## SCHOOL OF MEDIA AND COMMUNICATION

# UNDERGRADUATE COURSE STRUCTURE

# **B.SC (H) GRAPHICS AND ANIMATION**

## BATCH 2023-25

SEMI	ESTER I							
S.No	Type of Course	Code	Title of the Course	Co We		t Ho	urs Per	Remarks
	Course	L T P		P	С			
1	CC	BGA101	Introduction to Graphic Design	3	1	0	4	CC-1
2	CC	BGA102	Animation Fundamentals	3	1	0	4	CC-2
3	MDC	BGA103	To be chosen from the bucket	2	1	0	3	
4	AEC	AEC101	Communicative English-I	2	1	0	3	
5	Minor	BGA104	Basics of Photography	2	1	1	4	
6	VAC	VAC101	Environmental Education-I	2	0	0	2	
Semes	ster Credits	1		I		I.	20	
SEMI	ESTER II						T.	
7	CC	BGA105	Graphic Design- llustration and Typography	2	1	1	4	CC-3
8	CC	BGA106	Digital Methods : Photoshop, Illustrator	2	1	1	4	CC-4
9	MDC	BGA107	To be chosen from the bucket	2	1	0	3	
10	SEC		To be chosen from the pool of skills courses				2	
11	VAC	VAC102	Human Values and Ethics	2	0	0	2	
12	AEC	AEC102	Communicative English-II	2	1	0	3	
13	Minor	BGA108	Basics of Videography	2	1	1	4	
Semes	ster Credits	•	•	•	•	•	22	
SEMI	ESTER III						I	

1.4		DG 4 201		ا م	La	1 4	1.4	l aa s
14	CC	BGA201	2D Animation	2	1	1	4	CC-5
15	CC	BGA202	Web Design	2	1	1	4	CC-6
		BGA203	To be chosen from the	2	1	0	3	
16	MDC		bucket					
			Graphic Design- llustration and	2	1	1	4	
17	Minor	BGA204	Typography	2	1	1		
		AEC103		2	0	0	2	
		/ACE104	Introduction to Bengali					
18	AEC	/AEC105	Language and Literature / or / Hindi / or / Sanskrit					
			To be chosen from the					
19	SEC		pool of skills courses				2	
20	THE C	VII. G102	Constitutions and Human	2	0	0	2	
20	VAC	VAC103	Rights					
Seme	ester Credits						21	
SEM	ESTER IV							
21	CC	BGA205	Graphic Design for social media	2	1	1	4	CC-7
22	CC	BGA206	Preproduction techniques	2	1	1	4	CC-8
23	CC	BGA207	3D Basics	2	1	1	4	CC-9
24	SEC		To be chosen from the pool of skills courses	2		1	2	
25	Minor	BGA208	Digital Methods : Photoshop, Illustrator	0	2	2	4	
26	VAC	VAC104	Yoga and Wellness	2	0	0	2	
Seme	ester Credits		1	<u> </u>	1	<u> </u>	20	
SEM	ESTER V							
27	CC	BGA301	Shading and Texturing in 3D	0	2	2	4	CC-10
28	CC	BGA302	3D Lighting Rendering	0	2	2	4	CC-11
29	CC	BGA303	3D Character Animation	0	2	2	4	CC-12

30	Minor	BGA304	Television Broadcasting	3	1	0	4	
31	SEC		To be chosen from the pool of skills courses				2	
31	INT	BGA305	Internship				4	
					•			
Seme	ster Credits						22	
SEM	ESTER VII							
32	CC	BGA306	Vfx techniques	2	1	1	4	CC-13
33	CC	BGA307	Rigging	3	1	0	4	CC-14
34	CC	BGA308	Advanced Character animation	3	1	0	4	CC-15
35	Minor	BGA309	Radio & Podcasting	3	1	0	4	
36	SEC		To be chosen from the pool of skills courses				2	
37	Project	BGA310	Academic Project	0	2	2	4	
Seme	ster Credits			1	1	I	22	
Total	Credits of the	Program af	ter 3 <sup>rd</sup> Year				127	
			SEMESTER VII					
38	CC	BGA401	3D – Dynamics & Simulation	0	2	2	4	CC-16
39	CC	BGA402	Experimental Animation	0	2	2	4	CC-17
40	CC	BGA403	Animation Film Studies	3	1	0	4	CC-18
	CC (For		Research Methodology					
41	With research)	BGA404	(should start working on dissertation topic)	3	1	0	4	CC-19 (Research)
42	CC (For Without research)	BGA405	Film studies	3	1	0	4	CC-19(without Research)
43	Minor	BGA406	Art history and Figure drawing	0	2	2	4	
Total	Semester Cred	lit			•		20	

			Semester VIII					
44	CC	BGA407	Non Fiction Film	3	1	0	4	CC-20
45	CC (For Without research)	BGA408	Media and Cultural studies	3	1	0	4	CC-21 (without Research)
46	CC (For Without Research)	BGA409	Advertising Basics	3	1	0	4	CC-22(without Research)
47	Minor (For without research)	BGA410	Story development & Screenwriting for Animation	2	1	1	4	
48	Minor (For without research)	BGA411	Animation Showreel	2	1	1	4	
49	Dissertation	BGA410	Project/Dissertation	12	0	0	12	
Total	Semester Cred	lit	1	I	<u>I</u>	I	20	
Total	Credits of the	Program af	ter 4th Year				167	

<sup>\*</sup>NOTE: With research is only allowed for Students who secure 75% marks and above in the first six semesters

# **Ability Enhancement Course**

Serial	Course	Courses	L	T	P	С	Department
No.	Code						
1	AEC101	Communicative	2	1	0	3	PAN University (Sem -I)
		English-I					
2	AEC102	Communicative	2	1	0	3	PAN University (Sem-II)
		English-II					
3	AEC103	Introduction to Bengali	2	0	0	2	PAN University
		Language and					
		Literature					
4	AEC104	Hindi	2	0	0	2	PAN University
5	AEC105	Sanskrit	2	0	0	2	PAN University

## **Value Added Course**

Serial	Course	Courses	L	T	P	С	Department
No.	Code						

1	VAC101	Environmental	2	0	0	2	PAN University
		Education-I					
2	VAC102	Human Values and	2	0	0	2	PAN University
		Ethics					
3	VAC103	Constitutions and	2	0	0	2	PAN University
		Human Rights					
4	VAC104	Yoga and Wellness	2	0	0	2	PAN University
5	VAC105	Community	1	0	1	2	PAN University
		Engagement and Social					
		Responsibility					
6	VAC201	Environmental	1	0	1	2	PAN University
		Education-II					

# **Multi-Disciplinary Courses**

Serial No.	Course Code	Courses	L	Т	P	С
1	BGA103	Introduction to Media & Communication	2	1	0	3
2	BGA107	Introduction to Radio & Television	2	1	0	3
3	BGA203	Introduction to Digital Media	2	1	0	3

# **Minor Courses**

Serial No.	<b>Course Code</b>	Courses	L	T	P	C
1	BGA104	Basics of Photography	2	0	1	3
2	BGA108	Basics of Videography	2	0	1	3
3	BGA204	Graphic Design- llustration and Typography	1	0	2	3
4	BGA208	Digital Methods : Photoshop, Illustrator	1	0	2	3
5	BGA304	Television Broadcasting	2	1	0	3
6	BGA309	Radio & Podcasting	2	1	0	3
7	BGA406	Art history and Figure drawing	0	2	2	4
8		Story development & Screenwriting for				
	BGA410	Animation	2	1	1	4
9	BGA411	Animation Showreel	2	1	1	4

## **Skill Enhancement Course**

Serial No.	Course Code	Courses	L	T	P	С	Department
1	SEC101	Forensic Photography	1	0	1	2	Forensic, SOBAS
2	SEC102	Wildlife Forensics	1	0	1	2	Forensic, SOBAS
3	SEC103	Introduction to	1	0	1	2	Forensic, SOBAS
4	SEC104	Biometry Handwriting	1	0	1	2	Forensic, SOBAS
4	SEC104	Identification and	1	0	1		Potensic, SOBAS
		recognition					
5	SEC105	Accidental	1	0	1	2	Forensic, SOBAS
3	SLC103	Investigation	1		1	2	Torchsic, SOBAS
6	SEC106	Green Methods in	2	0	0	2	Chemistry, SOBAS
O	BECTOO	Chemistry	_			_	Chemistry, BODI is
7	SEC107	Fuel Chemistry	2	0	0	2	Chemistry, SOBAS
8	SEC108	Pharmaceutical	1	0	1	2	Chemistry, SOBAS
		Chemistry					-
9	SEC109	Mathematics for	1	1	0	2	Chemistry, SOBAS
		chemistry					
10	SEC110	Computation in	1	0	1	2	Chemistry, SOBAS
		Chemistry					
11	SEC111	Environmental	1	1	0	2	Environmental Science,
		Economics					SOBAS
12	SEC112	Conservation Biology	2	0	0	2	Environmental Science,
		and Wildlife					SOBAS
13	SEC113	Management Green Marketing and	2	0	0	2	Environmental Science,
13	BECTIS	Consumer Behaviour				_	SOBAS
14	SEC114	Environmental	1	0	1	2	Environmental Science,
		Sampling and Field					SOBAS
15	SEC115	Techniques Environmental and	2	0	0	2	Environmental Science,
13	SECTIO	Social Governance	2	0	0	2	SOBAS SCIENCE,
16	SEC116	Environmental	1	0	1	2	Environmental Science,
10	SECTIO	Analytical Chemistry	1		1	2	SOBAS Science,
17	SEC117	Application of AI-ML	1	0	1	2	Environmental Science,
	22011,	in Environmental	_				SOBAS
		Management					
18	SEC118	Environmental	1	1	0	2	Environmental Science,
		Entrepreneurship and					SOBAS
		Innovation					

19	SEC119	Circular Economy and Resource Management	2	0	0	2	Environmental Science, SOBAS
20	SEC120	Climate Change Science	2	0	0	2	Environmental Science, SOBAS
21	SEC121	Ecological Restoration	2	0	0	2	Environmental Science, SOBAS
22	SEC122	Introduction to Scientific Analysis and Documentation Skills	0	0	2	2	Physics, SOBAS
23	SEC123	Introduction to C/C++ Programming	0	0	2	2	Physics, SOBAS
24	SEC124	Instrumentation Skills	0	0	2	2	Physics, SOBAS
25	SEC125	Radiation Safety Techniques	1	0	1	2	Physics, SOBAS
26	SEC126	Introduction to Python Programming	0	0	2	2	Physics, SOBAS
27	SEC127	R Programming	0	0	2	2	Mathematics, SOBAS
28	SEC128	Introduction to MATLAB	0	0	2	2	Mathematics, SOBAS
29	SEC129	Q GIS	0	0	2	2	Geography, SOBAS
30	SEC130	Statistical Techniques and Computer Application	1	0	1	2	Geography, SOBAS
31	SEC131	Geoinformatics for Environmental Management	1	0	1	2	Geography, SOBAS
32	SEC132	Life Skills Education	1	1	0	2	Education, SOE
33	SEC133	Skills for Democratic Citizenship	1	1	0	2	Education, SOE
34	SEC134	Enzymology	1	0	1	2	Biotechnology, SOLB
35	SEC135	Basics of Forensic Biology	1	0	1	2	Biotechnology, SOLB
36	SEC136	Applied Biophysics	1	0	1	2	Biotechnology, SOLB
37	SEC137	Molecular Diagnostics	1	0	1	2	Biotechnology, SOLB
38	SEC138	Biostatistics	1	0	1	2	Biotechnology, SOLB
39	SEC139	Applied Biophysics1	1	0	1	2	SOLB (Microbiology)
40	SEC140	Applied Biophysics2	1	0	1	2	SOLB (Microbiology)
41	SEC141	Microbial and Molecular diagnostics	1	0	1	2	SOLB (Microbiology)
42	SEC142	IPR and Biosafety	1	1	0	2	SOLB (Microbiology, Biochemistry)

43	SEC143	Quality control and quality assurance	1	0	1	2	SOLB (Microbiology)
44	SEC144	Clinical Biochemistry	1	0	1	2	SOLB (Biochemistry)
45	SEC145	Forensic Science	1	0	1	2	SOLB (Biochemistry)
46	SEC146	Molecular diagnostics	1	0	1	2	SOLB (Biochemistry)
47	SEC147	AI in Biology	1	0	1	2	SOLB (Biochemistry)
48	SEC148	Writing and Editing Skill	1	1	0	2	Bengali, SOLACS
49	SEC149	Computer Application in Bengali	1	0	1	2	Bengali, SOLACS
50	SEC150	Bengali Advertising	1	1	0	2	Bengali, SOLACS
51	SEC151	Introduction Business Analytics	1	0	1	2	SOBE
52	SEC152	Negotiation skills in Business and Management	1	1	0	2	SOBE
53	SEC153	Introduction to accounting	1	1	0	2	SOBE
54	SEC154	People management and Leadership	2	0	0	2	SOBE
55	SEC155	Introduction to sales management	1	1	0	2	SOBE
56	SEC156	Conflict management skills	1	1	0	2	SOBE
57	SEC157	Finance for non-finance professionals	1	1	0	2	SOBE
58	SEC158	Academic writing skills in management and business	1	1	0	2	SOBE
59	SEC159	Professional etiquette and behaviour at workplace	1	1	0	2	SOBE
60	SEC160	AI Algorithm's in Media	1	0	1	2	SOMC
61	SEC161	MoJo (sem 2)	1	0	1	2	SOMC
62	SEC162	Anchoring Skills	1	0	1	2	SOMC
63	SEC163	Podcasting (BA sem4)	1	0	1	2	SOMC

## **Semester -I**

	Intro to Graphic Design_BGA101	L	Т	P	С		
Version 1.0		0	2	6	4		
Pre-requisites/Exposure	Knowledge about Graphics and Evo	Knowledge about Graphics and Evolution of Graphics					
Co-requisites	-						

## **Course Objectives**

- 1. To **develop** an understanding of graphic design concept
- 2. To **describe** the elements of graphic design.
- 3. To **teach** fundamentals of design and colour theory concepts.
- 4. To **enhance** the perception of design elements and applications.

#### **Course Outcomes**

On completion of this course, the students will be able to;

- CO1. **Construct** an overall knowledge about Graphic Design.
- CO2. **Evaluate** how design psychology works.
- CO3. **Analyze** an understanding of elements into handdrawn illustrations.
- CO4. **Apply** the techniques and aesthetics into manual design.
- CO5. **Explain** the tools and techniques used in design.
- CO6. **Define** the new terms and techniques used in design.

## Unit I:

Fundamentals of Graphics: Introduction to Graphics; Understanding of Graphics; Language of Graphics; The History of Graphic Design; The Future & Scope of Graphic Designer; The

Concept about Modern Graphics; Modern Equipment for Graphics

#### **Unit II:**

Basics of Design: Elements of Graphics – Line, Shape, Color, Texture & Typography; Principles of Design – Balance, Value, Space, Contrast, Emphasis/Dominance, Harmony, Movement/Rhythm, Proportion; Repetition/Pattern, Unity, Variety and Hierarchy. Gestalt Priciples.

#### **Unit III:**

Color Strategy: Sense of Color; Use of Color in Graphic Design; Color Mixing Theory; Color Using Formula; Color Board Making; RGB and CMYK Color Model.

#### **Unit IV:**

Sketching and Drawing: Sketching of natural and man-made objects and environments.

Construction drawing, Representational drawing, Simplification Drawing

#### Unit V:

Drawing for Design, Still life drawing, Gesture drawing, outdoor painting – Class assignments

#### Unit VI:

**Project** 

#### **Recommended Textbooks:**

- Arnheim, R. (1969). Visual Thinking: by Rudolf Arnheim. Faber & Faber Limited.
- Arnheim, R. (2023). Visual thinking. Univ of California Press.

#### **Reference books:**

- Eck, D. J. (2021). Introduction to Computer Graphics.
- Barnard, M. (2013). *Graphic design as communication*. Routledge.

BGA102	Animation Fundamentals	L	Т	P	С
Version 1.0		3	1	0	4
Pre-requisites/Exposure	Basic Knowledge of drawing	•	•	•	•

Co-requisites	-
1	

## **Course Objectives**

- 1. To **develop** an understanding of 2d and 3d animation.
- 2. To **describe** the scope and characteristics of an animator as a career.
- 3. To **operate** animation software.
- 4. To **develop** an understanding of animation portfolio.

#### **Course Outcomes**

On completion of this course, the students will be able to;

- CO1. **Construct** in-depth knowledge of the animation pipeline.
- CO2. **Evaluate** different aspects of animation.
- CO3. **Analyze** the animation principles.
- CO4. **Apply** the elements and basic rules of animation design.
- CO5. **Identify** the tools and techniques used in animation.
- CO6. **Memorize** the new terminologies and techniques used in animation.

#### **Course Content**

#### Unit-1

#### **Type of Animation**

Understanding of different types of animation AKA production pipeline – Animation Process and style – 2D classical animation – 3D animation – Stop Motion Animation.

#### Unit-2

**History of Animation** - Greek vase art, Egyptian art, and Cave art to see the potentiality of animation in the oldest existing visual arts of the world as well. This module also shows them how technology and art come together to Create animations, which will help them create their own animation films, taking inspiration from the masters of the past and present.

#### Unit-3

## **Applying Animation Principles**

Ball bouncing – Pendulum with thread –Ball throw–Jump.

Introduction to exposure sheet and field guide.

## Unit-4

**Drawing for animation**- Line of action- Body balance and weight distribution-Dynamic animation poses

#### **Text Books:**

- Williams, R. (2009). *The Animator's Survival Kit: Animated*. Richard Williams Animation Masterclass.
- Thomas, F., & Johnston, O. (1995). The illusion of life: Disney animation. Disney Editions.

#### **Reference books:**

 Wasko, J. (2020). Understanding Disney: The manufacture of fantasy. John Wiley & Sons.

# **Semester II**

	Graphic Design, Illustration and Typography_BGA105	L	Т	P	С
Version 1.0		0	2	6	4
Pre-requisites/Exposure	Knowledge about Graphics and Digital Illustration				
Co-requisites	-				

## **Course Objectives**

- 1. To **develop** an understanding of the principles of graphic design, colour theory
- 2. To **describe** the elements of graphic design.
- 3. To **teach** basics of typography.

4. To **enhance** the perception of colour and design.

#### **Course Outcomes**

On completion of this course, the students will be able to;

- CO1. **Develop** an overall knowledge about the language of graphic design.
- CO2. **Evaluate** an understanding of basic rules in design.
- CO3. **Analyze** the techniques and aesthetics into design.
- CO4. **Implement** impactful typographical artworks
- CO5. **Discuss** the elements and rules of graphic design.
- CO6. **Memorize** the new terminologies and techniques used in Typography.

#### Unit 1:

Introduction to Classification of graphics; Understanding the Language of Graphics; The of Graphic Design; The Concept about Modern Graphics;

#### Unit 2:

Composition Techniques for Illustration: Rule of thirds, leading lines, perspective; Creating balanced and dynamic compositions.

## Unit 3:

Elements of Graphic-Line, Shape, Color, Texture & Typography; Principles of Design; Balance, Value, Space, Contrast, Rhythm, Proportion, Pattern

## Unit 4:

Delving into typography: Exploring typographical anatomy; Understanding of the origin of letters, grasping Space, Text and Forms.

#### Unit 5:

Sense of Colour; Use of Colour in Graphic Design; Colour Mixing Theory; Colour schemes;

Unit 6: Project

#### **Recommended Textbooks:**

- Bringhurst, R. (2004). *The elements of typographic style*. Point Roberts, WA: Hartley & Marks, Publishers.
- Crowther, P. (2018). *Digital art, aesthetic creation: The birth of a medium*. Routledge."Visual Thinking" by Rudolf Arnheim.

#### **Reference books:**

• Crowther, P. (2018). Digital art, aesthetic creation: The birth of a medium. Routledge.

	Digital Methods: Illustrator_BGA106	Photoshop	L	T	P	С
Version 1.0			0	2	6	4
Pre-requisites/Exposure	Knowledge about Graphics and Digital Media Software					
Co-requisites	-					

## **Course Objectives**

- 1. To **develop** an understanding of graphic design software
- 2. To **describe** the elements of graphic design.
- 3. To **teach** basics of software handling.
- 4. To **enhance** the perception of design digitally using software.

## **Course Outcomes**

On completion of this course, the students will be able to

- CO1. **Construct** an overall knowledge about using digital medium.
- CO2. **Evaluate** an understanding of elements while designing digitally.
- CO3. **Analyze** the techniques and aesthetics into design software.
- CO4. **Implement** aesthetics for cinematic posters and cover design.
- CO5. **Discuss** the elements and rules of graphic design.
- CO6. **Define** the new technologies used in design.

#### Unit 1:

Introduction to Classification of graphics – Raster and Vector; Intro to digital methods; Introduction to design software: Adobe Photoshop CC and Adobe Illustrator CC; Applications, workflow

#### Unit 2:

Adobe Photoshop CC; Raster software; Intro to the interface of Photoshop; Introduction to the Menus; Basic application of tools – Move tool, Selection tool, Lasso tool, Eyedropper tool, Eraser tool, Pen tool, etc. Application of Layers, Channels, File formats.

## Unit 3:

Adobe Photoshop advanced; Advance Menu; Advance selection process; Sense of Colour; Use of Colour in Graphic Design; Colour correction; Professional design using compositional rules; Visiting Card and Poster design

#### Unit 4:

Adobe Illustrator CC; Vector software; Intro to the interface, setting up a project, menu; Basic application of tools – Move tool, Selection tool, Pencil tool, Eraser tool, mastering Pen tool, etc. Application of Path, Layers, File formats, Graphic properties (Fill and Stroke). Difference and application of Vector Designs;

#### Unit 5:

Adobe Illustrator advanced; Advance Menu; Artboard – utilization, settings, rulers, guides; Object, appearance, Path options advanced; 3D options in Illustrator; Creating vector Character and Background illustration from scratch;

## **Unit 6**: Project

#### **Recommended Textbooks and Resources:**

- Arnheim, R. (1969). Visual Thinking: by Rudolf Arnheim. Faber & Faber Limited...
- "Edwards, B. (2004). Color: a course in mastering the art of mixing colors. New York: Jeremy P. Tarcher.

#### **Reference books:**

• Vanderwalker, F. N. (2022). The Mixing of Colours and Paints. DigiCat.

## Semester III

## For BSC Hons. In Graphics and Animation SEM 3

		L	Т	P	С
	2D Animation				
Version 1.0		0	2	6	4
Pre-requisites/Exposure	Basic Knowledge of animation drawin	ıg			
Co-requisites	-				

## **Course Objectives**

- 1. To **develop** an understanding of 2d classical animation using light box.
- 2. To **describe** the process of applying core animation principles.
- 3. To **teach operating 2d** animation software.
- 4. To **develop** the ability to integrate classical and digital animation techniques.

#### **Course Outcomes**

On completion of this course, the students will be able to;

- CO1. Create polished classical animations, character designs, and storyboards.
- CO2. **Evaluate 2d** animation software.
- CO3. Analyze the animation principles both classically and digitally.
- CO4. **Demonstrate** the secondary elements like fire and water animation.
- CO5. **Discuss** the elements and rules of 2D Animation.
- CO6. **Remember** the new technologies used in design and animation.

## **Course Description:**

2D animation is the art of creating movement in a two-dimensional space. This includes characters, creatures, FX and backgrounds. It means **two-dimensional animation**, animation, or a product of **animation**, created when **two-dimensional** images are rapidly sequenced to create the illusion of lifelike motion, as in traditional drawn **animation**, cell **animation**, or computer-generated vector graphics. It's widely used for creating animated movies, cartoons, marketing videos, advertisements, educational materials, games, and so much more.

Describe the Basic Sketching, Fundamentals of Traditional Hand Drawing Animation, Working with Illustrator, explain the Character Designing, Image Composition, introduced with Digital Painting, Working with Photoshop, explain how to Creating Graphics & Motion Animation, and 2d effects composition, Digital Storytelling, Video and Audio Editing, Advance 2D animation Techniques,

At present 2D is a popular and diverse medium. It can be seen prevalently in TV shows, video games, feature films, advertisements, mobile apps and on websites. To there is a huge scope to career opportunity like-

Animation Companies
Advertisement Companies,
Gaming
Storyboard Artist
Content Developer
eLearning
2D Animation Artist
2D Motion Graphics Artist.

## **Unit-1: Classical Animation Techniques:**

Tools and Materials, Traditional tools (pencils, paper, light tables). Techniques for flipping and shooting traditional animation. Character Design: Designing characters for animation. Model sheets and turnarounds. Storyboarding: Basics of storyboarding for animation. Creating a storyboard for a short animated sequence.

## **Unit-2: Applying Animation Principles**

Ball bouncing – Pendulum with thread –Jump. Walk cycle Introduction to exposure sheet (**X sheets**) and field guide.

## **Unit-3. Introduction to Digital Animation Software:**

Introduction to Digital Animation Software: Overview of industry-standard software (Toon Boom Harmony, Adobe Animate). Interface, tools, and basic functions.

Digital Drawing Techniques: Techniques for drawing and animating digitally.

Using tablets and other digital tools. Rigging and Cut-Out Animation:

Basics of rigging characters for cut-out animation. Creating and animating with digital puppets.

#### **Unit-4: Effects animation**

Animating secondary elements like fire, water, smoke, etc. Integrating effects into character animation. Sound and Timing: Importance of sound in animation.

Syncing animation to dialogue and sound effects.

**Unit 5**: Integration of different animation techniques and effects

**Unit 6**: Final project

#### **Examination Scheme:**

Components		Class Assessment	End Term
Weightage (%)		50	50

#### **Text Books:**

- Williams, R. (2009). *The Animator's Survival Kit: Animated*. Richard Williams Animation Masterclass.
- Thomas, F., & Johnston, O. (1995). The illusion of life: Disney animation. Disney Editions.

#### **Reference Books:**

• Bendazzi, G. (2015). *Animation: a world history: volume II: the birth of a style-the three markets*. Routledge.

	Web Design (Practical)	L	T	P	С
Version 1.0		0	2	6	4
Pre-requisites/Exposure	Knowledge of basic Computer hardware & software				
Co-requisites	-				

## **Course Objectives**

- 1. To **develop** the skill & knowledge of Web page design.
- 2. To **teach** how to be an entrepreneur or can take up jobs in the multimedia and Website development studio and other information technology sectors.

#### **Course Outcomes:**

The student will be able to

- CO1. Construct the principle of Web page design
- CO2. Evaluate the basic concept of HTML.
- CO3. Analyze the basic concept of CSS.
- CO4. **Implement** the concept of web publishing
- CO5. **Discuss** the elements and rules of 2D Animation.
- CO6. **Remember** the new technologies used in design and animation.

#### Unit 1:

Web Design Principles, Basic principles involved in developing a website, Planning process Five Golden rules of web designing, Designing navigation bar, Page design, Home Page Layout, Design Concept.

#### Unit 2:

Basics in Web Design, Brief History of the Internet, World Wide Web, Why create a web site Web Standards, Audience requirement.

#### **Unit 3:**

Introduction to HTM, HTML Documents, Basic structure of an HTML document, Creating an HTML document, Mark up Tags, Heading-Paragraphs, Line Breaks, HTML Tags.

#### Unit 4:

Elements of HTML, Introduction to elements of HTML, Working with Text, Working with Lists, Tables and Frames, Working with Hyperlinks, Images and Multimedia, Working with Forms and controls.

#### Unit 5:

Introduction to Cascading Style Sheets, Concept of CSS, Creating Style Sheet, CSS Properties, CSS Styling(Background, Text Format, Controlling Fonts), Working with block elements and objects, Working with Lists and Tables, CSS Id and Class, Box Model(Introduction, Border properties, Padding, Properties, Margin properties), CSS Advanced(Grouping, Dimension, Display, Positioning, Floating, Align,Pseudo class, Navigation Bar, Image Sprites, Attribute sector), CSS Color, Creating page Layouts and Site Designs

#### Unit 6:

Introduction to Web Publishing or Hosting, Creating the Web Site, Saving the site, Working on the website, Creating website structure, Creating Titles for web pages

#### **Recommended Textbooks:**

- Beaird, J., Walker, A., & George, J. (2020). The principles of beautiful web design. SitePoint Pty Ltd.
- Veen, J. (2000). The art and science of Web design. Pearson Education.

## **Reference Books:**

• Robbins, J. N. (2007). Learning Web Design: A Beginner's Guide to (X) HTML, StyleSheets, and Web Graphics. "O'Reilly Media, Inc.".

# **Semester IV**

## **Course Objectives**

- 1. To **Learn** engaging visual content for social media
- 2. To **describe** the elements of graphic design.
- 3. To **teach** basics of software handling.
- 4. To develop skills in graphic design software.

#### **Course Outcomes**

On completion of this course, the students will be able to;

- CO1. **Develop** an overall knowledge about using digital medium.
- CO2. **Evaluate** an understanding of elements while designing digitally.
- CO3. **Analyze** the techniques and aesthetics into design software.
- CO4. Use social media graphics.
- CO5. **Discuss** the new technologies used in design.
- CO6. **Remember** the new technologies used for Social Media.

## **UNIT 1: Introduction to Graphic Design for Social Media**

Overview of social media graphic design principles; Introduction to social media platforms and their graphic design requirements, Setting up Adobe Express.

#### **UNIT 2: Design Principles and Color Theory For Social Media**

Understanding design principles (balance, contrast, emphasis, movement, pattern, unity), Color theory and how to apply it to social media graphics, Introduction to typography and font selection

#### **UNIT 3: Adobe Express for Social Media Graphics**

Introduction to Adobe Express, Creating using Express, Understanding layers, shapes in Express

## **UNIT 4: Designing for Different Social Media Platforms**

Designing for Facebook and Twitter, Designing for Instagram and LinkedIn, Understanding the different graphic design requirements for each platform

## **UNIT 5: Advanced Design Techniques and Animation**

Advanced design techniques using Adobe Express, Introduction to animation and motion graphics for social media, Creating animated social media graphics using Adobe Express.

## **UNIT 6: Portfolio Development and Final Project**

Developing a portfolio of social media graphics, Final project: Creating a comprehensive social media graphic design campaign

#### **Recommended Textbooks:**

- Pinilla, J. A. R., Aranda, J., Mathers, A., Historia Medieval, I. I., Siglos, X. X., Stallabrass, J., ... & Fasoli, R. D. C. (2016). *Cuando éramos invencibles*. El Gran Capitán.
- Edwards, B. (2004). Color: a course in mastering the art of mixing colors. New York: Jeremy P. Tarcher.

#### **Reference Books:**

• Sargent, W. (1964). The enjoyment and use of color (Vol. 944). Courier Corporation.

## **Preproduction techniques**

**BGA206** 

This course focuses on the foundational processes of preproduction, which are essential for any animation project. Students will gain knowledge of concept development, scripting, storyboarding, character design, environment design, and animatics. The course emphasizes the importance of preproduction in shaping a cohesive and efficient animation pipeline.

## **Course Objectives**

By the end of this course, students will be able to:

- 1. Understand the role and significance of preproduction in animation.
- 2. Develop strong visual storytelling through scripting and storyboarding.
- 3. Create effective character designs and environments.
- 4. Utilize digital tools to create animatics and refine preproduction assets.
- 5. Plan and document the complete preproduction workflow for an animation project.

## **Course Outcomes (COs)**

Upon successful completion of the course, students will be able to:

- **CO1: Develop** the concept of preproduction in animation and media production.
- CO2: Evaluate scripts and treatments for animated sequences.
- **CO3: Analyze** storyboards that effectively communicate visual narratives.
- **CO4: Apply** well-developed character designs and environments suited for animation projects.
- CO5: Discuss animatics and refine preproduction materials to industry standards.

• **CO6:** Remember the new technologies used for storyboarding and visualizations.

#### **Unit Breakdown**

## **Unit 1: Introduction to Preproduction (3 weeks)**

Definition and importance of preproduction; Phases of preproduction: Concept, scripting, design, and planning; Industry case studies of preproduction workflows

## **Unit 2: Scripting and Story Development (4 weeks)**

Developing concepts and loglines; Writing scripts and screenplays; Creating treatments and beat sheets

## **Unit 3: Storyboarding (4 weeks)**

Principles of storyboarding; Camera angles, composition, and visual flow; Storyboard formats and sequential storytelling

## **Unit 4: Character and Environment Design (4 weeks)**

Character design: Anatomy, expressions, and personality; Environment design: Backgrounds, mood, and atmosphere; Color theory and visual consistency

## **Unit 5: Animatics and Preproduction Package (3 weeks)**

Importance of animatics in previsualization; Creating animatics with timing and pacing; Compiling a complete preproduction package (script, storyboard, designs, animatics)

## **Unite 6: Projects**

- o Create an animatic for the storyboarded scene
- Final preproduction project presentation
- Design a character and their environment
- Create model sheets and expression sheets
- o Storyboarding a 1-2 minute animated scene
- Using digital tools like Storyboard Pro or Photoshop
- Writing exercises for short animated sequences
- Peer review of scripts

#### **Recommended Text Books-**

- Richard, W. (2002). The Animator's Survival Kit.
- Glebas, F. (2012). Directing the story: professional storytelling and storyboarding techniques for live action and animation. Routledge.

#### **Reference Books:**

 Beiman, N. (2015). Prepare to board! creating story and characters for animated features and shorts. CRC Press.

3D Basics BGA207

## **Course Description**

This course introduces the fundamental concepts and techniques of 3D computer graphics. Students will learn the basics of 3D modeling, texturing, lighting, and rendering using industry-standard software. The course emphasizes developing hands-on skills and understanding the pipeline for creating 3D assets for animation, games, and digital media.

## **Course Objectives**

By the end of this course, students will:

- 1. Understand the principles and workflow of 3D production.
- 2. Learn to create 3D models using various modeling techniques.
- 3. Develop basic skills in texturing, lighting, and rendering.
- 4. Gain proficiency with industry-standard 3D software.
- 5. Apply fundamental 3D techniques to create simple 3D projects.

## **Course Outcomes (COs)**

Upon successful completion, students will be able to:

- CO1: Develop and explain key concepts in 3D computer graphics.
- **CO2:** Evaluate competency in creating basic 3D models.
- **CO3:** Analyze the techniques and aesthetics into 3D software.
- **CO4:** Apply textures and materials to 3D objects.
- **CO5:** Understand lighting techniques for 3D scenes.
- **CO6:** Define rendered 3D assets suitable for basic animation projects.

Basics of 3D computer graphics; Overview of the 3D pipeline: Modeling, texturing, lighting, rendering, and animation; Coordinate systems and navigation in 3D space

## **Unit 2: 3D Modeling Techniques**

12Hr

Polygonal modeling: Extrude, bevel, edge loops; NURBS and subdivision surfaces; Boolean operations and modifiers

## **Unit 3: Texturing and Materials**

Understanding UV mapping and unwrapping; Applying textures and materials; Introduction to PBR (Physically-Based Rendering) materials

## **Unit 4: Lighting in 3D**

12Hr

Types of lights: Point, directional, spot, area; Three-point lighting setup; Basics of shadows and reflections

## **Unit 5: Rendering and Output**

12Hr

Rendering settings and output formats; Introduction to render engines (e.g., Cycles, Arnold); Rendering still images and turntable animations

#### Unit 6:

Render a textured and lit 3D scene; Create a simple animation and render it, Light a 3D scene with different lighting setups; Experiment with shadows and light intensity; UV unwrap and texture a 3D model; Apply basic shaders and materials; Create simple 3D objects (e.g., table, chair, vase); Low-poly modeling exercises; Introduction to 3D software interface (e.g., Blender, Maya); Handson practice with basic navigation tools.

#### **Textbooks:**

- Caudron, R., & Nicq, P. A. (2015). Blender 3D By Example. Packt Publishing Ltd.
- Vaughan, W. (2012). Digital Modeling, New Riders.

#### **Other Resources:**

• Design II, B. M. E., Def, M., & Seminar, B. M. E. (2010). Semester 2.

# **Semester V**

## **Shading and Texturing in 3D**

**BGA301** 

## **Course Description**

This course explores the principles, techniques, and workflows involved in shading and texturing 3D models. Students will gain hands-on experience with industry-standard software to create realistic and stylized materials for 3D assets. The course covers UV mapping,

procedural texturing, material creation, and rendering methods, providing a solid foundation for enhancing the visual appeal of 3D models.

## **Course Objectives**

By the end of this course, students will:

- 1. Understand the fundamentals of shading and texturing in 3D.
- 2. Develop skills in UV unwrapping and managing UV maps.
- 3. Learn to create and apply realistic and procedural textures.
- 4. Use shading networks and material nodes effectively.
- 5. Enhance 3D assets using advanced texturing techniques.

#### **Course Outcomes (COs)**

Upon successful completion of this course, students will be able to:

- **CO1:** Develop the concepts of shading, texturing, and UV mapping.
- **CO2:** Evaluate and manage UVs for complex 3D models.
- **CO3:** Analyze and apply both procedural and image-based textures.
- **CO4:** Apply shading networks for realistic materials.
- **CO5:** Understand fully textured 3D assets ready for rendering.
- **CO6:** Define textured and rendered 3D assets suitable for animation projects.

## **Unit 1: Introduction to Shading and Texturing**

12hr

Fundamentals of shaders and materials; Types of maps: Diffuse, specular, normal, bump, displacement; Overview of texturing tools and software (e.g., Blender, Maya, Substance Painter)

## **Unit 2: UV Mapping and Unwrapping**

12hr

Basics of UV coordinates and UV layout; Techniques for UV unwrapping; Optimizing UVs for different types of 3D models

## **Unit 3: Texturing Techniques**

12hr

Image-based texturing vs. procedural texturing; Creating seamless textures; Using PBR (Physically-Based Rendering) workflows

## **Unit 4: Shading Networks and Material Creation**

12hr

Understanding node-based shading systems; Creating custom materials and shaders; Reflection, transparency, subsurface scattering, and emission properties

## **Unit 5: Advanced Techniques and Rendering**

12hr

Texturing for specific styles: Realistic, stylized, toon shading; Advanced techniques: Decals, dirt maps, and weathering; Rendering textured models using render engines (Cycles, Arnold)

#### **Unite 6: Projects**

Render textured 3D models with lighting setups; Final project: Fully textured and rendered 3D scene; Create a complex shader network for a character or environment; Apply various surface properties for realism; Apply image textures and procedural textures to models; Create texture maps using Photoshop or Substance Painter; UV unwrap simple and complex models; Create UV maps for props and characters

#### **Recommended Books:**

- Ahearn, L. (2016). 3D game textures: create professional game art using photoshop. AK Peters/CRC Press.
- Lanier, L. (2015). Advanced Maya texturing and lighting. John Wiley & Sons.

## **3D Lighting Rendering**

**BGA302** 

#### **Course Description**

This course explores the principles and techniques of 3D lighting and rendering, which are essential for creating visually compelling and realistic 3D imagery. Students will learn various lighting methods, rendering engines, and optimization techniques to achieve professional-quality outputs. Emphasis will be placed on practical exercises using industry-standard software.

## **Course Objectives**

By the end of this course, students will:

- 1. Understand the fundamentals of 3D lighting and rendering.
- 2. Develop skills in applying various types of lighting setups.
- 3. Master the use of different rendering engines and their settings.
- 4. Learn to optimize lighting and rendering for efficiency and quality.
- 5. Create visually appealing rendered images and animations.

#### **Course Outcomes (COs)**

Upon successful completion of this course, students will be able to:

- **CO1:** Develop the concepts and types of lighting used in 3D graphics.
- **CO2:** Evaluate various lighting setups to achieve mood and realism.
- CO3: Analyze different render engines and rendering techniques effectively.
- CO4: Implement lighting and rendering settings for different project needs.
- CO5: Identify high-quality rendered animations suitable for portfolios.
- **CO6:** Define high-quality rendered images to enhance the overall quality.

#### **Unit 1: Fundamentals of 3D Lighting**

12Hr

Basics of lighting in 3D environments; Types of lights: Point, directional, spot, area, and environment lights; Light properties: Intensity, color, falloff, and attenuation

## **Unit 2: Lighting Techniques and Setups**

12Hr

Three-point lighting (Key, Fill, and Rim lights); Natural lighting vs. artificial lighting; Using HDRI (High Dynamic Range Imaging) for environment lighting

## Unit 3: Shading, Materials, and Light Interaction

12Hr

How lighting interacts with different materials; Specularity, reflection, refraction, and subsurface scattering; Creating and using physically-based materials (PBR)

## **Unit 4: Rendering Engines and Techniques**

12Hr

Introduction to rendering engines: Cycles, Arnold, V-Ray, Eevee; Render settings: Samples, resolution, passes, and quality controls; Introduction to real-time vs. offline rendering

## **Unit 5: Rendering Optimization and Post-Processing**

12Hr

Techniques for optimizing render times; Using render passes (diffuse, specular, ambient occlusion, etc.); Basic post-processing in compositing software (e.g., After Effects, Nuke)

## **Unit 6: Projects**

Optimize lighting and render settings for efficiency; Combine render passes in post-production for final output; Render the same scene using different render engines; Compare real-time and offline rendering results; Apply lighting to scenes with various materials (e.g., glass, metal, fabric); Create realistic material shaders and observe their interaction with light; Create a three-point lighting setup for a character; Use HDRI maps to light outdoor and indoor scenes; Creating basic lighting setups and experimenting with light properties.

#### **Recommended Text Books-**

- Tiede, U., Höhne, K. H., Bomans, M., Pommert, A., Riemer, M., & Wiebecke, G. (1990). Investigation of medical 3D-rendering algorithms. *IEEE Computer Graphics and Applications*, 10(2), 41-53.
- Verma, V., & Walia, E. (2010). 3D Rendering-Techniques and challenges. *International Journal of Engineering and Technology*, 2(2), 29-33.

## **3D Character Animation**

**BGA303** 

## **Course Description**

This course introduces students to the principles and techniques of 3D character animation. Emphasizing the importance of body mechanics, acting, and storytelling, students will learn how to bring characters to life using industry-standard software. The course covers essential animation principles, rigging basics, walk cycles, and advanced character performances.

## **Course Objectives**

By the end of this course, students will:

- 1. Understand the core principles of character animation.
- 2. Learn to use 3D animation tools and rigs effectively.
- 3. Develop skills in animating walk cycles, run cycles, and other character movements.
- 4. Explore character performance and acting to convey emotion and personality.
- 5. Create polished animation sequences that demonstrate storytelling and character engagement.

## **Course Outcomes (COs)**

Upon successful completion of this course, students will be able to:

- **CO1:** Create believable walk and run cycles.
- **CO2:** Evaluate the principles of animation.
- **CO3:** Analyze 3D rigs to animate basic and complex character movements.
- **CO4:** Use 12 principles of Animation into 3D software.
- CO5: Understand complete character animation sequences suitable for demo reels.
- **CO6:** Define characters with expressive actions and emotions.

#### **Unit Breakdown**

## **Unit 1: Principles of Animation**

12Hrs

The 12 principles of animation (squash and stretch, anticipation, timing, etc.); Keyframes, breakdowns, and in-betweens; Understanding poses and timing charts

## **Unit 2: Introduction to Character Rigs**

12Hrs

Exploring character rigs and controllers; FK (Forward Kinematics) vs. IK (Inverse Kinematics); Posing and keyframing techniques

## **Unit 3: Walk and Run Cycles**

12Hrs

Anatomy of a walk cycle: Contact, down, passing, and up poses; Creating believable walk and run cycles; Adjusting weight, balance, and body mechanics

## **Unit 4: Acting and Performance**

12Hrs

Facial expressions and lip-sync basics; Conveying emotions through body language; Acting for animation: Understanding character motivation

#### **Unit 5: Advanced Character Animation**

12Hrs

Animating interactions between characters (e.g., high-fives, fights); Overlapping action and secondary motion; Planning and executing a short animation sequence

#### **Unit 6: Projects**

Develop a short character animation (5-10 seconds); Refine animations based on feedback and critique; Create an animation where the character shows emotion (e.g., surprise, joy, sadness); Simple dialogue or pantomime performance; Animate a standard walk cycle; Practice posing characters with basic rigs; Animate simple movements like waving or pointing; Exercises in squash and stretch, anticipation, and follow-through; Create simple bouncing ball animations

## **Suggested Readings:**

- Roberts, S. (2012). Character animation fundamentals: developing skills for 2D and 3D character animation. Routledge.
- Roberts, S. (2012). Character Animation: 2D skills for better 3D. Routledge.

# **Semester VI**

Vfx techniques BGA306

## **Course Description:**

This course introduces students to the fundamental techniques and workflows of visual effects (VFX) used in film, television, and digital media. Through theoretical concepts and hands-on practical exercises, students will learn compositing, motion tracking, rotoscoping, keying, and

simulation techniques using industry-standard software. The course prepares students to create professional-quality VFX shots for their portfolios.

## **Course Objectives**

By the end of this course, students will:

- 1. Understand the key principles and terminology of VFX.
- 2. Develop skills in compositing, rotoscoping, and motion tracking.
- 3. Learn keying techniques for integrating live-action with CGI elements.
- 4. Explore 3D integration, particle effects, and simulation workflows.
- 5. Create VFX shots that combine multiple elements seamlessly.

#### **Course Outcomes (COs)**

Upon successful completion of this course, students will be able to:

- CO1: Develop fundamental VFX principles and workflows.
- CO2: Evaluate rotoscoping and masking techniques for isolating elements.
- CO3: Compare motion tracking and stabilization for animation and live-action footage.
- CO4: Use keying methods to remove green screen or blue screen backgrounds.
- CO5: Understand CGI elements, particle effects, and simulations into live-action shots.
- CO6: Memorize the new terminologies and techniques used in VFX.

#### **Unit 1: Introduction to VFX**

12Hrs

Overview of VFX history and applications; VFX terminology and workflows; Overview of industry-standard software (e.g., After Effects, Nuke, Blender)

## **Unit 2: Compositing and Rotoscoping**

12Hrs

Basics of compositing layers; Rotoscoping techniques for isolating objects; Creating masks and mattes

## **Unit 3: Motion Tracking and Stabilization**

12Hrs

2D and 3D motion tracking concepts; Match moving and stabilizing footage; Tracking markers and solving camera movements

#### **Unit 4: Keying and Chroma Removal**

12Hrs

Green screen and blue screen keying techniques; Dealing with spill suppression and edge refinement; Advanced keying methods (e.g., luma key, difference key)

#### **Unit 5: Particle Effects and Simulations**

12Hrs

Introduction to particle systems and simulations (fire, smoke, explosions, rain); 3D integration in VFX; Combining simulations with live-action footage

## **Unit 6: Projects**

Create particle effects like fire, rain, or smoke; Integrate simulations into a live-action scene; Analysis of VFX sequences in films; Introduction to the VFX pipeline; Remove green screen backgrounds and replace them with CGI or live-action plates; Refine edges and adjust lighting for seamless integration; Track and integrate a 3D object into live-action footage; Stabilize shaky video footage; Rotoscope elements from live-action footage; Composite multiple elements into a single scene

#### **Recommended Text Books:**

- Brinkmann, R. (2008). The art and science of digital compositing: Techniques for visual effects, animation and motion graphics. Morgan Kaufmann.
- Salla, O. (2017). Mastering the elements–Basics of 2D effect animation.

#### **Recommended Books:**

Fridsma, L., & Gyncild, B. (2024). Adobe After Effects Classroom in a Book 2024 Release.
 Adobe Press.

Rigging BGA307

Credits: 4

## **Course Objectives**

- 1. Develop foundational knowledge of rigging techniques in animation.
- 2. Understand the anatomy, skeleton structure with joints.
- 3. Apply skills in working with advanced 3D organic and inorganic models.
- 4. Analyze process of Skinning to make the character ready for animation.
- 5. Create industry-standard rigged models using acquired skills.

#### **Course Outcomes**

On completion of this course, students will be able to:

- 1. (**Develop**) Identify and describe the key stages in the rigging pipeline.
- 2. (Evaluate) Explain thorough knowledge of skinning a 3D character.
- 3. (Analyze) Evaluate the foundational knowledge of rigging techniques for 3D animation.
- 4. **(Apply)** Demonstrate a thorough knowledge and skill of rigging a 3D character.
- 5. (Understand) Identify a complete rigged character for an animated project.
- **6.** (**Remember**) Define new terminologies used for Animation.

## **Unit 1: Introduction to Rigging**

12Hrs

Building the skeleton structure – understanding the joints; Importance of Forward and Inverse Kinematics; Key components: understanding the human anatomy, skeleton, bone structures, weight, balance

#### **Unit 2: Forward and Inverse Kinematics**

12Hrs

Developing concepts for Forward Kinematics and Inverse Kinematics; IK-FK Switch, Adding Attributes, Set driven Key.

## **Unit 3: Adding Controllers and Blend Shapes**

12Hrs

Create and add controllers to manipulate the skeleton structure; Maintain Hierarchy and create the structure accordingly; Create Blend Shapes for 3D character and apply with Shape Editor

Unit 4: Constraints 12Hrs

Basics of Constraints and application; Point Constraint, Orient Constraint, Aim Constraint, Pole Vector Constraint, Parent Constraint

Unit 5: Bind Skin 12Hrs

Integrating 3D Model and Skeleton for binding Skin; Skin weights painting with proper distribution; Checking the full Rigged Character, ready for Animation.

#### **Unit 6 : Projects**

#### References

- An Essential Introduction to Maya Character Rigging by Cheryl Cabrera, Focal Press, USA, 2008. Essential Skills in Character Rigging by Nicholas B. Zeman.
- Online resources: Maya guides, a complete guide to Rigging for games.

**Course Title: Advanced Character Animation** 

CourseCode:BGA308Program:B.Sc.AnimationSemester:V

**Credits:** 4 (2 Theory + 2 Practical)

#### **Course Description**

This advanced course delves deeper into the art of character animation, focusing on refining students' skills in animating realistic and stylized characters with complex actions. The course covers advanced body mechanics, emotional expression, character interactions, dynamic action sequences, and special effects integration. Students will enhance their ability to animate with purpose, creating more dynamic, engaging, and emotionally resonant animations.

#### **Course Objectives**

By the end of this course, students will:

- 1. Master advanced animation principles, including weight, balance, and timing.
- 2. Develop the ability to animate complex movements and interactions with realistic body mechanics.
- 3. Learn to create and convey emotional depth through expressive animation.
- 4. Explore advanced animation techniques, including secondary actions and dynamic movement.
- 5. Integrate special effects seamlessly into character-driven scenes.

## **Course Outcomes (COs)**

Upon successful completion of this course, students will be able to:

- **CO1:** Create believable and dynamic character movements.
- **CO2:** Evaluate complex character actions, from high-energy movements to subtle emotional expressions.
- **CO3:** Analyze emotionally expressive animations that convey character intent and motivation.

- **CO4:** Apply realistic character interactions and integrate them with environmental and special effects.
- **CO5:** Understand professional-level animation sequences for their portfolio, demonstrating a high degree of technical and artistic skill.
- **CO6:** Memorize advanced animation techniques.

## **Unit 1: Advanced Animation Principles**

12Hrs

Advanced principles of timing, spacing, and weight; Detailed exploration of arcs, overlapping action, and follow-through; Acting for animation: Conveying emotions through movement

#### **Unit 2: Advanced Body Mechanics and Complex Movements**

12Hrs

Advanced body mechanics: Animating complex human actions (e.g., running, jumping, climbing, and interacting with props); Detailed focus on inertia, balance, and timing in movements; Overcoming challenges in animating non-human characters or exaggerated forms

## **Unit 3: Emotional Expression and Acting Through Animation**

12Hrs

Using animation to express character emotions and personalities; Acting for animation: Character motivation, emotion arcs, and internal/external conflict; Facial animation and lip-syncing techniques

## **Unit 4: Character Interaction and Scene Blocking**

12Hrs

Animating multiple characters interacting in a scene; Understanding scene blocking: Staging and composition for animation; Blocking techniques: Physical interaction, spatial relationships, and storytelling through movement

#### **Unit 5: Dynamic Action and Special Effects Integration**

12Hrs

Animating high-energy dynamic actions (e.g., chase sequences, fight scenes); Integrating environmental effects such as fire, wind, and rain into character animation; Creating dynamic interactions with special effects (e.g., character movements affected by explosions or weather)

## **Unit 6: Final Project: Advanced Character Animation Sequence**

12Hrs

- o Planning and executing a fully realized character animation sequence
- Combining advanced techniques in body mechanics, emotional expression, interaction, and effects
- o Polishing and refining the final animation for presentation

#### **Recommended Text books-**

- Richard, W. (2002). The Animator's Survival Kit.
- Vanderlip, S. (2001). *Mice: A complete pet owner's manual*. Barron's Educational Series.
- Klein, D. (2018). Mighty mouse. *The American Animated Cartoon: A Critical Anthology*, 197-204.

#### **Reference Books:**

• Kurtti, J., & Company, W. D. (1998). A Bug's Life: The Art and Making of an Epic of Miniature Porortions. Hyperion Press.

# **Semester VII**

## 3D – Dynamics & Simulation

**BGA401** 

## **Course Description**

This course covers the essential principles of dynamics and simulation techniques in 3D animation. Students will explore how to simulate natural phenomena such as gravity, cloth, fluids, rigid bodies, and soft bodies in 3D environments. They will learn to create realistic simulations for film, games, and other media, with a focus on integrating these effects into animated scenes to create compelling, lifelike interactions between characters, objects, and environments.

## **Course Objectives**

By the end of this course, students will:

- 1. Understand the principles of dynamics in 3D environments, including the behavior of rigid and soft bodies, cloth, and fluids.
- 2. Gain hands-on experience with 3D simulation tools to create realistic motion and interactions.
- 3. Learn to integrate simulations into animation pipelines for film, games, and virtual environments.
- 4. Master techniques to optimize simulations for performance while maintaining realism.
- 5. Develop problem-solving skills to troubleshoot and refine simulation workflows.
- 6. Understand how to integrate simulations with other aspects of 3D production, such as lighting and rendering.

#### **Course Outcomes (COs)**

Upon successful completion of this course, students will be able to:

• **CO1:** Create simulated elements into larger animation scenes for coherent visual storytelling.

- **CO2:** Evaluate principles of physics, including gravity, friction, and momentum, to create believable rigid body simulations.
- CO3: Analyze simulation of soft body dynamics and cloth movement with realistic interaction between elements.
- **CO4:** Use fluid dynamics to simulate water, smoke, and other liquid phenomena in 3D environments.
- **CO5:** Understand particle simulations for various effects such as dust, fire, and explosions.
- **CO6:** Remember, Optimize and troubleshoot simulation workflows for efficient rendering and performance.

## **Unit 1: Introduction to 3D Dynamics & Simulation**

12Hrs

Overview of dynamics and simulation principles in 3D environments; Key simulation concepts: Forces, gravity, friction, and momentum; Introduction to simulation software tools (e.g., Maya, Blender)

## **Unit 2: Rigid Body Dynamics**

12Hrs

Simulation of rigid body objects: collision, response, and interaction; Types of rigid body simulations: passive, active, and kinematic bodies; Physics of stacking, bouncing, and shattering

## **Unit 3: Soft Body Dynamics and Cloth Simulation**

12Hrs

Soft body physics: simulating deformable objects and their interactions; Cloth simulation: materials, draping, and collision with characters or environments; Techniques for fine-tuning soft body and cloth behaviors (e.g., tension, stretch, stiffness)

#### **Unit 4: Fluid Dynamics and Particle Systems**

12Hrs

Simulating liquids and gases: water, fire, smoke, and explosions; Particle systems: creation, behaviors, and interaction with forces; Techniques for creating realistic fluid and fire simulations

## **Unit 5: Integrating Simulations into Animation**

12Hrs

Techniques for integrating simulations into larger animation projects; Troubleshooting and refining simulations for optimal integration with animated characters; Simulation rendering: optimizing for performance and visual quality

#### **Unit 6: Final Project: Advanced Simulation Integration**

12Hrs

Planning and executing a fully realized simulation sequence; Combining rigid bodies, soft bodies, fluid dynamics, and particles in a cohesive project; Final project critique and optimization

#### Textbooks:

• Kumar, A. Beginning VFX with Autodesk Maya.

- Madeira, B., & Velho, L. (2022). *Introduction to Visual Effects: A Computational Approach*. CRC Press.
- "Maya 3D Dynamics and Effects: A Comprehensive Guide" by Eric L. Williams

#### **Referene Books:**

- King, R. (2019). 3D Animation for the Raw Beginner Using Autodesk Maya 2e. Chapman and Hall/CRC.
- "Kerlow, I. V. (2009). The art of 3D computer animation and effects. John Wiley & Sons.

	Animation Film Studies	L	T	P	С
Version1.0		3	1	0	4
Pre-requisites/Exposure	Basic Knowledge of Indian and World Cinema				
Co-requisites					

## **Course Objectives**

- 1. The course aims to prepare students to understand visual images and how it transformed from still to motion picture
- 2. To demonstrate the structural elements of films
- 3. To demonstrate and make students understand the evolution of cinema through its historical, political and technological advancement
- 4. To demonstrate various theories and styles that has contributed to the understanding of cinema.

#### **Course Outcomes**

On completion of this course, the students will be able to

CO1: Develop a sense of cinema as a modern artform.

CO2: Evaluate the processes and theories that contribute to cinema.

CO3: Analyze how cinema's history and techniques are unique and have a language of its own.

CO4: Apply the historical, socio-political and cultural ramifications of cinema

CO5: Understand camera techniques and various effects used in Cinema.

CO6: Define the unique theories and styles that has contributed to the Indian and World Cinema.

### **Catalogue Description**

This module introduces students to a brief history of cinema (Global and Indian Perspectives), the development of cinema as a distinct art form and what influence the other art forms have on cinema. The module explains the language of cinema, fundamental cinematic terminologies and basics of animation films. Also the students get to know how cinema is a tool for social change. Experts from the field from all across the platform will be called for delivering expert lectures on various aspects of films. Workshops will be conducted where the learners will learn the intricacies of cinema.

#### **Course Content**

Unit I (10 Lecture Hours)

### **Basic Aspects of Cinema:**

Early Cinema - Lumeire Brothers, Geogre Melies. Mise en Scene, Time & Space, Scales of Shots, Transitions, Film elements, Film Genres

Unit II (10 Lecture Hours)

#### Film Theory

Reading Cinema – An Introduction to Film Theories – Film Theory as Opposed to Film History and Film Criticism – Cinema and the Concept of Gaze – Cinema and Feminism – Fundamentals

of Genre Studies – Philosophy of Language Film Analysis – Film Semiotics – An Introduction to the Turning Points in Global Cinema – Major Cinema Movements across the World – Indian Cinema Movements in Global Contexts. Marxist Film Theory: Marxism, Film and Film Studies by Mike Wayne

Feminist Film Theory - Visual Pleasure and Narrative Cinema by Laura Mulvey

#### **Unit III**

(10 Lecture Hours)

#### Cinema before WWII

Classical Hollywood Cinema - Genres, Studio System, Aesthetic Paradigms. Charlie Chaplin, Orson Welles, Alfred Hitchcock. Introduction to New Hollywood. Avante Garde Cinema: Surrealism and Psychoanalysis Dali and Bunuel's *Un Chien Andalou* Marxism and Soviet Montage: Sergei Eisenstein,

Dziga Vertov. Eisenstein's Battleship Potemkin, Strike, Vertov's Man With the Movie Camera

#### **Unit IV**

(10 Lecture Hours)

#### Cinema after WWII

Italian Neo Realism - Ten points, Historical and Political context. Vittorio De Sica: Bicycle Thief

French New Wave - The Concept of Auteur, Primacy of Mise en Scene - First New Wave, Second New Wave. Cahiers du Cinema and its impact. Jean Luc Godard, François Truffaut, Eric Rohmer, Claude Chabrol, Jacques Rivette, Alain Resnais. Films: 400 Blows, Breathless, Pierrot le Fou

Post-War Japanese Cinema: Ozu, Kurosawa, Mizoguchi (any one)

### Unit V

(10 Lecture Hours)

#### **Introduction of Animation Films**

Overview of Animation History, Early animation techniques, Milestones in animation film, Global pioneers in animation, The 12 Principles of Animation (Disney), Frame-by-frame vs. keyframe animation, Types and Genres of Animation, 2D, 3D, stop-motion, and experimental animation. Case studies: Influential animated films

### **Unit VI**

(10 Lecture Hours)

### **Storytelling in Animation**

Writing for Animation, Creating compelling narratives for animation, The Hero's Journey in animation, Visual Storytelling, Composition, camera movement, and color theory, Exploring mood and tone, Dialogue and Sound Design, Voice acting and lip-sync techniques, Background score and sound effects, Production Process, Pre-production, Planning, scripting, and concept art, Production -Animation workflows for different techniques, Post-production -Rendering, editing, and special effects

#### **Text Books:**

- Blair, P. (2020). Cartoon Animation with Preston Blair, Revised Edition!: Learn techniques for drawing and animating cartoon characters. Walter Foster Publishing.
- Johnston, O., & Thomas, F. (1981). *The illusion of life: Disney animation* (p. 576). New York: Disney Editions.

#### **Reference Books:**

- Saran, R. (2014). *History of Indian cinema*. Diamond Pocket Books Pvt Ltd.
- Stanchfield, W. (2013). Drawn to Life: 20 Golden Years of Disney Master Classes Volume 1: Volume 1: The Walt Stanchfield Lectures (Vol. 1). Taylor & Francis.

## Research Methodology

#### **Course Overview:**

This course introduces students to research methodologies relevant to the fields of graphics, animation, and media production. It emphasizes practical skills, analytical thinking, and academic rigor needed for conducting effective research projects in creative industries.

### **Course Objectives:**

- To introduce fundamental research concepts and methodologies in the context of graphics and animation.
- To understand the application of research methods in solving creative and technical problems in media projects.
- To formulate clear research questions and hypotheses relevant to the fields of animation and graphic design.
- To develop effective strategies for data collection and analysis in media research.
- To evaluate and apply ethical principles in conducting research within creative industries.

#### **Course Outcomes:**

By the end of this course, students will:

- Understand the fundamentals of research methodologies.
- Be able to design and conduct research projects related to graphics and animation.
- Apply both qualitative and quantitative methods effectively.
- Develop critical thinking and analytical skills for media studies.
- Communicate research findings using visual and multimedia tools.

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### **Unit -1: Introduction to Research Methodology**

12Hr

What is Research?; Types of Research; Basic, Applied, and Action Research; Relevance of Research in graphics, and Animation; **Research Process Overview Steps:** Identifying a problem, reviewing literature, designing a study, data collection, analysis, and interpretation; Research Ethics and Integrity.

### **Unit -2: Formulating Research Questions and Hypotheses**

12Hr

Identifying Research Problems, Case studies from animation and graphics projects, Research Objectives and Hypotheses, formulating clear and testable hypotheses, Literature Review; Techniques for conducting an effective literature review, Using databases and citation management tools.

### **Unit- 3: Research Design and Approaches**

12Hr

**Qualitative vs. Quantitative Research**, Key differences, advantages, and limitations; **Research Approaches:** Experimental, Descriptive, Case Study; Comparative, and Mixed Methods **Introduction to Design Thinking**; Applying design thinking principles to research.

Primary Data Collection: Surveys, Interviews, Focus Groups, and Observations; Tools for animation-based user research (e.g., eye-tracking software); Secondary Data Collection: Analyzing existing data sets and media content; Sampling Methods: Types of sampling: Random, Stratified, Convenience

## **Unit 5: Data Analysis and Interpretation (Week 9-10)**

**Quantitative Data Analysis:** Introduction to statistical tools (Excel, SPSS basics); Descriptive and Inferential Statistics; **Qualitative Data Analysis:** Thematic analysis, coding, and categorization; Introduction to NVivo or similar tools; **Interpreting Results:** Presenting findings visually using graphics and animation

#### **Unit 6: Research in Creative Contexts**

12Hrs

- Ethnographic Research in Animation Studies
- Cultural and Social Analysis of Media Content
- Evaluating Trends in the Animation and Graphics Industry
- Case studies on technological impacts (e.g., AI, VR)

### **Suggested Readings:**

- 1. **Creswell, J. W.** (2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.
- 2. **Berger**, A. A. (2014). *Media and Communication Research Methods*.
- 3. Rose, G. (2016). Visual Methodologies: An Introduction to Researching with Visual Materials.
- 4. Smith, H., & Dean, R. T. (2009). Practice-led Research, Research-led Practice in the Creative Arts.

#### **Tools and Software:**

- Excel, SPSS (Basic), NVivo
- Adobe Suite for Visual Presentation
- Reference Management Software (Zotero, Mendeley)
- Nowell-Smith, G. (Ed.). (1996). The Oxford history of world cinema. OUP Oxford.

BGA405	Film Studies	L	T	P	C
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Pre-Requisites/ Exposure	-	1	ı	1	1
Co-Requisites	-				

## **Course Objectives**

- To expose students to film studies;
- To create awareness about the major theories,
- Techniques and narrative strategies of film and its appreciation across time;
- To introduce students to films produced in various cultures.

#### **Course Outcomes**

On completion of this course, the students will be able to

- Develop understanding of history for cinematography.
- Evaluate various facilities required to Shoot and edit the film.
- Analyze different techniques of capturing the film and techniques of editing.
- Develop the script and shooting techniques
- Understand camera techniques and various lighting effects used in Cinema
- Remember new terminologies used in Production process.

#### **Catalogue Description**

This course introduces students to film aesthetics through the analysis of film form and style. The course aims to provide students with a fluency in and understanding of film's unique language as it evolves technologically, historically and generically. It gives a brief introduction of history of cinema and changing pattern in Cinema.

#### **Course Content**

#### 10 Lecture Hour

### **Unit-I: Film Language**

Illusion of Movement- Pre-cinema toys and machines- Shot: Mise-en-scene & Composition - Aspects of mise-en-scene- Realism & Mise-en-scene - Cinematography & lighting: Types of shots; Camera angles, placement, movement, types of lenses; basics of lighting.

#### 10 Lecture Hour

### **UNIT-II: Film theory**

What is cinema, Film theory – form and function-Auteur Theory- role of Cahiers du cinema, effect of auteur- the auteur concept in Britain- Contributions of D W Griffith- Alfred Hitchcock-Francois Truffaut, Jean Du Godard- apparatus theory- feminist theory- formalist theory- Marxist theory and psychoanalytical theory of film- Digital Aesthetics, Music and choreography- film genre.

#### 10 Lecture Hour

### **UNIT-III: Brief History of Cinema**

Brief History of World Cinema Hollywood cinema-early cinema and film form the studio system-rise and decline of the studio- British cinema- culture ideology- Brief History of Indian Cinema: Hiralal Sen, D. G. Phalke, Studio system: New Theatres, Bombay Talkies- Post Studio System-Indian New Wave.

#### 10 Lecture Hour

## **UNIT-IV: Contemporary World Cinema**

Cinema from the Communist world, the Third World, World cinema and national film movement, German expressionism, Italian neo realism Soviet Montage, French new wave.

#### 10 Lecture Hour

### **UNIT-V: Script Writing and Film Analysis**

Script of fiction film- Concept & development of non-fiction film- Dialogue Exercise-Critical analysis of films - Review writing of contemporary Bengali & Hindi films of last calendar year

### 10 Lecture Hour

#### **UNIT-VI: Visual Communication and New Media**

Aesthetics, Perception, Representation, Visual Rhetoric, Cognition, Semiotics, Reception Theory, Narrative, Media Aesthetics, Ethics, Visual Literacy, Cultural Studies

## **Assignment: -**

• Producing one short films of not more than seven minutes and not less than five minutes including opening and closing credits

### Text books: -

- Nelmes, J. (Ed.). (2012). *Introduction to film studies*. Routledge.
- Fischer, L. (1996). Cinematernity: Film, motherhood, genre. Princeton University Press.

#### Reference Books

- Villarejo, A. (2021). Film studies: The basics. Routledge.
- Bordwell, D., & Carroll, N. (Eds.). (2012). *Post-theory: Reconstructing film studies*. University of Wisconsin Pres.
- Bordwell, D., & Carroll, N. (Eds.). (2012). *Post-theory: Reconstructing film studies*. University of Wisconsin Press.
- Davis, G., Dickinson, K., Patti, L., & Villarejo, A. (2015). Film studies: a global introduction. Routledge.
- Andrew, D. (2009). The core and the flow of film studies. *Critical Inquiry*, 35(4), 879-915.
- Nichols, B. (2010). Engaging cinema: An introduction to film studies. WW Norton & Company.

# **Semester VIII**

**Course Title: Non-Fiction Film** 

CourseCode:BGA407Program:B.Sc.AnimationSemester:VIII

**Credits:** 4 (2 Theory + 2 Practical)

### **Course Description**

This course provides an in-depth exploration of non-fiction film, including its forms, techniques, and evolution. Students will study the history and development of documentary and non-fiction cinema, with a focus on both traditional and modern approaches to documentary filmmaking. Through a combination of theoretical understanding and hands-on practice, students will learn to analyze, create, and critique non-fiction films, while developing skills to effectively communicate factual stories in cinematic form.

### **Course Objectives**

By the end of this course, students will:

- 1. Understand the different genres and styles of non-fiction film, including documentaries, docudramas, and experimental non-fiction.
- 2. Gain proficiency in research, pre-production, and production processes specific to non-fiction filmmaking.

- 3. Learn the ethics and responsibilities of non-fiction filmmakers in representing reality.
- 4. Develop the technical skills necessary for non-fiction filmmaking, including camera work, editing, and sound design.
- 5. Explore contemporary non-fiction trends and the impact of digital media on the genre.
- 6. Create and present a short non-fiction film project.

### **Course Outcomes (COs)**

Upon successful completion of this course, students will be able to:

- **CO1:** Analyze different forms of non-fiction film, including their conventions, themes, and historical development.
- **CO2:** Apply documentary filmmaking techniques such as observational, participatory, expository, and reflexive modes.
- **CO3:** Design and produce a non-fiction short film from concept to completion.
- **CO4:** Critique non-fiction films based on their representation of reality, ethical considerations, and storytelling techniques.
- CO5: Utilize editing and sound techniques to enhance the documentary narrative.
- **CO6:** Understand the impact of technology and social media on the evolution of non-fiction filmmaking.

#### **Unit 1: Introduction to Non-Fiction Film**

10HRS

Definition and history of non-fiction film; Key non-fiction genres: documentary, mockumentary, and experimental films; Early pioneers of non-fiction film (e.g., Dziga Vertov, Robert Flaherty)

### **Unit 2: Documentary Filmmaking Styles and Techniques**

10HRS

Documentary modes: expository, observational, participatory, reflexive, and performative; Visual and narrative techniques specific to non-fiction film (e.g., voice-over narration, archival footage, interviews); The role of the filmmaker: subjectivity vs. objectivity in documentary filmmaking

#### Unit 3: Research and Pre-Production for Non-Fiction Film

10HRS

Research techniques for non-fiction storytelling: interviews, archival research, observation; Developing a treatment and script for a documentary; Legal and ethical considerations in documentary production: rights, consent, and representation

#### **Unit 4: Production Techniques for Non-Fiction Film**

10HRS

Cinematic techniques for documentary production: composition, lighting, and camera movement; Sound design and the use of music in non-fiction films; Working with real subjects: ethics and the role of the filmmaker in documenting reality

### **Unit 5: Post-Production and Editing**

10HRS

Editing techniques for non-fiction films: assembling interviews, b-roll, and archival footage; The role of editing in shaping the narrative and influencing audience perception; Sound design in documentary film: mixing, music, and sound effects

## **Unit 6: Final Project: Non-Fiction Short Film**

10HRS

Planning and executing a final non-fiction film project; Incorporating research, production, and post-production techniques learned throughout the course; Presentation of final projects and peer reviews

#### Activities:

- o Produce a 5-7 minute non-fiction film on a topic of choice
- Final project presentations with critiques from peers and instructors

### **Suggested Readings**

- "Barnouw, E. (1993). *Documentary: A history of the non-fiction film*. Oxford University Press.
- McLane, B. A. (2022). *A new history of documentary film*. Bloomsbury Publishing USA. "Introduction to Documentary" by Bill Nichols
- Barnouw, E. (1993). *Documentary: A history of the non-fiction film*. Oxford University Press.

#### **Software Tools**

- Adobe Premiere Pro (for editing)
- Final Cut Pro (for editing)
- Adobe Audition (for sound design)
- Avid Media Composer (for advanced editing)
- DSLR Cameras or Video Cameras (for filming)

### **B.Sc.** in Graphics and Animation

#### **Course Overview:**

This course explores the intersection of media, culture, and visual communication, focusing on how media and cultural theories apply to graphics, animation, and digital storytelling. Students will analyze media texts, understand cultural contexts, and develop a critical perspective on the role of media in shaping societies.

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## **Course Objectives:**

- To introduce core concepts and theories of media and cultural studies.
- To understand the application of cultural theories in analyzing media representations and identities.
- To critically evaluate visual narratives and their cultural impact in animation and graphic design.
- To build integrated analytical strategies for assessing global and local media dynamics.
- To explore and assess the implications of media technologies and cultural policies on creative industries.

### **Learning Outcomes:**

By the end of this course, students will:

- Understand key theories and concepts in media and cultural studies.
- Critically analyze media texts and their cultural implications.
- Apply theoretical frameworks to graphics and animation projects.
- Recognize the role of media in shaping identities and cultural narratives.
- Develop informed perspectives on the global media landscape and creative industries.

#### **Unit 1: Introduction to Media and Cultural Studies**

12hr

• Understanding Media and Culture; Definitions and key concepts; The role of media in cultural production and consumption; Historical Overview of Media Studies; Evolution of media: From print to digital; Key Theories in Cultural Studies; Semiotics, Structuralism, and Post-structuralism

### **Unit 2: Media Representation and Identity**

12hr

**Representation in Media:** Concepts of encoding/decoding (Stuart Hall); Stereotypes, power dynamics, and cultural hegemony; **Identity and Media:** Gender, race, class, and sexuality in

media representations Case studies from global and Indian animation and graphic design; **Media** and **Identity Politics:** How media shapes and reflects identities in a globalized world

### **Unit 3: Media, Culture, and Technology**

12hr

Media Convergence and Digital Culture: Understanding transmedia storytelling and crossplatform media; Theories of Technology and Society: Marshall McLuhan's media ecology; Technological determinism vs. social constructivism; Impact of AI and VR on Culture and Media: Ethical and cultural implications

#### **Unit 4: Visual Culture and Semiotics**

12hr

**Introduction to Visual Culture:** The role of images in contemporary culture; Case studies: Visual narratives in animation and graphic design; **Semiotics in Media Analysis:** Understanding signs, symbols, and meaning-making; Application of semiotic analysis in media texts and advertisements; **Global Visual Culture:** How global media influences local cultures and vice versa

## **Unit 5: Cultural Industries and Creative Economy**

12hr

The Cultural Industries Model: Characteristics and economic significance; Media Production Cultures: Labor, creativity, and power dynamics in animation studios; Streaming Platforms and Cultural Policy: Case studies: Netflix, Disney+, and local animation industries

#### **Unit 6: Globalization and Media**

12hr

Media and Globalization: Cultural homogenization vs. cultural hybridity; Localization of Global Media: How global content is adapted for local audiences; Cultural Flows and Diaspora Media: Analyzing the impact of migration on media production and consumption

### **Suggested Readings:**

- 1. **Hall, S.** (1997). Representation: Cultural Representations and Signifying Practices.
- 2. **McLuhan, M.** (1964). Understanding Media: The Extensions of Man.

- 3. **Storey, J.** (2018). Cultural Theory and Popular Culture: An Introduction.
- 4. **Berger**, A. A. (2014). *Media Analysis Techniques*.

## **Syllabus Copy**

	Advertising	L	T	P	C
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Pre-Requisites/ Exposure	-	ı	ı		ı
Co-Requisites	-				

### **Course Objectives**

- To Understand the concept of advertising.
- To discuss the basic economic impact of advertising.
- To explain the different job functions and responsibilities of those employed in advertising.
- To recognize some of the social and ethical implications of advertising.

#### **Course Outcomes**

On completion of this course, the students will be able to

- Orient learners towards the practical aspects and techniques of advertising.
- Comprehend opportunities and challenges in Advertising sector.
- Prepare a primary advertising model 4. Understand applying of related skills.

### **Catalogue Description**

Advertising means of communication with an audience about the different products and services you offer, and it works on conveying a message to people by persuading them to buy or try their products. This course introduces the fundamental theoretical framework of advertising. The course generally aims to provide training to its students to identify problems and be able to plan and manage advertising contents in the world of marketing. They are taught about communicating skills with clients, leadership and problem-solving skills with a variety of subjects.

### **Course Content**

#### 10 Lecture Hour

## **UNIT-I: Introduction to Advertising**

Concept- Features- Evolution of Advertising- Types of advertising - Creative advertising messages- Active Participants- Benefits of advertising to Business firms and consumers

#### 10 Lecture Hour

### **UNIT-II: Advertising Agency**

Features- Structure and services offered- Types of advertising agencies- Agency selection criteria-Role of AAAI (Advertising Agencies Association of India)- ASCI (Advertising Standard Council of India)

#### 10 Lecture Hour

### **UNIT-III: Planning Advertising Campaigns**

Advertising Campaign Planning - Steps Determining advertising objectives - Advertising Budgets-Media Planning - Integrated Marketing Communications (IMC) - Concept, Features, Elements, Role of advertising in IMC-Marketing mix.

#### 10 Lecture Hour

### **UNIT-IV: Execution and Evaluation of Advertising**

Creativity in Advertising-Creative aspects: Buying Motives - Types, Selling Points- Features, Appeals – Types, Concept of Unique Selling Preposition (USP)- Creativity through Endorsements: Endorsers – Types, Celebrity Endorsements – Advantages and Limitations, High Involvement and Low Involvement Products

#### 10 Lecture Hour

#### **UNIT-V**: Fundamentals of Creativity in Advertising

Preparing print ads: Essentials of Copywriting, Copy – Elements, Types, Layout- Principles, Illustration - Importance. Creating broadcast ads: Execution Styles, Jingles and Music – Importance, Concept of Storyboard. Evaluation: Advertising copy, Pre-testing and Post-testing of Advertisements – Methods and Objectives

#### 10 Lecture Hour

#### **UNIT-VI**: Advertising Theories and Models

Hierarchy-of-effects models-AIDA Model- DAGMAR model-Maslow's Hierarchy of Needs-PLC Model-VIPS Model- Ehrenberg Model- The DRIP Model- Lavidge and Steiner Model-Lasswell's Model of Communication

#### Text books: -

- Ogilvy, D. (2011). Confessions of an Advertising Man. United Kingdom: Southbank Publishing.
- Vilanilam, P. J. V., Varghese, A. K. (2004). Advertising Basics! A Resource Guide for Beginners. India: SAGE Publications.

#### **Reference Books**

- Belch, M. A., Belch, G. E. (2014). Advertising and Promotion: An Integrated Marketing Communications Perspective. Singapore: McGraw-Hill Education.
- Arens, W. F. (2006). Contemporary Advertising. United Kingdom: McGraw-Hill/Irwin.
- Keller, K. L. (2013). Strategic Brand Management: Building, Measuring, and Managing Brand Equity. Germany: Pearson.
- Baack, P. D., Baack, D. E., Clow, K. E. (2012). Integrated Advertising, Promotion, and Marketing Communications. United Kingdom: Prentice Hall PTR.
- Kotler, P., Roberto, N. (1989). SOCIAL MARKETING. United Kingdom: Free Press.

Course Title: Story development and Screenwriting for Animation

Semester

VIII

Credits: 4

## **Course Objectives**

- 1. Introduction to Story development and Screenwriting
- 2. Understand the fundamental principles of story development and screenwriting for animation.
- 3. Develop skills in creating compelling characters, plot structures, and dialogue for animated films and TV shows.
- 4. Analyze and critique animated films and TV shows from a story development and screenwriting perspective.
- 5. Create a screenplay or TV show pilot script for an animated project.

#### **Course Outcomes**

On completion of this course, students will be able to:

- 6. (**Create**) Develop a story concept, create character profiles, and structure a narrative for an animated film or TV show.
- 7. (**Evaluate**) Explain the structure of different screenwriting processes.

- 8. **(Analyze)** Write a feature-length screenplay for an animated project, including dialogue, scene descriptions, and transitions.
- 9. (Apply) Use different scripts for quality, realism, and efficiency.
- 10. (**Understand**) Effective use of visual elements, such as action lines, camera angles, and lighting, to tell a story in an animated film or TV show.
- 11. (**Remember**) skillset and knowledge in creating compelling characters, plot structures, and dialogues

### Unit 1: Introduction to Story Development and Screenwriting for Animation 10Hrs

Overview of the animation industry and the role of story development and screenwriting; Introduction to the key concepts, principles and terminologies used worldwide.

## **Unit 2: Story Development**

10Hrs

Developing a story concept and premise; Creating character profiles and backstories; Structuring a narrative and creating a treatment.

## **Unit 3: Screenwriting Fundamentals**

10Hrs

Introduction to screenwriting software and formats; Writing effective dialogue and scene descriptions; Understanding scene structure and timing - pacing.

## **Unit 4: Visual Storytelling and Character Development**

10Hrs

Understanding camera angles, lighting, and composition; Creating effective action lines and transitions; Creating well-rounded, believable characters, Understanding character motivation and backstory; Developing character arcs and relationships.

### **Unit 5: Collaborative Story Development**

10HRS

Working in teams to develop a story concept and treatment; Giving and receiving constructive feedback.; Understanding the importance of collaboration in the animation industry.

### **Recommended Text Books:**

- *Moore, C. B.* (2022). Weight of the Sword and the Hero's Journey.
- Blake, S. (2005). Save the Cat: The Last Book on Screenwriting You'll Ever Need. Zhejiang University Press, 4, 6-17.

#### **Reference Books:**

• Bernardi, D., & Hoxter, J. (2017). *Off the page: screenwriting in the era of media convergence*. Univ of California Press.