAG-706	Digital Design Lab	PC-H1	-	-	8	8	-	-	4	4	-	-	70	30	100	3 Hours
B23-GAG-707	Visual Art and Creativity	CC-HM1	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
<b>Total Credits :24</b>											<b>Total Marks</b>				<b>600</b>	

**Semester-VIII**

Course Code	Course Title	Course Type	Contact Hours				Credits				Marks				Duration of Exam	
			L	T	P	Total	L	T	P	Total	T	IA (T)	P	IA (P)		Total
B23-GAG-801	Research Design	CC-H4	3	1	-	4	3	1	-	4	70	30	-	-	100	3 Hours
B23-GAG-802	User Interface & User Experience (UI/UX)	CC-H5	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
B23-GAG-803	Animation Techniques	CC-H6	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
B23-GAG-804	3D Modeling Props	DSE-H2 (Choose any one)	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
B23-GAG-805	3D Modeling Environment		3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
B23-GAG-806	Experimental Animation	PC-H2	-	-	8	8	-	-	4	4	-	-	70	30	100	3 Hours
B23-GAG-807	3D Texturing	CC-HM2	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
<b>Total Credits :24</b>											<b>Total Marks</b>				<b>600</b>	

**Scheme of Examination of UG Programme (Interdisciplinary)**  
**B.Sc. in Graphics & Animation (Honours with Research) Scheme: D in**  
**accordance with NEP 2020 (Multiple Entry-Exit, Internships and Choice**  
**Based Credit System) w.e.f. Academic Session 2025-26**

**Semester-VII**

Course Code	Course Title	Course Type	Contact Hours				Credits				Marks				Duration of Exam	
			L	T	P	Total	L	T	P	Total	T	IA (T)	P	IA (P)		Total
B23-GAG-701	Story, Script & Storyboarding	CC-H1	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
B23-GAG-702	Graphic Design	CC-H2	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
B23-GAG-703	Multimedia Technologies	CC-H3	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
B23-GAG-704	History of Indian Art	DSE-H1 (Choose any one)	3	1	-	4	3	1	-	4	70	30	-	-	100	3 Hours
B23-GAG-705	History of Western Art		3	1	-	4	3	1	-	4	70	30	-	-	100	
B23-GAG-706	Digital Design Lab	PC-H1	-	-	8	8	-	-	4	4	-	-	70	30	100	3 Hours
B23-GAG-707	Visual Art and Creativity	CC-HM1	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
<b>Total Credits :24</b>											<b>Total Marks</b>				<b>600</b>	

**Semester-VIII**

**Semester-VIII**

Course Code	Course Title	Course Type	Contact Hours				Credits				Marks				Duration of Exam	
			L	T	P	Total	L	T	P	Total	T	IA (T)	P	IA (P)		Total
B23-GAG-801	Research Design	CC-H4	3	1	-	4	3	1	-	4	70	30	-	-	100	3 Hours
B23-GAG-802	User Interface & User Experience (UI/UX)	CC-H5	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
B23-GAG-807	3D Texturing	CC-HM2	3	-	2	5	3	-	1	4	50	20	20	10	100	3 Hours
B23-GAG-808	Project /Dissertation	Evaluation Report=8 Credits Viva-Voce Examination = 4 Credits				12				Evaluation Report= 200 Marks Viva-Voce Examination=100 Marks				300	-	
<b>Total Credits :24</b>											<b>Total Marks</b>				<b>600</b>	

<b>Session: 2025-26</b>			
<b>Part A - Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	Story, Script & Storyboarding		
Course Code	B23-GAG-701		
Course Type	CC-H1		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Learn the idea creation for writing a story. CLO 2: Understand the grammar fundamentals for writing content CLO 3: Understand the language, dialect and script CLO 4: Convert the written content into the multimedia formats CLO 5: Learn the practical aspects of storyboarding		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Story : Elements of story, Resources and ideas from life, Story Genres, Characters and the story, character driven stories, Event driven stories. Story structures and styles (Linear, Non-Linear, Circular and Episodic) Narrative, non-narrative, abstract, absurd with reference to stories for animated film Basic writing for Animation, Story Structure, Plot, Dramatic structure, Conflict, Setting mood, Rising action, Falling Action, Dénouement, Resolution		11
II	Script : Anatomy of a Script, Script Elements and Scene Heading, Action, Characters, Dialogue, Parenthetical, Extension, Transition, Shots, Page Breaking, Finer Points, Dual Dialogue, and Adlibs, Abbreviations and Montages, A Series of Shots and Short Lines/Poetry/Lyrics, transitions, continuity etc. Titles or Opening Credits, and Superimpose or Title, Title Page, Production Drafts, Top Continued and Bottom Continued, Locking Script Pages and Locking Scenes, Header, Do's and Don'ts. Script Formats, Radio scripts, TV scripts, Animation film scripts.		11
III	Storyboarding: Introduction to Storyboard, Importance of StoryBoard, difference between storyboard and Graphic Comic, Difference between Story,		11

	Script and Storyboard. Advantages of Storyboard in Animation and Anatomy of a Storyboard.	
IV	Shots: Introduction to various shots, Camera angles and Camera Movements used in Storyboard panels. continuity and Timing, Building a sequence of shots. Use of Perspective, Composition, Light & Shadow in Storyboarding. Script to Storyboard Designing a storyboard based on a short script, Use of Thumbnails and Quick story sketches, Creating visual narrative using Animatics	12
V	Practicals 1. Write a one-line summary of the main idea. 2. Define the genre (comedy, drama, horror) and tone (light, dark, emotional). 3. Write a short summary of the entire story. 4. Create character bios — name, age, background, motivation, conflict. 5. Describe main locations and time period. 6. Write key events in order — beginning, middle, end. 7. Identify the main problem and how it's resolved. 8. Define the central message or moral. 9. Share with peers/instructor for critique and refine the story.	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory: 50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum 20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>- Animation history and production by aparna vats; new delhi publishers; First edition 2017</li> <li>- Story: Substance, Structure, Style and the Principles of Screenwriting by Robert McKee</li> <li>- The Way of the Storyteller by Ruth Sawyer</li> <li>- Comic Book Design: The Essential Guide to Creating Great Comics and Graphic Novels Gary Spencer Millidge</li> <li>- Facial Expressions: A Visual Reference for Artists, Mark Simon, Publisher: Watson-Guptill,</li> <li>- The Animation Book: A Complete Guide to Animated Filmmaking--From Flip-Books to Sound Cartoons to 3- D Animation, Three Rivers Press</li> <li>- The Art of story board by John Hart</li> <li>- 'How to Write for Animation' by Jeffrey Scott's book</li> <li>- Animation Art: From Pencil to Pixel, the world of Cartoon Anime and CGI- Jerry Beck</li> </ul>		

Session: 2025-26			
Part A – Introduction			
Name of Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	Graphic Design		
Course Code	B23-GAG-702		
Course Type	CC-H2		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the basic principles of graphic design. CLO 2: Learn the major tools of graphic designing. CLO 3: Know about the color theory and color scheme CLO 4: Understand different kind of layouts in graphic designing. CLO 5: Understand different types of designing.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
Part B- Contents of the Course			
<b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Introduction to graphics, tools of graphics, uses & types of graphics Meaning and definition of graphics design Elements and principles of graphic design Graphics Overview: Raster graphics, Vector graphics		11
II	Understanding the role of graphic design in advertising Design Theory: Gestalt Principal, Visual Perception Elements of Art: Point, Line, Form, Shape, Space, Color, Texture, Value Principles of Art: Balance, Rhythm, Harmony, Contrast, Proportion, • Dominance, Unity		11
III	Logo Design: Principal, element and types Poster Design: Types, Elements Brochure Design: Types Infographics: concept and uses Colour Theory: Colour wheel, colour scheme		11
IV	Authoring and process of publishing Publishing types, newspaper and magazine publishing Research papers and publications		12

	Packaging and its types, Functions of Packaging	
V	<p style="text-align: center;">Practicals</p> <ol style="list-style-type: none"> <li>1. Re Design Logo / New Logo</li> <li>2. 5 Business Card</li> <li>3. 2 Social Poster Design</li> <li>4. 2 Commercial Poster Design</li> <li>5. 5 Social Media Post</li> <li>6. Magazine Cover Design</li> <li>7. 2 Illustration Designs</li> <li>8. 1 Borchher Design</li> <li>9. 2 Certificate Design</li> <li>10. 1 Newsletter Design with contain 4 pages</li> </ol>	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory: 50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum 20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>• Golombisky, K., &amp; Hagen, R. (2017). White space is not your enemy: A beginner's guide to communicating visually through graphic, web &amp; multimedia design. CRC Press.</li> <li>• Harrington, R. (2012). Understanding Adobe Photoshop CS6: The essential techniques for imaging professionals. Peachpit Press.</li> <li>- Gulbins, J. (2013). Mastering Photoshop layers: A photographer's guide. Rocky Nook</li> </ul>		

<b>Session: 2025-26</b>			
<b>Part A – Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	Multimedia Technologies		
Course Code	B23-GAG-703		
Course Type	CC-H3		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the file organization of different multimedia elements. CLO2: Learn the knowledge of various multimedia equipment's and kiosks. CLO 3: Create the linking inputs of interconnected multimedia systems. CLO 4: Learn to secure the created multimedia content. CLO 5: Learn about multimedia technologies in present scenario.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Multimedia Elements, Multimedia Applications, Multimedia System Architecture, Multimedia Databases; Types of Compression, Binary Image Compression Schemes, Color, gray scale, still-video image compression, video Image compression, audio compression; Data and File format standards- RTF, TIFF, RIFF, MIDI, JPEG, AVI, JPEG		11
II	Key Technology Issues, Pen Input, Video and Image Display Systems, Print Output Technologies, Image Scanners, Digital Voice and Audio, Video Images and Animation, Full Motion Video; Magnetic Media Technology, Optical Media, WORM optical drives , Cache Management for storage systems.		11
III	Types of Multimedia systems, Virtual Reality Design, Components of Multimedia system, Distributed Application Design Issues, Multimedia Authoring and User Interface, Hypermedia Messaging, Distributed Multimedia Systems		11
IV	Secured Multimedia, Digital Rights Management Systems, Technical Trends, Multimedia encryption, Digital Watermarking, Security Attacks; Multimedia		12

	Authentication, Pattern, Speaker and Behavior Recognition,	
V	<p style="text-align: center;"><b>Practicals</b></p> <ol style="list-style-type: none"> <li>1. To prepare a file with Text and Paragraph alignment.</li> <li>2. To edit an Image by Cropping, resizing the same.</li> <li>3. To edit a image by using five filters and effects</li> <li>4. To prepare a power point presentation by using multimedia components</li> <li>5. To record an audio sample by using microphone and edit it in audio editor</li> <li>6. To record a video clip from video camera in HD format and edit it in video editor</li> <li>7. To convert an audio and a video file in different format using audio-video converter</li> </ol>	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory: 50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum 20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>• Weixel, Fulton, Barksdale.Morse, “Multimedia Basics”, Easwar Press 2004.</li> <li>• Andleigh PK and Thakrar K, “Multimedia Systems”, Addison Wesley Longman, 1999.</li> <li>• Fred Halsall, “Multimedia Communications”, Addison Wesley, 2000.</li> <li>• Ralf Steinmetz, KlaraNahrstedt, “Multimedia, computing, communications and applications”, Prentice Hall, 1995.</li> <li>• Tay Vaughan, “Multimedia making It work”, TMH 5th Edition 2001.</li> </ul>		
-		

<b>Session: 2025-26</b>			
<b>Part A – Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	History of Indian Art		
Course Code	B23-GAG-704		
Course Type	DSE-H1		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO1: Understand and explain major phases of Indian art from prehistoric to colonial periods. CLO2: Identify iconic artworks and their distinguishing characteristics. CLO3: Analyze the influences of religion, patronage, and regional identities on art. CLO4: Develop visual literacy in reading Indian iconography and symbolism.		
Credits	Theory	Tutorial	Total
	3	1	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		
<b>Part B-Contents of the Course</b>			
<b>Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Origin of the World Kala Division of Art: External and Secret Art Palaeolithic, Mesolithic, Neolithic Age Bhimbetka Caves and Paintings. Indus Valley Civilization: Seals, terracotta, sculpture, and architecture		15
II	Mauryan Art: Characteristics of Maurya Art; Ashokan Pillars The sculptures of Yaksha –Yakshinis Chaamardharini Yakshaini-Didarganj Shunga and Satavahana Period Buddhist art		15
III	Golden age in India-Gupta period		15

	Architecture, Sculpture Paintings of Ajanta Caves Characteristics of Ajanta Paintings Introduction to Elephanta Caves and Temples	
IV	Indian Modern Art Bengal Company School Raja Ravi Verma, Nand Lal Bose, Abanindranath Tagore, Amrita Sher-Gil Satish Gujral, Jamini Roy	15
<b>Total Contact Hours</b>		60
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>30</b>	➤ <b>Theory: 70</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	10	
• Mid-Term Exam:	15	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>• The History of Indian Art – A.L. Basham, Oxford University Press.</li> <li>• Ancient Indian Art and Architecture – J.C. Harle, Oxford University Press.</li> <li>• Paintings of India – Swaminathan, Lalit Kala Akademi.</li> <li>• Indian Art – Partha Mitter, Oxford University Press.</li> <li>• भारतीय ललित कला. स्टेला क्रामरिश. इंडियन म्यूजियम कोलकाता।</li> <li>• मुगल एंड राजपूत पेंटिंग्स. पर्सी ब्राउन. एशियन एज पब्लिशर्स</li> </ul>		

Session: 2025-26			
Part A – Introduction			
Name of Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	History of Western Art		
Course Code	B23-GAG-705		
Course Type	DSE-H1		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO1: Identify major art movements and their characteristics. CLO2: Trace the evolution of Western art in historical context. CLO3: Apply historical art styles and concepts in design and animation projects. CLO4: Discuss about the legendary artist of Western Artist.		
Credits	Theory	Tutorial	Total
	3	1	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		
Part B-Contents of the Course			
<b>Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Origin of the Art Palaeolithic, Mesolithic, Neolithic Age Mesopotamia and the origins of civilization Funerary art, hieroglyphics, and monumental architecture The Great Khufu Pyramid of Giza		15
II	Classical Greek sculpture and architecture Pottery, Architecture (Parthenon)The Doryphoros by Polyklitos Kouros and Kore Sculpture Discus Thrower by Phidias Greeks Culture Roman Art: Realism, Mosaics, frescoes, Civic Architecture		15
III	Age of Renaissance-Jan Van Eyck, Masaccio; Sandro Botticelli Artist High Period Renaissance Leonardo Michelangelo, Raphael – harmony and ideal beauty		15
IV	Baroque Art Movement Caravaggio, Bernini, Rembrandt Modern Art of Europe, Francisco Goya Claude Monet, Edouard Manet Auguste Renoir, Paul Cezanne		15

<b>Total Contact Hours</b>			60
<b>Suggested Evaluation Methods</b>			
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>	
➤ <b>Theory</b>	<b>30</b>	➤ <b>Theory:</b>	<b>70</b>
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		
<b>Part C-Learning Resources</b>			
<b>Recommended Books/e-resources/LMS:</b>			
<ul style="list-style-type: none"> <li>• Gombrich, E.H. The Story of Art. Phaidon Press.</li> <li>• Janson, H.W. History of Art. Pearson.</li> <li>• Honour, H., &amp; Fleming, J. A World History of Art. Laurence King.</li> <li>• Stokstad, M., &amp; Cothren, M. Art History. Pearson.</li> <li>• Elkins, J. Why Art Cannot Be Taught. University of Illinois Press.</li> <li>• Berger, J. Ways of Seeing. Penguin Books.</li> <li>• Animated films and visual art studies from Disney, Pixar, and Studio Ghibli for stylistic influences.</li> </ul>			

<b>Session: 2025-26</b>			
<b>Part A – Introduction</b>			
Name of the Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	Digital Design Lab		
Course Code	B23-GAG-706		
Course Type	PC-H1		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO:1. Understand the difference between different graphics and image file formats. CLO:2. Understand Vector Graphic tools. CLO:3. Know About Design Process. CLO:4. Learn the Techniques to Create Digital Graphics		
Credits	Theory	Practical	Total
	0	4	4
Teaching Hours per week	0	8	8
Internal Assessment Marks	0	30	30
End Term Exam Marks	0	70	70
Max. Marks	0	100	100
Examination Time	4 hours		
<b>Part B-Contents of the Course</b>			
<b>Practical's</b>			<b>Contact Hours</b>
	1. Create five Logos		120
	2. Draw two Posters		
	3. Make a Web Banner		
	4. Make two Hoardings		
	5. Create Emailers		
	6. Make four Flyers		
	7. Make two Magazine covers		
	8. Make Two Newspaper Advertisement		
	9. Infographics Discussion		
	10. Make a Trifold brochure		
	11. Make a French fold brochure		
	12. Create a Gatefold brochure		
	13. Make Bi fold brochure		
	14. Create a Accordian brochure		
	15. Create Five PowerPoint presentations		
	16. Make a Webpage		
	17. Typography Practice		
	18. Packaging Drawing Practice		
	19. Make a Vehicle wrap design		
	20. Make a Mock up design		

<b>Suggested Evaluation Methods</b>			
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>	
<b>➤ Practicum</b>	<b>30</b>	<b>➤ Practicum</b>	<b>70</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	10		
• Mid-Term Exam:	15		
<b>Part C-Learning Resources</b>			
<b>Recommended Books/e-resources/LMS:</b>			
<ul style="list-style-type: none"> <li>• Corel Draw Training Guide, Author: Satish Jain, M. Geetha Basics of Illustration</li> <li>• Corel draw 2020 User Guide</li> <li>• A Textbook of Vector Calculus by Shanti Narayan (Author), P.K. Mittal (Author)</li> <li>• Guide to Graphics Design by Scott W. Santoro, Library of Congress Cataloging-in-Publication Data, ISBN 978-0-13-230070-4 (pbk.)</li> <li>• Graphic Designer's Essential Reference, Visual Elements, Techniques, and Layout Strategies for Graphic Designers by Timothy Samara, ROCKPORT PUBLISHER</li> </ul>			

<b>Session: 2025-26</b>			
<b>Part A - Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	Visual Art and Creativity		
Course Code	B23-GAG-707		
Course Type	CC-HM1		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the knowledge of Art Elements. CLO 2: Learn the principles of Art. CLO 3: Understand the knowledge of colours. CLO 4: Understand the knowledge of different types of art. CLO 5: To know the knowledge of visualization.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Define Art Origin of Art: ○ Study of Prehistoric Indian Art ○ Visual Arts & Its Forms & Creative Pedagogies Diversity of Shapes, Form, Lines, Textures Drawing: Line, Contour, Stippling and Hatching Sketching and Concept Drawing Understanding of Light and Shadow Landscapes and Composition Mandala art: Concept Doodling: Concept		11
II	Perception of Color and Color Wheel Pattern Design and 3D Design Perspectives on the Creative Process Typography: Elements and Features Calligraphy: Elements and Features		11
III	Indian art forms: Madhubani Art		11

	Warli, Patta Chitra, Gond Rajsthani Miniature paintings Western art movements: Realism, Impressionism Cubism, Surrealism, Abstract art	
IV	Concept of creativity Brainstorming, thumbnails, mood boards Visual storytelling Principles of good composition Layout planning and framing Poster design, logo design Creative product design	12
V	Practicals 1. Discussion on Anatomy and Create four exercises 2. Create Three Caricatures 3. Poster design 4. Discussion on Colour theory and mixture 5. Painting exercises (landscape, portrait, abstract). 6. Warli Art and Gond Art drawing 7. Creating Mandala Art on Canvas 8. Dot painting Techniques Practice 9. Stone Art Practice 10. Glass Painting or Mirror Image Art Practice	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory: 50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum 20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>- Animation history and production by aparna vats; new delhi publishers; First edition 2017</li> <li>- Story: Substance, Structure, Style and the Principles of Screenwriting by Robert McKee</li> <li>- The Way of the Storyteller by Ruth Sawyer</li> <li>- Facial Expressions: A Visual Reference for Artists, Mark Simon, Publisher: Watson-Guptill,</li> <li>- The Animation Book: A Complete Guide to Animated Filmmaking--From Flip-Books to Sound Cartoons to 3- D Animation, Three Rivers Press</li> <li>- The Illusion of Life: Disney Animation, Ollie Johnston and Frank Thomas, Publisher: Disney Editions;</li> <li>- Making Comics: Storytelling Secrets of Comics, M... by Scott McCloud</li> <li>- The Art of story board by John Hart</li> <li>- 'How to Write for Animation' by Jeffrey Scott's book</li> <li>- Animation Art: From Pencil to Pixel, the world of Cartoon Anime and CGI- Jerry Beck</li> </ul>		

**Session: 2025-26**

**Part A - Introduction**

Name of Programme	B.Sc. Graphics & Animation		
Semester	8 <sup>th</sup>		
Name of the Course	Research Design		
Course Code	B23-GAG-801		
Course Type	CC-H4		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	<p>CLO 1: Understand the core principles, types, and ethical considerations involved in research methodology.</p> <p>CLO 2: Utilize suitable research designs, sampling strategies, and data collection techniques to carry out effective research.</p> <p>CLO 3: Interpret and evaluate data using statistical methods and apply relevant software tools for data analysis.</p> <p>CLO 4: Produce clear and organized research reports with accurate citations and effectively communicate findings through presentations.</p>		
Credits	Theory	Tutorial	Total
	3	1	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

**Part B-Contents of the Course**

**Instructions for Paper- Setter:** The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	Definition and Concept of Research: Meaning, nature, and purpose of research, Characteristics of good research; Types of Research: Basic vs. applied research, Qualitative vs. quantitative research, Exploratory, descriptive and explanatory research Research Process: Identifying the research problem, Review literature, Setting objectives and hypothesis formulation Ethics in Research: Importance of ethical considerations, Plagiarism and academic integrity, Informed consent and confidentiality	15
II	Research Design: Definition and importance, Components of research design, Types of research design (experimental, correlational, observational, etc.) Sampling Methods: Probability sampling (random, systematic, stratified, cluster), non-probability sampling (convenience, purposive, snowball), Sample size determination Data Collection Methods: Primary Data: Surveys, questionnaires,	15

	interviews, Observation methods; Secondary Data: Government reports, articles, journals, and online sources Measurement and Scaling: Nominal, ordinal, interval, and ratio scales, Likert scale and semantic differential scale	
III	Data Preparation: Data cleaning and coding, Tabulation and organization of data Descriptive Statistics: Measures of central tendency (mean, median, mode), Measures of dispersion (range, variance, standard deviation), Frequency distribution and graphical representation Inferential Statistics: Hypothesis testing (null and alternative hypotheses), p-value and significance testing, t-test, chi-square test, ANOVA Correlation and Regression Analysis: Pearson and Spearman correlation, Simple and multiple regression models Use of Software for Data Analysis: Introduction to SPSS, Excel, R, or Python for data interpretation	15
IV	Research Report Writing: Structure of the research report, Title page, abstract, introduction, methodology, results, and conclusion, Formatting and referencing (APA, MLA, Chicago, etc.) Citations and Referencing: In-text citations and bibliography, Reference management tools (Zotero, Mendeley, EndNote) Presentation of Research Findings: Preparing PowerPoint presentations, Data visualization (charts, graphs, and tables), Effective communication and presentation skills Plagiarism and Citation Tools: Checking plagiarism (Turnitin, Grammarly), Importance of originality in research Assessment Methods: Assignments and quizzes, Practical application of data collection and analysis methods, Research report submission, Presentation of research findings	15
<b>Total Contact Hours</b>		60
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>30</b>	➤ <b>Theory: 70</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.	10	
• Mid-Term Exam:	15	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS</b>		
<ul style="list-style-type: none"> <li>○ Kothari, C. R. (2004). Research Methodology: Methods and Techniques (2nd ed.). New Age International.</li> <li>○ Creswell, J. W. (2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (5th ed.). SAGE Publications.</li> <li>○ Bryman, A. (2016). Social Research Methods (5th ed.). Oxford University Press.</li> <li>○ Babbie, E. (2020). The Practice of Social Research (15th ed.). Cengage Learning.</li> <li>○ Bhattacharyya, D. K. (2009). Research Methodology (2nd ed.). Excel Books.</li> <li>○ Graziano, A. M., &amp; Raulin, M. L. (2013). Research Methods: A Process of Inquiry (8th ed.). Pearson.</li> <li>○ Singh, Y. K. (2006). Fundamentals of Research Methodology and Statistics. New Age International.</li> <li>○ Cooper, D. R., &amp; Schindler, P. S. (2014). Business Research Methods (12th ed.). McGraw-Hill Education.</li> <li>○ Saunders, M., Lewis, P., &amp; Thornhill, A. (2019). Research Methods for Business Students (8th ed.). Pearson.</li> </ul>		

<b>Session: 2025-26</b>			
<b>Part A - Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	8 <sup>th</sup>		
Name of the Course	User Interface & User Experience (UI /UX)		
Course Code	B23-GAG-802		
Course Type	CC-H5		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Generating design ideas based on well-defined goals and scenarios CLO 2: Developing impactful user interfaces using design systems CLO 3: Employing Wire framing, prototyping, and testing tools for design evaluation CLO 4: Applying user-centered design principles to enhance User Experiences CLO 5: Create various user interface.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<p><b>Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.</p>			
Unit	Topics		Contact Hours
I	Concept of User Interface Design (UI) Scope of Interface Design Process of UI Design: Empathize, Define, Ideate, Deliver, Test / Components Elements of UI Design: Input Controls, Navigation Components, Informational Components, Containers. Principles of UI Design Clarity, Consistency, Accessibility, Feedback, Familiarity, Design Standards, Structure and Hierarchy, Simplicity, Control, Empathy Types of UI Design		11
II	Concept of UX Design Process of UX Design: Product Definition, Product Research, Analysis, Design, Validation (Testing) 8 Stages: Project Definition and Scope, Understanding the problem, UX Research, Ideation (Sketching and low fidelity prototyping), High fidelity		11

	mockups and prototype, Usability Testing, Design handoff, Quality Assurance or UX Audit, Elements of User Experience Functional Layout & Interaction design, UX Principles: Doherty Threshold, Occam's Razor, Pareto Principle, Postel's Law, Tesler's Law	
III	Gestalt Principles Concept of Microcopy Concept of Wireframing: low fidelity and high fidelity Difference Between UI and UX	11
IV	Concept of Grids User Persona and Scenario Concept Of Prototypes Market Competitive Analysis Research Methodology	12
V	<b>Practicals:</b> 1. Login/Signup Screens 2. Home Screen 3. Navigation Screens/Menus 4. List Screens 5. Detail Screens 6. Forms/Input Screens 7. Confirmation/Success Screens 8. Profile Screens 9. Checkout Screens 10. Prototyping	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory: 50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum 20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>• A Project Guide to UX Design: For user experience designers in the field or in the making (2nd. ed.). Russ Unger and Carolyn Chandler. New Riders Publishing, USA, 2012.</li> <li>• The Essential Guide to User Interface Design: An Introduction to GUI Design Principles and Techniques, Third Edition by Wilbert O. Galitz, Wiley Publishing, Inc.</li> <li>• Adobe XD in CC, Classroom in a Book, The official training workbook from Adobe By Brian Wood, ADOBE PRESS</li> <li>• The UX Book Process and Guidelines for Ensuring a Quality User Experience, Rex Hartson and Pardha S. Pyla, Elsevier, 2012</li> </ul>		

<b>Session: 2025-26</b>			
<b>Part A - Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	8 <sup>th</sup>		
Name of the Course	Animation Techniques		
Course Code	B23-GAG-803		
Course Type	CC-H6		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand about the origin and development of animation. CLO 2: Know about the different Styles of Animation around the word. CLO 3: Learn Different Principals of Animation CLO 4: Understanding of Animation industry and its scope in different areas.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Ancient Origin of animation Development of Animation: 19 <sup>th</sup> Century, Early 20 <sup>th</sup> Century, Golden Age of Animation Techniques of Animation: Cel Animation / Frame by Frame, Traditional Animation, Stop Motion Animation, Computer Animation – 2D, 3D, Particles Animation and VFX. Animation Styles: Anime, Manga-Inspired Animation, <b>Weston's</b> , Filipino Animation		11
II	12 Principals of Animation Compare: Straight ahead action and pose-to-pose Pipeline of Animation: Pre-Production, Production and Post-Production Compare production process of 2D and 3D Animation		11
III	Persistence of Vision: Illusion and Motion of Illusion LightBox, FlipBook , Frame with types, X-Sheet Frame Rate (FPS): 8fps, 10fps, 12fps, 24fps, 30fps, 60fps, 120fps Stop Motion Animation: Cut-Out Animation, Sand Animation, Shadow Animation, Clay Animation		11

IV	Scope of Animation in Advertising, E-Learning, Games Pioneers of Indian Animation: Uday Shankar, Ram Mohan, Rajendra Kumar, Rajiv Chilaka Cartoon Channels and about their Animation Styles: Cartoon Network, Nickelodeon, Disney, Pogo, Hungama. Animation Studio and their role in growth of animation: Warner Bros, Disney, Hanna-Barbera, Pixar, Dreamworks, Aardman	12
V	<p style="text-align: center;"><b>Practicals</b></p> <ol style="list-style-type: none"> <li>1. Animate a wave motion using frame-by-frame technique.</li> <li>2. Design a 2D character model sheet (front, side, back view).</li> <li>3. Create character turn-around animation (rotation of head or body).</li> <li>4. Make a simple facial expression sheet (happy, sad, angry, surprised).</li> <li>5. Animate squash and stretch using a ball or object.</li> <li>6. Animate anticipation and follow-through using a simple character (jumping or throwing).</li> <li>7. Create a walk cycle (8-frame or 16-frame loop).</li> <li>8. Create a run cycle showing balance and motion.</li> <li>9. Create foreground, midground, and background layers for parallax animation.</li> <li>10. Animate a camera pan (left to right or zoom in/out).</li> <li>11. Create mouth shapes (A, E, O, M, etc.) for lip sync.</li> <li>12. Create a storyboard of minimum 6 panels for a short scene.</li> <li>13. Design camera angles and transitions between scenes.</li> <li>14. Prepare an animatic (storyboard + timing + sound).</li> <li>15. Create a short 2D animation film (20–30 seconds)</li> </ol>	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory:</b> <b>50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum</b> <b>20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>- Animation history and production by aparna vats; new delhi publishers; First edition 2017</li> <li>- Story: Substance, Structure, Style and the Principles of Screenwriting by Robert McKee</li> <li>- The Way of the Storyteller by Ruth Sawyer</li> <li>- Facial Expressions: A Visual Reference for Artists, Mark Simon, Publisher: Watson-Guptill,</li> <li>- The Animation Book: A Complete Guide to Animated Filmmaking--From Flip-Books to Sound Cartoons to 3- D Animation, Three Rivers Press</li> <li>- The Illusion of Life: Disney Animation, Ollie Johnston and Frank Thomas, Publisher: Disney Editions;</li> <li>- Making Comics: Storytelling Secrets of Comics, M... by Scott McCloud</li> <li>- The Art of story board by John Hart</li> </ul>		

<b>Session: 2025-26</b>			
<b>Part A - Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	8 <sup>th</sup>		
Name of the Course	3D Modeling Props		
Course Code	B23-GAG-804		
Course Type	DSE-H2		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	<p>CLO 1: Students will be able to identify different types of props, understand their role</p> <p>CLO 2: Understanding navigate 3D software effectively and set up a clean scene for prop modeling.</p> <p>CLO 3: Students will be able to produce optimized low-poly game-ready props while maintaining visual clarity.</p> <p>CLO 4: Understanding unwrap models cleanly and create efficient UV layouts for texturing.</p> <p>CLO 5: Understand the knowledge of create props.</p>		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Introduction to 3D Props and Basic Modeling Overview of 3D props and their applications in games, animation, and VR Basics of 3D modeling techniques including polygonal modeling, primitives, and box modeling Introduction to 3D software tools (Blender, Maya, 3ds Max) Master fundamental 3D transformations like translation, rotation, and scaling for effective model manipulation.		11
II	Advanced Modeling and Sculpting Techniques for hard surface and organic modeling Using digital sculpting tools like ZBrush for high detail Concepts of topology, edge loops, and mesh optimization Understand the importance of clean topology for animation and real-time performance.		11
III	Texturing and Material Creation UV unwrapping of 3D models		11

	Texture painting and procedural texturing workflows Material creation and shader basics using Substance Painter or similar tools Learn how to create realistic materials by combining texture maps such as diffuse, normal and specular maps.	
IV	Lighting, Rendering, and Optimization Lighting setups suitable for 3D props Rendering techniques in different engines or software Optimization strategies for real-time rendering in games and VR Optimize models for performance by reducing polygon count and using Level of Detail (LOD) techniques	12
V	Practicals <ol style="list-style-type: none"> <li>1. Wooden shield</li> <li>2. Leather pouch</li> <li>3. Goblet/Chalice</li> <li>4. Crossbow or daggers</li> <li>5. Create a cohesive prop kit for a specific themed environment:</li> <li>6. Cyberpunk alley props</li> <li>7. Abandoned lab props</li> <li>8. Ancient temple ruins</li> <li>9. Pirate ship deck props</li> <li>10. Mechanical props</li> <li>11. Modified gun</li> <li>12. Long range shooter scope</li> </ol>	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory:</b> <b>50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum</b> <b>20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>- The Art of 3D Computer Animation and Effects – Isaac Victor Kerlow</li> <li>- Digital Modeling – William Vaughan</li> <li>- Introducing Autodesk Maya – Dariush Derakhshani</li> <li>- 3D Modeling for Games: Creating Low Poly Game Assets – Andrew Gahan</li> <li>- Stop Staring: Facial Modeling and Animation – Jason Osipa</li> <li>- Digital Sculpting with Mudbox / ZBrush – Mike de la Flor &amp; Bridgette Mongeon</li> </ul>		

<b>Session: 2025-26</b>			
<b>Part A - Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	8 <sup>th</sup>		
Name of the Course	3D Modeling Environment		
Course Code	B23-GAG-805		
Course Type	DSE-H2		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand Environment Modeling Fundamentals CLO 2: Create Environment Blockouts and Model Low-Poly Environment Assets CLO 3: Apply PBR Texturing to Environments CLO 4: Understanding unwrap models cleanly and create efficient UV layouts for texturing. CLO 5: Understand the knowledge of create environment.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<p><b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.</p>			
Unit	Topics		Contact Hours
I	Introduction to 3D Environments What is a 3D Environment and its importance Basics of 3D modeling, key terms, and uses Role of 3D Environments in different Industries Interface introduction (such as unreal or 3ds Max)		11
II	Modeling and Terrain Creation Creating 3D objects from 2D shapes (extrude, bevel, loft, etc.) Terrain modeling and landscaping techniques Basics of modular modeling Creating simple and complex scenes		11
III	Texturing, Lighting, and Materials Basic material and texturing techniques Lighting basics and camera setup Tips for making environments look realistic Introduction to rendering		11
IV	Animation, Effects, and Optimization Basic animation (keyframes, movement)		12

	Simulation and environment effects (wind, water, fire) Environment optimization (LODs, polygon reduction) Practical project: Create your own small 3D environment	
V	<p style="text-align: center;">Practicals</p> <ol style="list-style-type: none"> <li>1. Personalized Name Keychains: Learning how to turn text into 3D form.</li> <li>2. Smart Desk Organizer: Designing a practical and creative object.</li> <li>3. Geometric Puzzle Set: Designing interactive and mathematical puzzles.</li> <li>4. Miniature Architectural Models: Making scaled architectural models.</li> <li>5. Eco-Friendly Plant Pots: Designing sustainable plant holders.</li> <li>6. Custom Game Tokens: Creating custom game tokens and dice.</li> <li>7. Safety Whistles: Designing useful and functional safety whistles.</li> <li>8. Reusable Cup Design: Improving everyday usable cup designs.</li> <li>9. Terrain Sculpting and Texturing: Creating 3D terrain models and applying textures.</li> <li>10. Lighting and Effects in 3D Environment: Setting up lighting and applying effects.</li> </ol>	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory:</b> <b>50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum</b> <b>20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>- <b>Ahearn, Luke.</b> <i>3D Game Environments: Create Professional 3D Game Worlds.</i> CRC Press, 2016.</li> <li>- <b>Hamdani, Abdelilah.</b> <i>3D Environment Design with Blender.</i> Packt Publishing, 2022.</li> <li>- <b>Vaughan, William.</b> <i>Digital Modeling.</i> New Riders Publishing, 2012.</li> <li>- <b>Gahan, Andrew.</b> <i>3ds Max Modeling for Games.</i> Focal Press, 2011.</li> <li>- <b>Kelly, Henry.</b> <i>Environment Art in the Game Industry: A Guide to Rich and Realistic Environments Using Substance Designer.</i> CRC Press, 2021.</li> <li>- <b>Kerlow, Isaac Victor.</b> <i>The Art of 3D Computer Animation and Effects.</i> Wiley, 2009.</li> <li>- <b>Mongeon, Bridgette &amp; De La Flor, Mike.</b> <i>Digital Sculpting with Mudbox.</i> Focal Press, 2010.</li> <li>- <b>Owen Demers.</b> <i>Digital Texturing and Painting.</i> New Riders, 2001</li> </ul>		

<b>Session: 2025-26</b>			
<b>Part A – Introduction</b>			
Name of the Programme	B.Sc. Graphics & Animation		
Semester	8 <sup>th</sup>		
Name of the Course	Experimental Animation		
Course Code	B23-GAG-806		
Course Type	PC-H2		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO:1. Understand the knowledge of flipbook. CLO:2. Understand the principles of animation CLO:3. Know About the techniques of adding sound CLO:4. Learn the knowledge of typography in stop motion		
Credits	Theory	Practical	Total
	0	4	4
Teaching Hours per week	0	8	8
Internal Assessment Marks	0	30	30
End Term Exam Marks	0	70	70
Max. Marks	0	100	100
Examination Time	4 hours		
<b>Part B-Contents of the Course</b>			
<b>Practical's</b>			<b>Contact Hours</b>
	Flipbook: Ball Slide with Direction Change		120
	Clock Movement: Mechanical Clock Gears Experiment		
	Pendulum Clock Swing		
	Ball Bounce: Squash & Stretch, Timing & Spacing		
	Multi-Material Bounce Comparison: Weight, Spacing, and Squash & Stretch		
	Water Balloon Bounce		
	Push and Drag Mass Study: Follow-Through, Drag		
	Pinball: Timing & Spacing, Arcs		
	Arrow: Anticipation, Staging		
	Water Drop Animation		
	Under Water Animation		
	Capturing and Editing		
	Adding Sound		
	Cut out Animation: Letter Reveal		
	Clay Shape Changing		
	Kinetic Typography Stop Motion		
	Object Animation: Household Item Movement		
	Mix Media Animation		
	Commercial by using original Product		

Title animation			
<b>Suggested Evaluation Methods</b>			
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>	
➤ <b>Practicum</b>	<b>30</b>	➤ <b>Practicum</b>	<b>70</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	10		
• Mid-Term Exam:	15		
<b>Part C-Learning Resources</b>			
<b>Recommended Books/e-resources/LMS:</b>			
<ul style="list-style-type: none"> <li>• Norman McLaren, Neighbours (1952), Begone Dull Care (1949)</li> <li>• Len Lye, A Colour Box (1935), Free Radicals (1958), Rainbow Dance (1936)</li> <li>• Oskar Fischinger, An Optical Poem (1938), Motion Painting No.1 (1947)</li> <li>• Mary Ellen Bute, Synchrony No. 4: Escape (1937), Spook Sport (1939)</li> <li>• Harry Smith, Early Abstractions (1946–1957)</li> </ul>			

<b>Session: 2025-26</b>			
<b>Part A - Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	8 <sup>th</sup>		
Name of the Course	3D Texturing		
Course Code	B23-GAG-807		
Course Type	CC-HM2		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand Environment Modeling Fundamentals CLO 2: Create Environment Blockouts and Model Low-Poly Environment Assets CLO 3: Apply PBR Texturing to Environments CLO 4: Understanding unwrap models cleanly and create efficient UV layouts for texturing. CLO 5: Understand the knowledge of create environment.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Introduction to PBR (Physically Based Rendering) workflow Understanding texture maps: Base Color, Roughness, Metallic, Normal Height / Displacement Ambient Occlusion Basics of UV Mapping, UV layout, seams, unwrapping Introduction to the UV Editor in 3ds Max		11
II	Understanding Substance Painter interface Texture Baking, Normal map Ambient Occlusion, Curvature, Position, Thickness Creating Smart Materials & Smart Masks Layer-based painting, Procedural texturing techniques Exporting texture maps (Arnold, V-Ray, Unreal, Unity presets)		11
III	Introduction to Substance Designer Node-based procedural material creation		11

	Working with noise nodes, blend nodes, generators Creating tileable materials (wood, metal, stone, fabric) Exporting Substance materials (.sbsar) 3ds Max Material Editor (Slate Editor) Applying materials to 3D models in 3ds Max Using V-Ray or Arnold materials	
IV	Advanced texture painting (edge wear, dirt, scratches, gradients) Creating realistic materials (metals, skin, fabric, leather) Texture optimization for games and films UDIM workflow Rendering textured models using Arnold / V-Ray	12
V	<p style="text-align: center;"><b>Practicals</b></p> <ol style="list-style-type: none"> <li>1. 3D model (mug, crate, hammer, etc.)</li> <li>2. Create basic PBR maps (Base Color, Roughness, Metalness) using Photoshop/any 2D tool.</li> <li>3. Import a low-poly and high-poly model and texture</li> <li>4. UV unwrapping a 3D object sword, mug</li> <li>5. Hand painted texture assignment</li> <li>6. Organic texturing skin creature and cloth</li> <li>7. Hard surface texturing gun, robot, drown</li> <li>8. Creating tile able texturing</li> <li>9. Exporting game ready texturing</li> </ol>	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory:</b> <b>50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum</b> <b>20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>• “3ds Max Bible” – UVW Mapping and Material Editor chapters</li> <li>• “Substance Painter User Guide” – PBR basics and texture sets</li> <li>• “The PBR Guide” (Allegorithmic/Substance) – PBR theory</li> <li>• “Substance Painter Fundamentals” – Layers, baking, export workflows</li> <li>• “Substance Designer Official Documentation” – node library, material graphs</li> <li>• “Autodesk 3ds Max Essentials” – Material Editor and shader workflows</li> <li>• Substance Painter – Advanced Techniques Guide</li> <li>• 3ds Max – Rendering &amp; Shading chapters (V-Ray/Arnold)</li> </ul>		

# Honours with Research

<b>Session: 2025-26</b>			
<b>Part A - Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	Story, Script & Storyboarding		
Course Code	B23-GAG-701		
Course Type	CC-H1		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Learn the idea creation for writing a story. CLO 2: Understand the grammar fundamentals for writing content CLO 3: Understand the language, dialect and script CLO 4: Convert the written content into the multimedia formats CLO 5: Learn the practical aspects of storyboarding		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<p><b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.</p>			
Unit	Topics		Contact Hours
I	Story : Elements of story, Resources and ideas from life, Story Genres, Characters and the story, character driven stories, Event driven stories. Story structures and styles (Linear, Non-Linear, Circular and Episodic) Narrative, non-narrative, abstract, absurd with reference to stories for animated film Basic writing for Animation, Story Structure, Plot, Dramatic structure, Conflict, Setting mood, Rising action, Falling Action, Dénouement, Resolution		11
II	Script : Anatomy of a Script, Script Elements and Scene Heading, Action, Characters, Dialogue, Parenthetical, Extension, Transition, Shots, Page Breaking, Finer Points, Dual Dialogue, and Adlibs, Abbreviations and Montages, A Series of Shots and Short Lines/Poetry/Lyrics, transitions, continuity etc. Titles or Opening Credits, and Superimpose or Title, Title Page, Production Drafts, Top Continued and Bottom Continued, Locking Script Pages and Locking Scenes, Header, Do's and Don'ts. Script Formats, Radio scripts, TV scripts, Animation film scripts.		11

III	Storyboarding: Introduction to Storyboard, Importance of StoryBoard, difference between storyboard and Graphic Comic, Difference between Story, Script and Storyboard. Advantages of Storyboard in Animation and Anatomy of a Storyboard.	11
IV	Shots: Introduction to various shots, Camera angles and Camera Movements used in Storyboard panels. continuity and Timing, Building a sequence of shots. Use of Perspective, Composition, Light & Shadow in Storyboarding. Script to Storyboard Designing a storyboard based on a short script, Use of Thumbnails and Quick story sketches, Creating visual narrative using Animatics	12
V	Practicals 10. Write a one-line summary of the main idea. 11. Define the genre (comedy, drama, horror) and tone (light, dark, emotional). 12. Write a short summary (½–1 page) of the entire story. 13. Create character bios — name, age, background, motivation, conflict. 14. Describe main locations and time period. 15. Write key events in order — beginning, middle, end. 16. Identify the main problem and how it's resolved. 17. Define the central message or moral. 18. Share with peers/instructor for critique and refine the story.	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory: 50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum 20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>- Animation history and production by aparna vats; new delhi publishers; First edition 2017</li> <li>- Story: Substance, Structure, Style and the Principles of Screenwriting by Robert McKee</li> <li>- The Way of the Storyteller by Ruth Sawyer</li> <li>- Comic Book Design: The Essential Guide to Creating Great Comics and Graphic Novels Gary Spencer Millidge</li> <li>- Facial Expressions: A Visual Reference for Artists, Mark Simon, Publisher: Watson-Guption,</li> <li>- The Animation Book: A Complete Guide to Animated Filmmaking--From Flip-Books to Sound Cartoons to 3- D Animation, Three Rivers Press</li> <li>- The Art of story board by John Hart</li> <li>- 'How to Write for Animation' by Jeffrey Scott's book</li> <li>- Animation Art: From Pencil to Pixel, the world of Cartoon Anime and CGI- Jerry Beck</li> </ul>		

<b>Session: 2025-26</b>			
<b>Part A – Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	Graphic Design		
Course Code	B23-GAG-702		
Course Type	CC-H2		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the basic principles of graphic design. CLO 2: Learn the major tools of graphic designing. CLO 3: Know about the color theory and color scheme CLO 4: Understand different kind of layouts in graphic designing. CLO 5: Understand different types of designing.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Introduction to graphics, tools of graphics, uses & types of graphics Meaning and definition of graphics design Elements and principles of graphic design Graphics Overview: Raster graphics, Vector graphics		11
II	Understanding the role of graphic design in advertising Design Theory: Gestalt Principal, Visual Perception Elements of Art: Point, Line, Form, Shape, Space, Color, Texture, Value Principles of Art: Balance, Rhythm, Harmony, Contrast, Proportion, • Dominance, Unity		11
III	Logo Design: Principal, element and types Poster Design: Types, Elements Brochure Design: Types Infographics: concept and uses Colour Theory: Colour wheel, colour scheme		11
IV	Authoring and process of publishing Publishing types, newspaper and magazine publishing Research papers and publications Packaging and its types, Functions of Packaging		12

V	Practicals	30
	11. Re Design Logo / New Logo 12. 5 Business Card 13. 2 Social Poster Design 14. 2 Commercial Poster Design 15. 5 Social Media Post 16. Magazine Cover Design 17. 2 Illustration Designs 18. 1 Borchher Design 19. 2 Certificate Design 20. 1 Newsletter Design with contain 4 pages	
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory: 50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum 20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>• Golombisky, K., &amp; Hagen, R. (2017). White space is not your enemy: A beginner's guide to communicating visually through graphic, web &amp; multimedia design. CRC Press.</li> <li>• Harrington, R. (2012). Understanding Adobe Photoshop CS6: The essential techniques for imaging professionals. Peachpit Press.</li> <li>- Gulbins, J. (2013). Mastering Photoshop layers: A photographer's guide. Rocky Nook</li> </ul>		

<b>Session: 2025-26</b>			
<b>Part A – Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	Multimedia Technologies		
Course Code	B23-GAG-703		
Course Type	CC-H3		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the file organization of different multimedia elements. CLO2: Learn the knowledge of various multimedia equipment's and kiosks. CLO 3: Create the linking inputs of interconnected multimedia systems. CLO 4: Learn to secure the created multimedia content. CLO 5: Learn about multimedia technologies in present scenario.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Multimedia Elements, Multimedia Applications, Multimedia System Architecture, Multimedia Databases; Types of Compression, Binary Image Compression Schemes, Color, gray scale, still-video image compression, video Image compression, audio compression; Data and File format standards- RTF, TIFF, RIFF, MIDI, JPEG, AVI, JPEG		11
II	Key Technology Issues, Pen Input, Video and Image Display Systems, Print Output Technologies, Image Scanners, Digital Voice and Audio, Video Images and Animation, Full Motion Video; Magnetic Media Technology, Optical Media, WORM optical drives , Cache Management for storage systems.		11
III	Types of Multimedia systems, Virtual Reality Design, Components of Multimedia system, Distributed Application Design Issues, Multimedia Authoring and User Interface, Hypermedia Messaging, Distributed Multimedia Systems		11
IV	Secured Multimedia, Digital Rights Management Systems, Technical Trends, Multimedia encryption, Digital Watermarking, Security Attacks; Multimedia		12

	Authentication, Pattern, Speaker and Behavior Recognition,	
V	<p style="text-align: center;">Practicals</p> <p>8. To prepare a file with Text and Paragraph alignment.</p> <p>9. To edit an Image by Cropping, resizing the same.</p> <p>10. To edit a image by using five filters and effects</p> <p>11. To prepare a power point presentation by using multimedia components</p> <p>12. To record an audio sample by using microphone and edit it in audio editor</p> <p>13. To record a video clip from video camera in HD format and edit it in video editor</p> <p>14. To convert an audio and a video file in different format using audio-video converter</p>	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory: 50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum 20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>• Weixel, Fulton, Barksdale.Morse, “Multimedia Basics”, Easwar Press 2004.</li> <li>• Andleigh PK and Thakrar K, “Multimedia Systems”, Addison Wesley Longman, 1999.</li> <li>• Fred Halsall, “Multimedia Communications”, Addison Wesley, 2000.</li> <li>• Ralf Steinmetz, KlaraNahrstedt, “Multimedia, computing, communications and applications”, Prentice Hall, 1995.</li> <li>• Tay Vaughan, “Multimedia making It work”, TMH 5th Edition 2001.</li> </ul>		
-		

<b>Session: 2025-26</b>			
<b>Part A – Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	History of Indian Art		
Course Code	B23-GAG-704		
Course Type	DSE-H1		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO1: Understand and explain major phases of Indian art from prehistoric to colonial periods. CLO2: Identify iconic artworks and their distinguishing characteristics. CLO3: Analyze the influences of religion, patronage, and regional identities on art. CLO4: Develop visual literacy in reading Indian iconography and symbolism.		
Credits	Theory	Tutorial	Total
	3	1	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		
<b>Part B-Contents of the Course</b>			
<b>Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Origin of the World Kala Division of Art: External and Secret Art Palaeolithic, Mesolithic, Neolithic Age Bhimbetka Caves and Paintings. Indus Valley Civilization: Seals, terracotta, sculpture, and architecture		15
II	Mauryan Art: Characteristics of Maurya Art; Ashokan Pillars The sculptures of Yaksha –Yakshinis Chaamardharini Yakshaini-Didarganj Shunga and Satavahana Period Buddhist art		15
III	Golden age in India-Gupta period		15

	Architecture, Sculpture Paintings of Ajanta Caves Characteristics of Ajanta Paintings Introduction to Elephanta Caves and Temples	
IV	Indian Modern Art Bengal Company School Raja Ravi Verma, Nand Lal Bose, Abanindranath Tagore, Amrita Sher-Gil Satish Gujral, Jamini Roy	15
<b>Total Contact Hours</b>		60
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>30</b>	➤ <b>Theory: 70</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	10	
• Mid-Term Exam:	15	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>• The History of Indian Art – A.L. Basham, Oxford University Press.</li> <li>• Ancient Indian Art and Architecture – J.C. Harle, Oxford University Press.</li> <li>• Paintings of India – Swaminathan, Lalit Kala Akademi.</li> <li>• Indian Art – Partha Mitter, Oxford University Press.</li> <li>• भारतीय ललित कला. स्टेला क्रामरिश. इंडियन म्यूजियम कोलकाता।</li> <li>• मुगल एंड राजपूत पेंटिंग्स. पर्सी ब्राउन. एशियन एज पब्लिशर्स</li> </ul>		

Session: 2025-26			
Part A – Introduction			
Name of Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	History of Western Art		
Course Code	B23-GAG-705		
Course Type	DSE-H1		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	<b>CLO1:</b> Identify major art movements and their characteristics. <b>CLO2:</b> Trace the evolution of Western art in historical context. <b>CLO3:</b> Apply historical art styles and concepts in design and animation projects. <b>CLO4:</b> Discuss about the legendary artist of Western Artist.		
Credits	Theory	Tutorial	Total
	3	1	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		
Part B-Contents of the Course			
<b>Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Origin of the Art Palaeolithic, Mesolithic, Neolithic Age Mesopotamia and the origins of civilization Funerary art, hieroglyphics, and monumental architecture The Great Khufu Pyramid of Giza		15
II	Classical Greek sculpture and architecture Pottery, Architecture (Parthenon)The Doryphoros by Polyklitos Kouros and Kore Sculpture Discus Thrower by Phidias Greeks Culture Roman Art: Realism, Mosaics, frescoes, Civic Architecture		15
III	Age of Renaissance-Jan Van Eyck, Masaccio; Sandro Botticelli Artist High Period Renaissance Leonardo Michelangelo, Raphael – harmony and ideal beauty		15
IV	Baroque Art Movement Caravaggio, Bernini, Rembrandt Modern Art of Europe, Francisco Goya Claude Monet, Edouard Manet Auguste Renoir, Paul Cezanne		15

<b>Total Contact Hours</b>		60	
<b>Suggested Evaluation Methods</b>			
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>	
➤ <b>Theory</b>	<b>30</b>	➤ <b>Theory:</b>	<b>70</b>
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		
<b>Part C-Learning Resources</b>			
<b>Recommended Books/e-resources/LMS:</b>			
<ul style="list-style-type: none"> <li>• Gombrich, E.H. The Story of Art. Phaidon Press.</li> <li>• Janson, H.W. History of Art. Pearson.</li> <li>• Honour, H., &amp; Fleming, J. A World History of Art. Laurence King.</li> <li>• Stokstad, M., &amp; Cothren, M. Art History. Pearson.</li> <li>• Elkins, J. Why Art Cannot Be Taught. University of Illinois Press.</li> <li>• Berger, J. Ways of Seeing. Penguin Books.</li> <li>• Animated films and visual art studies from Disney, Pixar, and Studio Ghibli for stylistic influences.</li> </ul>			

<b>Session: 2025-26</b>			
<b>Part A – Introduction</b>			
Name of the Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	Digital Design Lab		
Course Code	B23-GAG-706		
Course Type	PC-H1		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO:1. Understand the difference between different graphics and image file formats. CLO:2. Understand Vector Graphic tools. CLO:3. Know About Design Process. CLO:4. Learn the Techniques to Create Digital Graphics		
Credits	Theory	Practical	Total
	0	4	4
Teaching Hours per week	0	8	8
Internal Assessment Marks	0	30	30
End Term Exam Marks	0	70	70
Max. Marks	0	100	100
Examination Time	4 hours		
<b>Part B-Contents of the Course</b>			
<b>Practical's</b>			<b>Contact Hours</b>
	21. Create five Logos		120
	22. Draw two Posters		
	23. Make a Web Banner		
	24. Make two Hoardings		
	25. Create Emailers		
	26. Make four Flyers		
	27. Make two Magazine covers		
	28. Make Two Newspaper Advertisement		
	29. Infographics Discussion		
	30. Make a Trifold brochure		
	31. Make a French fold brochure		
	32. Create a Gatefold brochure		
	33. Make Bi fold brochure		
	34. Create a Accordian brochure		
	35. Create Five PowerPoint presentations		
	36. Make a Webpage		
	37. Typography Practice		
	38. Packaging Drawing Practice		
	39. Make a Vehicle wrap design		
	40. Make a Mock up design		

<b>Suggested Evaluation Methods</b>			
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>	
➤ <b>Practicum</b>	<b>30</b>	➤ <b>Practicum</b>	<b>70</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	10		
• Mid-Term Exam:	15		
<b>Part C-Learning Resources</b>			
<b>Recommended Books/e-resources/LMS:</b>			
<ul style="list-style-type: none"> <li>• Corel Draw Training Guide, Author: Satish Jain, M. Geetha Basics of Illustration</li> <li>• Corel draw 2020 User Guide</li> <li>• A Textbook of Vector Calculus by Shanti Narayan (Author), P.K. Mittal (Author)</li> <li>• Guide to Graphics Design by Scott W. Santoro, Library of Congress Cataloging-in-Publication Data, ISBN 978-0-13-230070-4 (pbk.)</li> <li>• Graphic Designer’s Essential Reference, Visual Elements, Techniques, and Layout Strategies for Graphic Designers by Timothy Samara, ROCKPORT PUBLISHER</li> </ul>			

<b>Session: 2025-26</b>			
<b>Part A - Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	7 <sup>th</sup>		
Name of the Course	Visual Art and Creativity		
Course Code	B23-GAG-707		
Course Type	CC-HM1		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the knowledge of Art Elements. CLO 2: Learn the principles of Art. CLO 3: Understand the knowledge of colours. CLO 4: Understand the knowledge of different types of art. CLO 5: To know the knowledge of visualization.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Define Art Origin of Art: ○ Study of Prehistoric Indian Art ○ Visual Arts & Its Forms & Creative Pedagogies Diversity of Shapes, Form, Lines, Textures Drawing: Line, Contour, Stippling and Hatching Sketching and Concept Drawing Understanding of Light and Shadow Landscapes and Composition Mandala art: Concept Doodling: Concept		11
II	Perception of Color and Color Wheel Pattern Design and 3D Design Perspectives on the Creative Process Typography: Elements and Features Calligraphy: Elements and Features		11

III	Indian art forms: Madhubani Art Warli, Patta Chitra, Gond Rajasthani Miniature paintings Western art movements: Realism, Impressionism Cubism, Surrealism, Abstract art	11
IV	Concept of creativity Brainstorming, thumbnails, mood boards Visual storytelling Principles of good composition Layout planning and framing Poster design, logo design Creative product design	12
V	Practicals 1. Discussion on Anatomy and Create four exercises 2. Create Three Caricatures 3. Poster design 4. Discussion on Colour theory and mixture 5. Painting exercises (landscape, portrait, abstract). 6. Warli Art and Gond Art drawing 7. Creating Mandala Art on Canvas 8. Dot painting Techniques Practice 9. Stone Art Practice 10. Glass Painting or Mirror Image Art Practice	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory:</b> <b>50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum</b> <b>20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>- Animation history and production by aparna vats; new delhi publishers; First edition 2017</li> <li>- Story: Substance, Structure, Style and the Principles of Screenwriting by Robert McKee</li> <li>- The Way of the Storyteller by Ruth Sawyer</li> <li>- Facial Expressions: A Visual Reference for Artists, Mark Simon, Publisher: Watson-Guption,</li> <li>- The Animation Book: A Complete Guide to Animated Filmmaking--From Flip-Books to Sound Cartoons to 3- D Animation, Three Rivers Press</li> <li>- The Illusion of Life: Disney Animation, Ollie Johnston and Frank Thomas, Publisher: Disney Editions;</li> <li>- Making Comics: Storytelling Secrets of Comics, M... by Scott McCloud</li> <li>- The Art of story board by John Hart</li> <li>- 'How to Write for Animation' by Jeffrey Scott's book</li> <li>- Animation Art: From Pencil to Pixel, the world of Cartoon Anime and CGI- Jerry Beck</li> </ul>		

**Session: 2025-26**

**Part A - Introduction**

Name of Programme	B.Sc. Graphics & Animation		
Semester	8 <sup>th</sup>		
Name of the Course	Research Design		
Course Code	B23-GAG-801		
Course Type	CC-H4		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	<p>CLO 1: Understand the core principles, types, and ethical considerations involved in research methodology.</p> <p>CLO 2: Utilize suitable research designs, sampling strategies, and data collection techniques to carry out effective research.</p> <p>CLO 3: Interpret and evaluate data using statistical methods and apply relevant software tools for data analysis.</p> <p>CLO 4: Produce clear and organized research reports with accurate citations and effectively communicate findings through presentations.</p>		
Credits	Theory	Tutorial	Total
	3	1	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

**Part B-Contents of the Course**

**Instructions for Paper- Setter:** The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	Definition and Concept of Research: Meaning, nature, and purpose of research, Characteristics of good research; Types of Research: Basic vs. applied research, Qualitative vs. quantitative research, Exploratory, descriptive and explanatory research Research Process: Identifying the research problem, Review literature, Setting objectives and hypothesis formulation Ethics in Research: Importance of ethical considerations, Plagiarism and academic integrity, Informed consent and confidentiality	15
II	Research Design: Definition and importance, Components of research design, Types of research design (experimental, correlational, observational, etc.) Sampling Methods: Probability sampling (random, systematic, stratified, cluster), non-probability sampling (convenience, purposive, snowball), Sample size determination Data Collection Methods: Primary Data: Surveys, questionnaires,	15

	interviews, Observation methods; Secondary Data: Government reports, articles, journals, and online sources Measurement and Scaling: Nominal, ordinal, interval, and ratio scales, Likert scale and semantic differential scale	
III	Data Preparation: Data cleaning and coding, Tabulation and organization of data Descriptive Statistics: Measures of central tendency (mean, median, mode), Measures of dispersion (range, variance, standard deviation), Frequency distribution and graphical representation Inferential Statistics: Hypothesis testing (null and alternative hypotheses), p-value and significance testing, t-test, chi-square test, ANOVA Correlation and Regression Analysis: Pearson and Spearman correlation, Simple and multiple regression models Use of Software for Data Analysis: Introduction to SPSS, Excel, R, or Python for data interpretation	15
IV	Research Report Writing: Structure of the research report, Title page, abstract, introduction, methodology, results, and conclusion, Formatting and referencing (APA, MLA, Chicago, etc.) Citations and Referencing: In-text citations and bibliography, Reference management tools (Zotero, Mendeley, EndNote) Presentation of Research Findings: Preparing PowerPoint presentations, Data visualization (charts, graphs, and tables), Effective communication and presentation skills Plagiarism and Citation Tools: Checking plagiarism (Turnitin, Grammarly), Importance of originality in research Assessment Methods: Assignments and quizzes, Practical application of data collection and analysis methods, Research report submission, Presentation of research findings	15
<b>Total Contact Hours</b>		60
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>30</b>	➤ <b>Theory: 70</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.	10	
• Mid-Term Exam:	15	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS</b>		
<ul style="list-style-type: none"> <li>○ Kothari, C. R. (2004). Research Methodology: Methods and Techniques (2nd ed.). New Age International.</li> <li>○ Creswell, J. W. (2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (5th ed.). SAGE Publications.</li> <li>○ Bryman, A. (2016). Social Research Methods (5th ed.). Oxford University Press.</li> <li>○ Babbie, E. (2020). The Practice of Social Research (15th ed.). Cengage Learning.</li> <li>○ Bhattacharyya, D. K. (2009). Research Methodology (2nd ed.). Excel Books.</li> <li>○ Graziano, A. M., &amp; Raulin, M. L. (2013). Research Methods: A Process of Inquiry (8th ed.). Pearson.</li> <li>○ Singh, Y. K. (2006). Fundamentals of Research Methodology and Statistics. New Age International.</li> <li>○ Cooper, D. R., &amp; Schindler, P. S. (2014). Business Research Methods (12th ed.). McGraw-Hill Education.</li> <li>○ Saunders, M., Lewis, P., &amp; Thornhill, A. (2019). Research Methods for Business Students (8th ed.). Pearson.</li> </ul>		

<b>Session: 2025-26</b>			
<b>Part A - Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	8 <sup>th</sup>		
Name of the Course	User Interface & User Experience (UI /UX)		
Course Code	B23-GAG-802		
Course Type	CC-H5		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Generating design ideas based on well-defined goals and scenarios CLO 2: Developing impactful user interfaces using design systems CLO 3: Employing Wire framing, prototyping, and testing tools for design evaluation CLO 4: Applying user-centered design principles to enhance User Experiences CLO 5: Create various user interface.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<b>Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Concept of User Interface Design (UI) Scope of Interface Design Process of UI Design: Empathize, Define, Ideate, Deliver, Test / Components Elements of UI Design: Input Controls, Navigation Components, Informational Components, Containers, Principles of UI Design Clarity, Consistency, Accessibility, Feedback, Familiarity, Design Standards, Structure and Hierarchy, Simplicity, Control, Empathy Types of UI Design		11
II	Concept of UX Design Process of UX Design: Product Definition, Product Research, Analysis, Design, Validation (Testing) 8 Stages: Project Definition and Scope, Understanding the problem, UX Research, Ideation (Sketching and low fidelity prototyping), High fidelity mockups and prototype, Usability Testing, Design handoff, Quality Assurance or		11

	UX Audit, Elements of User Experience Functional Layout & Interaction design UX Principles: Doherty Threshold, Occam's Razor, Pareto Principle, Postel's Law, Tesler's Law	
III	Gestalt Principles Concept of Microcopy Concept of Wireframing: low fidelity and high fidelity Difference Between UI and UX	11
IV	Concept of Grids User Persona and Scenario Concept Of Prototypes Market Competitive Analysis Research Methodology	12
V	<b>Practicals:</b> 1. Login/Signup Screens 2. Home Screen 3. Navigation Screens/Menus 4. List Screens 5. Detail Screens 6. Forms/Input Screens 7. Confirmation/Success Screens 8. Profile Screens 9. Checkout Screens 10. Prototyping	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory: 50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum 20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>• A Project Guide to UX Design: For user experience designers in the field or in the making (2nd. ed.). Russ Unger and Carolyn Chandler. New Riders Publishing, USA, 2012.</li> <li>• The Elements of User Experience: User-Centered Design for the Web and Beyond, Second Edition Jesse James Garrett, Pearson Education. 2011.</li> <li>• The Essential Guide to User Interface Design: An Introduction to GUI Design Principles and Techniques, Third Edition by Wilbert O. Galitz, Wiley Publishing, Inc.</li> <li>• Adobe XD in CC, Classroom in a Book, The official training workbook from Adobe By Brian Wood, ADOBE PRESS</li> <li>• The UX Book Process and Guidelines for Ensuring a Quality User Experience, Rex Hartson and Pardha S. Pyla, Elsevier, 2012</li> </ul>		

<b>Session: 2025-26</b>			
<b>Part A - Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	8 <sup>th</sup>		
Name of the Course	3D Texturing		
Course Code	B23-GAG-807		
Course Type	CC-HM2		
Level of the course	400-499		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand Environment Modeling Fundamentals CLO 2: Create Environment Blockouts and Model Low-Poly Environment Assets CLO 3: Apply PBR Texturing to Environments CLO 4: Understanding unwrap models cleanly and create efficient UV layouts for texturing. CLO 5: Understand the knowledge of create environment.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
<b>Part B- Contents of the Course</b>			
<b>I Instructions for Paper- Setter:</b> The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.			
Unit	Topics		Contact Hours
I	Introduction to PBR (Physically Based Rendering) workflow Understanding texture maps: Base Color, Roughness, Metallic, Normal Height / Displacement Ambient Occlusion Basics of UV Mapping, UV layout, seams, unwrapping Introduction to the UV Editor in 3ds Max		11
II	Understanding Substance Painter interface Texture Baking, Normal map Ambient Occlusion, Curvature, Position, Thickness Creating Smart Materials & Smart Masks Layer-based painting, Procedural texturing techniques Exporting texture maps (Arnold, V-Ray, Unreal, Unity presets)		11
III	Introduction to Substance Designer Node-based procedural material creation Working with noise nodes, blend nodes, generators		11

	Creating tileable materials (wood, metal, stone, fabric) Exporting Substance materials (.sbsar) 3ds Max Material Editor (Slate Editor) Applying materials to 3D models in 3ds Max Using V-Ray or Arnold materials	
IV	Advanced texture painting (edge wear, dirt, scratches, gradients) Creating realistic materials (metals, skin, fabric, leather) Texture optimization for games and films UDIM workflow Rendering textured models using Arnold / V-Ray	12
V	<p style="text-align: center;"><b>Practicals</b></p> <ol style="list-style-type: none"> <li>1. 3D model (mug, crate, hammer, etc.)</li> <li>2. Create basic PBR maps (Base Color, Roughness, Metalness) using Photoshop/any 2D tool.</li> <li>3. Import a low-poly and high-poly model and texture</li> <li>4. UV unwrapping a 3D object sword, mug</li> <li>5. Hand painted texture assignment</li> <li>6. Organic texturing skin creature and cloth</li> <li>7. Hard surface texturing gun, robot, drown</li> <li>8. Creating tile able texturing</li> <li>9. Exporting game ready texturing</li> </ol>	30
<b>Total Contact Hours</b>		75
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment: 30</b>		<b>End Term Examination: 70</b>
➤ <b>Theory</b>	<b>20</b>	➤ <b>Theory: 50</b>
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	5	
• Mid-Term Exam:	10	
➤ <b>Practicum</b>	<b>10</b>	➤ <b>Practicum 20</b>
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5	
• Mid-Term Exam:	-	
<b>Part C-Learning Resources</b>		
<b>Recommended Books/e-resources/LMS:</b>		
<ul style="list-style-type: none"> <li>• “3ds Max Bible” – UVW Mapping and Material Editor chapters</li> <li>• “Substance Painter User Guide” – PBR basics and texture sets</li> <li>• “The PBR Guide” (Allegorithmic/Substance) – PBR theory</li> <li>• “Substance Painter Fundamentals” – Layers, baking, export workflows</li> <li>• “Substance Designer Official Documentation” – node library, material graphs</li> <li>• “Autodesk 3ds Max Essentials” – Material Editor and shader workflows</li> <li>• Substance Painter – Advanced Techniques Guide</li> <li>• 3ds Max – Rendering &amp; Shading chapters (V-Ray/Arnold)</li> </ul>		

<b>Session: 2025-26</b>			
<b>Part A – Introduction</b>			
Name of Programme	B.Sc. Graphics & Animation		
Semester	8 <sup>th</sup>		
Name of the Course	Project/Dissertation		
Course Code	B23-GAG-808		
Course Type	-		
Level of the course	400-499		
Pre-requisite for the course (if any)	-		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	<ul style="list-style-type: none"> <li>• To understand the fundamental of media research</li> <li>• To understand the research methodology and research design</li> <li>• To understand data analysis and data coding</li> <li>• To understand the research thesis / report/ dissertation writing</li> <li>• To understand the use of computer software</li> </ul>		
Credits	Evaluation Report	Viva-Voce Examination	Total
	8	4	12
Teaching Hours per week	-	-	-
Max. Marks	200	100	300
<b>Part B- Contents of the Course</b>			
<b>Instructions for Practical:</b> Each student will develop a portfolio compiling the below given exercises for End term exam, showcasing applications of computer in journalism.			
<b>Practical Assignments</b>			<b>Contact Hours</b>
<p><b>Research Project and Guidelines</b></p> <ul style="list-style-type: none"> <li>• Identify Research Problem</li> <li>• Write a synopsis</li> <li>• Do review of Literature</li> <li>• Frame Research questions and Hypothesis</li> <li>• Frame objectives</li> <li>• Design Methodology</li> <li>• Prepare data collection tool</li> <li>• Collect Data</li> <li>• Draw conclusions</li> <li>• Write thesis / Dissertation</li> <li>• Every student has to publish and write a research paper alongwith dissertation.</li> </ul> <p>Evaluation of the thesis will be on the basis of Quality of Above Research. Supervisor will be allotted to each student of research honors Viva vice will be conducted in front of a three member committee constituted by the Institute.</p> <p><b>Submissions related to research</b> Prepare a Questionnaire Prepare a code book Prepare Google form</p>			

	Prepare charts and tables Write review of literature Data coding with SPSS software			
<b>Suggested Evaluation Methods</b>				
<b>Internal Assessment</b>			<b>End Term Examination : 300</b>	
	➤ ` Practicum	<b>0</b>	➤ Practicum	300
	Evaluation Report	0	200	200
	Viva-Voce	0	100	100
	Max. Marks	0	300	300