Savitribai Phule Pune University

Structure of UG Program as per NEP-2020

Name of Program : B Sc Animation

Major Course : Animation

Level : 4.5 (First Year) Semester : I

CourseType	Course Code	Course Title	Course Credits		Teaching Scheme Hr/Week		Evaluation Scheme andMax Marks		
			TH	PR	TH	PR	CE	EE	Total
Subject I 2(T)+2(P)	ANM-101-T	Basics of Animation	2	-	2	-	15	35	50
	ANM-102-P	Lab Course on ANM-101-T	-	2	-	2	15	35	50
Subject II 2(T)+2(P)	ANM-103-T	Foundation of Art	2	-	2	-	15	35	50
	ANM-104-P	Lab Course on ANM-103-T	-	2	-	2	15	35	50
Subject III 2(T)+2(P)	ANM-105-T	Vector Design (Illustrator)	2	-	2	-	15	35	50
	ANM-106-P	Lab Course on ANM-105-T	-	2	-	2	15	35	50
GE/OE 2(T)	ANM-107-OE	Basics of Digital Photography and Film Making	2	-	2	-	15	35	50
SEC 2(T/P)	ANM-108-SEC	Character Design	-	2	-	2	15	35	50
IKS 2(T)	IKS-100-T	Generic IKS	2	-	2	-	15	35	50
AEC 2(T)	ANM-109-AEC	MIL-I (Hindi)/ MIL-I (Marathi)/ MIL-I (English)	2	-	2	-	15	35	50
VEC (2)	ANM-110-VEC	Environmental Science-I	2	-	2	-	15	35	50
		TOTAL	14	8	14	8			

Level : 4.5 (First Year) Semester : II

CourseType	Course Code	Course Title	Course Credits		Teaching Scheme Hr/Week		Evaluation Scheme andMax Marks		
			TH	PR	TH	PR	CE	EE	Total
Subject I 2(T)+2(P)	ANM-151-T	Digital Graphics (Photoshop)	2	-	2	-	15	35	50
	ANM-152-P	Lab Course on ANM-151-T	-	2	-	2	15	35	50
Subject II 2(T)+2(P)	ANM-153-T	Print Design (InDesign)	2	-	2	-	15	35	50
	ANM-154-P	Lab Course on ANM-153-T	-	2	-	2	15	35	50
Subject III 2(T)+2(P)	ANM-155-T	Production Process	2	-	2	-	15	35	50
	ANM-156-P	Lab Course on ANM-155-T	-	2	-	2	15	35	50
GE/OE 2(P)	ANM-157-OE	Basics of Image Editing and Video Editing (Lightroom + Filmora)	-	2	-	2	15	35	50
SEC 2(T/P)	ANM-158-SEC	Digital Photography	-	2	-	2	15	35	50
AEC 2(T)	ANM-159-AEC	MIL-II (Hindi)/ MIL-II (Marathi)/ MIL-II (English)	2	-	2	-	15	35	50
VEC (2)	ANM-160-VEC	Environmental Science-II	2	-	2	-	15	35	50
CC (2)	ANM-161-CC	Course from University Basket	2	-	2	-	15	35	50
		TOTAL	**12**	**10**	**12**	**10**			

Level : 5.0 (Second Year) Semester : III

CourseType	Course Code	Course Title	Course Credits		Teaching Scheme Hr/Week		Evaluation Scheme andMax Marks		
			TH	PR	TH	PR	CE	EE	Total
MajorCore 4(T)+2(P)	ANM-201-MJ	3D Animation (3Ds Max)	4	-	4	-	30	70	100
	ANM-202-MJ	Lab Course on ANM-201-MJ	-	2	-	2	15	35	50
VSC 2(T/P)	ANM-221-VSC	Film Making Fundamentals	-	2	-	2	15	35	50
FP/CEP (2)	ANM-231-FP	Mini Project based on Graphic Design	-	2	-	2	15	35	50
Minor 2(T)+2(P)	ANM-241-MN	Design Thinking	2	-	2	-	15	35	50
	ANM-242-MN	2D Animation (Animate)	-	2	-	2	15	35	50
GE/OE 2(T)	ANM-203-OE	Designing & Video Animation for Social Media	2	-	2	-	15	35	50
IKS 2(T)	ANM-200-IKS	Film Appreciation and Visual Communication	2	-	2	-	15	35	50
AEC 2(T)	ANM-204-AEC	Soft Skills – I	2	-	2	-	15	35	50
CC (2)	ANM-205-CC	Course from University Basket	2	-	2	-	15	35	50
		TOTAL	14	8	14	8			

Level : 5.0 (Second Year) Semester : IV

CourseType	Course Code	Course Title	Course Credits		Teaching Scheme Hr/Week		Evaluation Scheme andMax Marks		
			TH	PR	TH	PR	CE	EE	Total
MajorCore 4(T)+2(P)	ANM-251-MJ	Advance 3D Animation – I (Maya)	4	-	4	-	30	70	100
	ANM-252-MJ	Lab Course on ANM-251-MJ	-	2	-	2	15	35	50
VSC 2 (T/P)	ANM-271-VSC	Mini Project based on Graphic Design	-	2	-	2	15	35	50
FP/CEP (2)	ANM-281-CEP	Documentary on Community Engagement and Service	-	2	-	2	15	35	50
Minor 2(T)+2(P)	ANM-291-MN	Video Editing (Premiere)	2	-	2	-	15	35	50
	ANM-292-MN	Lab Course on ANM-291-MN	-	2	-	2	15	35	50
GE/OE 2(P)	ANM-253-OE	Explainer Video Animation & Designing for Social Media	-	2	-	2	15	35	50
SEC 2(T/P)	ANM-254-SEC	Stop Motion Techniques	-	2	-	2	15	35	50
AEC 2(T)	ANM-255-AEC	Soft Skills – II	2	-	2	-	15	35	50
CC (2)	ANM-256-CC	Course from University Basket	2	-	2	-	15	35	50
		TOTAL	**10**	**12**	**10**	**12**			

Level : 5.5 (Third Year) Semester : V

CourseType	Course Code	Course Title	Course Credits		Teaching Scheme Hr/Week		Evaluation Scheme andMax Marks		
			TH	PR	TH	PR	CE	EE	Total
MajorCore 8(T)+ 4(P)	ANM-301-MJ	Advance 3D Animation - II (Maya)	4	-	4	-	30	70	100
	ANM-302-MJ	Lab Course on ANM-301-MJ	-	2	-	2	15	35	50
	ANM-303-MJ	Blender Animation	4	-	4	-	30	70	100
	ANM-304-MJ	Lab Course on ANM-303-MJ	-	2	-	2	15	35	50
Major Elective 2(T) + 2(P)	ANM-310-ME	Motion Graphics & Compositing (After Effects)	2	-	2	-	15	35	50
	ANM-311-ME	Lab Course on ANM-310-ME	-	2	-	2	15	35	50
	OR								
	ANM-312-ME	Visual Effect (Silhouette)	2	-	2	-	15	35	50
	ANM-313-ME	Lab Course on ANM-312-ME	-	2	-	2	15	35	50
VSC 2(T/P)	ANM-321-VSC	3D Sculpting (ZBrush)	-	2	-	2	15	35	50
FP/CEP 2(FP/CEP)	ANM-331-FP	Mini Project based on 2D/3D Animation (Animate/Maya/Blender)	-	2	-	2	15	35	50
Minor 2(T)	ANM-341-MN	White Board Animation and SketchUp Design	2	-	2	-	15	35	50
		TOTAL	12	10	12	10			

Level : 5.5 (Third Year) Semester : VI

CourseType	Course Code	Course Title	Course Credits		Teaching Scheme Hr/Week		Evaluation Scheme andMax Marks		
			TH	PR	TH	PR	CE	EE	Total
MajorCore 8(T)+4(P)	ANM-351-MJ	Visual Effect-I (Nuke)	4	-	4	-	30	70	100
	ANM-352-MJ	Lab Course on ANM-351-MJ	-	2	-	2	15	35	50
	ANM-353-MJ	Augmented Reality (AR) (Unity)	4	-	4	-	30	70	100
	ANM-354-MJ	Lab Course on ANM-353-MJ	-	2	-	2	15	35	50
Major Elective 2(T)+2(P)	ANM-360-ME	Visual Effect- II (Silhouette)	2	-	2	-	15	35	50
	ANM-361-ME	Lab Course on ANM-360-ME	-	2	-	2	15	35	50
	OR								
	ANM-362-ME	Motion Graphics & Compositing (After Effects)	2	-	2	-	15	35	50
	ANM-363-ME	Lab Course on ANM-362-ME	-	2	-	2	15	35	50
VSC 2(T/P)	ANM-371-VSC	Showreel and Project	-	2	-	2	15	35	50
FP/OJT/CEP 4(OJT)	ANM-381-OJT	On Job Training	-	4	-	4	30	70	100
		TOTAL	**10**	**12**	**10**	**12**			

Level : 6.0 (Forth Year) Semester : VII (Honors with Research Degree)

CourseType	Course Code	Course Title	Course Credits		Teaching Scheme Hr/Week		Evaluation Scheme andMax Marks		
			TH	PR	TH	PR	CE	EE	Total
MajorCore 6(T)+4(P)	ANM-401-MJ	Game Design	2	-	2	-	15	35	50
	ANM-402-MJ	Lab Course on ANM-401-MJ	-	2	-	2	15	35	50
	ANM-403MJ	IPR & Cyber Security	2	-	2	-	15	35	50
	ANM-404-MJ	Digital Marketing	2	-	2	-	15	35	50
	ANM-405-MJ	Audio Editing (Audition)	-	2	-	2	15	35	50
Major Elective 2(T)+2(P)	ANM-410-ME	UI & UX Design	2	-	2	-	15	35	50
	ANM-411-ME	Lab Course on ANM-410-ME	-	2	-	2	15	35	50
	OR								
	ANM-412-ME	Web Technology	2	-	2	-	15	35	50
	ANM-413-ME	Lab Course on ANM-412-ME	-	2	-	2	15	35	50
4(RP)	ANM-431-RP	Research Project	-	4	-	8	30	70	100
4(RM) (T)	ANM-441-RM	Research Methodology	4	-	4	-	30	70	100
		TOTAL	12	10	12	10			

Level : 6.0 (Forth Year) Semester : VIII (Honors with Research Degree)

CourseType	Course Code	Course Title	Course Credits		Teaching Scheme Hr/Week		Evaluation Scheme andMax Marks		
			TH	PR	TH	PR	CE	EE	Total
MajorCore 6(T)+4(P)	ANM-451-MJ	Game Production (Unity)	2	-	2	-	15	35	50
	ANM-452-MJ	Lab Course on ANM801MJ	-	2	-	2	15	35	50
	ANM-453-MJ	Basics of Marketing & Portfolio Development	2	-	2	-	15	35	50
	ANM-454-MJ	Game Development (Unreal Engine)	2	-	2	-	15	35	50
	ANM-455-MJ	Lab Course on ANM804MJ	-	2	-	2	15	35	50
Major Elective 2(T)+2(P)	ANM-460-ME	Advanced VFX -I (Real Flow)	2	-	2	-	15	35	50
	ANM-461-ME	Lab Course on ANM806ME	-	2	-	2	15	35	50
	OR								
	ANM-462-ME	Advanced VFX -II (Mocha Pro)	2	-	2	-	15	35	50
	ANM-463-ME	Lab Course on ANM808ME	-	2	-	2	15	35	50
8(RP)	ANM-481-RP	Research Project	-	8	-	16	60	140	200
		TOTAL	08	14	08	22			

OR

Level : 6.0 (Forth Year) Semester : VII (Honors Degree)

Course Type	Course Code	Course Title	Course Credits		Teaching Scheme Hr/Week		Evaluation Scheme andMax Marks		
			TH	PR	TH	PR	CE	EE	Total
MajorCore 10(T)+4(P)	ANM-401-MJ	Game Design	4	-	4	-	30	70	100
	ANM-402-MJ	Lab Course on ANM-451-MJ	-	2	-	2	15	35	50
	ANM-403MJ	IPR & Cyber Security	4	-	4	-	30	70	100
	ANM-404-MJ	Digital Marketing	2	-	2	-	15	35	50
	ANM-405-MJ	Audio Editing (Audition)	-	2	-	2	15	35	50
Major Elective 2(T)+2(P)	ANM-410-ME	UI & UX Design	2	-	2	-	15	35	50
	ANM-411-ME	Lab Course on ANM-460-ME	-	2	-	2	15	35	50
	OR								
	ANM-412-ME	Web Technology	2	-	2	-	15	35	50
	ANM-413-ME	Lab Course on ANM-462-ME	-	2	-	2	15	35	50
4 (RM) (T)	ANM-441-RM	Research Methodology	4	-	4	-	30	70	100
		TOTAL	**16**	**06**	**16**	**06**			

Level : 6.0 (Forth Year) Semester : VIII (Honors Degree)

CourseType	Course Code	Course Title	Course Credits		Teaching Scheme Hr/Week		Evaluation Scheme andMax Marks		
			TH	PR	TH	PR	CE	EE	Total
MajorCore 10(T)+4(P)	ANM-451-MJ	Game Production (Unity)	4	-	4	-	30	70	100
	ANM-452-MJ	Lab Course on ANM801MJ	-	2	-	2	15	35	50
	ANM-453-MJ	Basics of Marketing & Portfolio Development	2	-	2	-	15	35	50
	ANM-454-MJ	Game Development (Unreal Engine)	4	-	4	-	30	70	100
	ANM-455-MJ	Lab Course on ANM804MJ	-	2	-	2	15	35	50
Major Elective 2(T)+2(P)	ANM-460-ME	Advanced VFX -I (Real Flow)	2	-	2	-	15	35	50
	ANM-461-ME	Lab Course on ANM806ME	-	2	-	2	15	35	50
	OR								
	ANM-462-ME	Advanced VFX -II (Mocha Pro)	2	-	2	-	15	35	50
	ANM-463-ME	Lab Course on ANM808ME	-	2	-	2	15	35	50
4 (OJT)	ANM-481-OJT	On Job Training	-	4	-	4	30	70	100
		TOTAL	**12**	**10**	**12**	**10**			

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE
Syllabus
B Sc Animation

Title of the Course: : Basics of Animation							
Year: I				**Semester: I**			
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
Subject I	ANM-101-T	02	00	02	30	15	35	50

Course Objectives:-

- To explore the history of animation globally and on a national level and the contributions of different countries and people in it.
- To familiarize themselves with terminology commonly used in the animation industry and the different fields in it and to learn various software and hardware used for it.
- Students will learn and apply fundamental animation principles, importance of audio elements and to study human and animal anatomy and layout design, to create visually compelling visuals for their animations.
- To develop skills in creating storyboards, and other various art forms which enhance storytelling and visual appeal.
- To analyze and appreciate classic animated films, analyzing their techniques, storytelling, and visual style to gain inspiration and insight for their own animation projects

Course Outcomes:-

- Students will have a comprehensive understanding of the history, techniques, and principles of animation.
- Students will be proficient in using animation software and hardware tools for both 2D and 3D animation production.
- Students will be able to apply animation principles effectively to create compelling character animations and dynamic environments and develop storyboard animation sequences, incorporating audio elements and utilizing various camera angles and shot compositions.
- Students will gain appreciation for the interdisciplinary nature of animation, integrating elements from art, design, and storytelling into their animation projects.
- Students will develop critical thinking and analytical skills through the study and analysis of classic and contemporary animation films.
- Students will be prepared to pursue further studies or careers in animation, film production, game design, or related fields.

Course Content		
Unit	**Unit Name**	**Lectures**
Unit 1	**History of Animation - World**	**3**
	1.1 American Animation: Disney (Beginning of animation) 1.2 Russian Animation: Soyuz Multifilm 1.3 Other countries animation	
Unit 2	**History of Animation - India**	**2**
	2.1. Films Division 2.2. Bhimsain, Ram Mohan, Ajit Rao, NID	
Unit 3	**Animation Glossary**	**2**
	3.1. Terms used in 2D Animation 3.2. Terms used in 3D Animation & VFX	
Unit 4	**Types of Animation**	**2**
	4.1. Traditional Animation 4.2. 2D Animation 3 4.3. D Animation 4.4. Stop Motion Animation 4.5. Motion Graphics	
Unit 5	**Basic Principles of Animation**	**3**
	5.1 Explain the Basic Principles 5.2 Explain with Acting	
Unit 6	**Role of Audio in Animation.**	**2**
	6.1 Background Music. 6.2 Voice over. 6.3 Foley Track.	
Unit 7	**Anatomy & Body Language**	**3**
	7.1. Studying Character Anatomy 7.2. Studying Animal Anatomy 7.3. Developing of Characters 7.4. Developing the characters with computer animation 7.5. Case Studies of famous animation characters.	
Unit 8	**Location concepts and Layouts**	**3**
	8.1 Understanding angles and perspectives 8.2 Creating Thumbnail sketches 8.3 Compositing the location 8.4 Creating layouts from master locations 8.5 Studying location designing from a famous animated movie	
Unit 9	**Developing Animation Storyboard**	**2**
	9.1. Shot, Scene, Sequence 9.2. Types of shots and Camera angles	

Unit 10	**File Formats**	**2**
10.1	Acting: Expression, Gesture	
10.2	Architecture: Lighting, Texture	
10.3	Sculpture: 3D Visualization, Posing	
10.4	Music: Culture, Expressions	
Unit 11	**Techniques used in Animation short films**	**1**
11.1	Discussion about award winning animation short films	
Unit 12	**Software available for digital animation**	**2**
12.1	2D Animation - free and paid	
12.2	3D Animation - free and paid	
Unit 13	**Hardware for animation**	**1**
13.1	2D Animation - Animation table, disc, peg bar, etc	
13.2	Digital animation - Computer, Graphic tables, Render farms, 3D Scanners.	
Unit 14	**Appreciation of 6 all-time classic animation films**	**2**
14.1	Demonstrate the shots, have discussion, explain details of the film	

Reference books:

1. The Complete Animation course by Chris Patmore, Barron's Educational Series (New York)
2. Anatomy of the Artist – Thompson & Thompson

CourseType	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
Subject I	ANM-102-P	00	02	02	60	15	35	50

Title of the Course: : Lab Course on ANM-101-T

Year: I — **Semester: I**

Course Objectives:-

- Gaining experience of working in a group
- Make the student familiar with the fundamental theories of different medium of 2D Animation Techniques
- Learning related hardware, software and other tools for animation techniques

Course Outcomes:-

Student will be able to:-

- Identify and apply the 12 Animation Principles through Digital Animation.
- Understand timing and motion through key-frames, holds and in-betweens
- Demonstrate skills in the use of industry standard tools

Course Contents

1. Bouncing ball
2. Bouncing ball with different type of ball
3. Single Pendulum
4. Double Pendulum
5. Cartoon Character
6. Character jump
7. Arc
8. Walk cycle – male
9. Walk cycle – female
10. Run cycle – male
11. Run cycle – female
12. Character acting with dialog
13. Masking
14. Character Expression
15. Character animation with 12 principles.

Title of the Course: : Foundation of Art

Year: I				Semester: I				

CourseType	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
Subject II	ANM-103-T	02	00	02	30	15	35	50

Course Objectives:-

- Develop proficiency in drawing and handling various art materials, understanding their significance in animation.
- Gain a thorough understanding of design elements and their importance in creating compelling animations.
- Learn and apply one to two-point perspective techniques to create depth and realism in their drawings.
- Master color theory and color harmony principles to effectively convey mood, atmosphere, and storytelling in their animations.
- Explore different types of art forms, including traditional and digital mediums, to broaden their artistic perspective.
- Acquire rendering skills with appropriate styles and proportions, ensuring their animations are visually appealing and professionally executed.

Course Outcomes:- Student will be able to:-

- Could you please summarize the fundamental principles of drawing and handling
- Materials, emphasizing the significance of design elements? Additionally, could you
- Provide an example of how to apply one to two-point perspective in drawing.
- Discuss the principles of color theory and color harmony in drawing and sketching.
- Demonstrate rendering techniques with suitable styles and proportions.

Course Content

Unit	Unit Name	Lectures
Unit 1	**Skills required for an Animation Artist**	5

1.1 Introduction to Visual and Creative development of an artist.
1.2 Introduction to Light & shade.
1.3 Introduction to Grayscale pencil shading.

Unit2	**Introduction to Colors**	5

2.1. Different types of Methods Additive and Subtractive
2.2. Introduction to Pigment colors
2.3. Introduction to Harmony and Schemes
2.4. Tint, Shade, Value
2.5. Warm Colors
2.6. Cool Colors

Unit3	**Elements of Visual Design**	5

3.1. Line
3.2. Color
3.3. Shape

	3.4. Value	
	3.5. Texture	
	3.6. Space	
	3.7. Form	
	3.8. Typeface.	
Unit 4	**Principles of design and Gestalt Theory**	**5**

4.1. Unity/Harmony
4.2. Balance
4.3. Scale/proportion
4.4. Dominance/emphasis
4.5. Similarity
4.6. Proximity
4.7. Contrast
4.8. Figure and Ground
4.9. Symmetry
4.10. Order
4.11. Continuation
4.12. Closure

Unit 5	**Introduction to 2D, 3D Design and Typography**	**5**

5.1 What is 2D and 3D Design?
5.2 Fundamentals of Type
5.3 Features of typography: fonts, kerning, weightages, etc.

Unit 6	**Introduction to Human Anatomy**	**5**

6.1 Heads
6.2 Key Lines
6.3 Volume Construction
6.4 Balance
6.5 Muscles
   Bones and joints

Unit 7	**Introduction to Perspective drawing**	**4**

7.1. One point perspective drawing
7.2. Two point perspective drawing
7.3. Three point perspective drawing

Reference Books:

1. http://www.scholarpedia.org/article/Gestalt_principles?_hstc=7752004.36a0ddae8e24bce7

2. Anatomy and Drawing by Victor Perard

3. https://blog.adobespark.com/2020/10/17/8-basic-design-principles-to-help-you-create-better-graphics/

Title of the Course: : Lab Course on ANM-103-T								
Year: I					**Semester: I**			
CourseType	Course Code	**Credit Distribution**		Credits	Allotted Hours	**Allotted Marks**		
		Theory	Practical			CIE	ESE	Total
Subject II	ANM-104-P	00	02	02	60	15	35	50

Course Objectives:-

● Demonstrate renders with appropriate style and proportions.
● Illustrate the importance of elements of designs
● Identify, analyze color theory and color harmony in drawing and sketching.
● Demonstrate the usage of 1-2 point perspective in drawing
● Recall the basics of drawing and material handling
● Review different type of art forms.

Course Outcomes:-

Student will be able to:-

• Could you please summarize the fundamental principles of drawing and handling

• Materials, emphasizing the significance of design elements? Additionally, could you

• Provide an example of how to apply one to two-point perspective in drawing.

• Discuss the principles of color theory and color harmony in drawing and sketching.

• Demonstrate rendering techniques with suitable styles and proportions.

Course Content

Unit 1	Skills required for an Animation Artist	5

Sketching (15 hrs)

1. Assignment for Drawing Basic Shapes (Two and Three Dimensional)
2. Drawing and Developing five objects using Basic shapes. (e.g. Car, Cup and Saucer)
3. Practicing Technique of Pencil Shading.
4. Making 10 point Grayscale using two of the Shading techniques.
5. Types of Colors (Primary, Secondary, Tertiary), demonstration and assignment
6. Sketching Eyes, Ear, Nose and lips.
7. Sketching Hand and Feet.
8. Sketching Human Face.
9. Foreshortening of hand and legs.
10. Assignment for Muscle Drawing.
11. Drawing Basic Human figure (Male, Female, and Child)

Flipbook (15 hrs)
1. Drawing different mannequin poses.
2. Sequential drawing for figures (E.g - Walking, Running, Jumping)
3. Sequential drawing for objects (E.g - Grain Sack, Cube with tail.)
4. Making a Flipbook for a "Ball with Tail" and coloring it
5. Making a Flipbook for "Growing Flower" or any other subject (of your choice) and coloring it

Title of the Course: ANM105S3 Vector Design (Illustrator)								

Year: I					Semester: I			

CourseType	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
Subject III	ANM-105-T	02	00	02	30	15	35	50

Course Objectives:-

- To make the students understand Vector graphic software.
- To acquaint them with the basic utilities of Illustrator.
- To help them manage graphic, print media and concept design work.

Course Outcomes:-

Student will be able to:-

- Recall theoretical knowledge of print and digital media.
- Explain various concepts of digital art.
- Illustrate the usage of various tools for Vector graphic software.
- Identify various points of raster designing and vector art style.
- Compare Concept Art and Fantasy Art while converting from paper to digital format.
- Understanding of various photo editing techniques, including color correction, retouching, cropping, and resizing.
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Course Content

Unit	Unit Name	Lectures
Unit 1	**Introduction to Vector Software**	16

1.1. Interface Introduction to Adobe Illustrator
1.2. What's new in Illustrator
1.3. Illustrator system requirements
1.4. Panels & Workspaces in Adobe Illustrator
1.5. Art boards in Adobe Illustrator
1.6. Vector basics / Selection & Direct selection tool
1.7. Fill & Stroke effects in Adobe Illustrator
1.8. Using Colour / Swatches / Pantone's / Gradients & more
1.9. Handy Tips / Things to know for beginners

Unit 2	**Essential Practice**	12

2.1 Creating shape vectors
2.2 Grouped vectors & Compounding vector shapes
2.3 Drawing with the Pen tool / Brush tool / Pencil tool & more
2.4 The Blob brush tool & Eraser tool
2.5 Type tools in Adobe Illustrator

Unit 3	Create a project	10
	3.1. Setting up a document. 3.2. Placing in a drawing / Sketch. 3.3. Image trace tool for sketches in Adobe Illustrator Understanding Transform tools	
Unit 4	Drawing	10
	4.1. Tracing a hand drawn sketch & Converting to vector artwork 4.2. Compounding vector shapes & strokes / Pathfinder Tool	
Unit 5	Colouring & Text	10
	5.1. Colouring a vector drawing in Adobe Illustrator 5.2. Adding type to a poster design in Adobe Illustrator	
Unit 6	Finishing & Exporting	02
	6.1 Exporting ready for print in Adobe Illustrator	
	Reference Book :- The complete beginners guide to Adobe Illustrator.	

Title of the Course: Lab Course on ANM-105-T								
Year: I				**Semester: I**				
CourseType	Course Code	**Credit Distribution**		Credits	Allotted Hours	**Allotted Marks**		
		Theory	Practical			CIE	ESE	Total
Subject III	ANM-106-P	00	02	02	60	15	35	50

Course Objectives:-

- To make the students understand Vector graphic software.
- To acquaint them with the basic utilities of Illustrator.
- To help them manage graphic, print media and concept design work.

Course Outcomes:-

Student will be able to:-

- Recall theoretical knowledge of print and digital media.
- Explain various concepts of digital art.
- Illustrate the usage of various tools for Vector graphic software.
- Identify various points of raster designing and vector art style.
- Compare Concept Art and Fantasy Art while converting from paper to digital format.
- Understanding of various photo editing techniques, including color correction, retouching, cropping, and resizing.

Course Content	
Adobe Illustrator Practical List	**60 Hrs.**

1. Shapes Composition
2. Create tattoo Designs
3. Create own text A to Z
4. Logo Design
5. Branding Visiting Card
6. Letter head
7. Envelop Design
8. Brochure Design
9. Advertise Design
10. Product modeling illustration
11. Car Modeling
12. Character Design

Reference Book:

The complete beginners guide to Adobe Illustrator.

Title of the Course : Basics of Digital Photography and Film Making								
Year: I				Semester: I				
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CE	EE	Total
GE/OE 2(T)	ANM-107-OE	02	00	02	30	15	35	50

Course Objectives :

- **Understanding Equipment:** Familiarize students with the basic components of digital cameras and filmmaking equipment, including cameras, lenses, tripods, and lighting.
- **Technical Proficiency:** Develop fundamental skills in operating digital cameras, understanding exposure, aperture, shutter speed, ISO, and their relationship in both photography and filmmaking contexts.
- **Composition and Framing:** Teach principles of composition and framing for both photography and filmmaking, including rule of thirds, leading lines, framing, and perspective.
- **Lighting Techniques:** Introduce various lighting techniques for different scenarios, including natural light, artificial light, and studio setups, and their impact on image quality and storytelling.
- **Storytelling and Narrative**: Explore the basics of visual storytelling and narrative construction, emphasizing how to convey emotion, mood, and meaning through images and sequences.
- **Editing Basics:** Provide an overview of basic editing techniques for both photography and filmmaking, including cropping, color correction, and basic video editing software.

Course Outcomes :

- **Creative Expression:** Students will develop a personal style and aesthetic in their photography and filmmaking, effectively utilizing composition, lighting, and framing techniques to convey emotion, mood, and narrative.
- **Problem-Solving Skills:** Students will be able to identify and address technical challenges in photography and filmmaking, such as exposure issues, lighting problems, and composition dilemmas, through critical thinking and creative problem-solving.
- **Portfolio Development:** Students will compile a portfolio of their own photographic and cinematic work, showcasing their technical skills, creative vision, and ability to effectively communicate ideas through visual media.
- **Critical Analysis:** Students will critically analyze and evaluate their own work and the work of others, providing constructive feedback and identifying areas for improvement in terms of technical execution, creativity, and storytelling effectiveness.

Course Content		
Unit	**Unit Name**	**Lectures**
Unit 1	**Evolution of Photography**	**01**
	1.1. Definition of Photography 1.2. Origin of Camera World 1.3. Urge of Invention of Photography	
Unit 2	**Digital Photography**	**05**
	2.1. Basics of Digital Photography 2.2. Camera Equipment 2.3. Various Camera and Lenses 2.4. Camera Settings 2.7. Creative Photography (Angles in Photography)	
Unit 3	**Basics Of Lighting**	**04**
	3.1 What are major sources of lights? 3.2 Types of Lights in Photography. (Main / Key Light, Fill Light, Cut Light/Kick Light, Background Light). 3.3 Flash Operating Modes	
Unit 4	**Composition**	**03**
	4.1 What is composition in Photography? Its significance. 4.2 Types of Composition: Symmetrical, Radial, Diagonal, Letter Box, Tall Crop, Rule of third, Overlapping, Frame in Frame, Geometrical Shapes & Forms.	
Unit 5	**Analytical Thinking and Study**	**02**
	5.1 Finding Right Mind-set 5.2 Framing the Unexpected 5.3 Photographing People 5.4 Developing Photographic Voice 5.5 Field Activity or Assignment	
Unit 6	**Development**	**01**
	Before a film can get started, it needs to go through the "development" phase. This phase includes the creation, writing, organizing and planning of a film project. The budget must be set, cast goes through auditions, the location is decided, and multiple scripts are written. Many times, writers and directors create storyboards to entice producers to finance the film.	
Unit 7	**Pre-Production**	**03**
	Once a film or digital media has gotten out of development, it's not quite time to start filming. Although that day is getting ever-closer, there first needs to be a pre-production phase. While cameras are not yet rolling, pre-production can be just as intense as the filming itself.	

Unit 8	Production	03

At long last, the film is ready roll. Production is the quickest, and sometimes the shortest portion of filmmaking and digital media production. How long it takes to film depends on variables like the number of locations, the length of the film, and if any key members, such as leads, are off set for any portion of the filming.

Unit 9	Cinematography Lightening Technique, Sound	05

- 9.1. Introduction to Video Camera
- 9.2. Camera and its Function
- 9.3. Camera Angles and Shots
- 9.4. Composition
- 9.5 Video Lights, Lightening Techniques
- 9.6 Sound

Unit 10	Post-Production	02

If someone saw a rough cut of a special effects-heavy blockbuster with no post-production additions, they would not be all that excited. The audience would be confused about why it looks so weird, without music or effects. Post-production is when the footage is edited, visual effects are added, music is composed, and titles are finalized.

Unit 11	Distribution	01

With so many different mediums, such as movie theatres, television, home video, digital media and streaming, there are various distribution possibilities. What kind of distribution a film gets can depend on its quality and the pull of the filmmaker or studio?

Title of the Course: : Character Design								
Year: I				**Semester: I**				
Course Type	**Course Code**	**Credit Distribution**		**Credits**	**Allotted Hours**	**Allotted Marks**		
		Theory	**Practical**			**CIE**	**ESE**	**Total**
SEC 2(T/P)	ANM-108-SEC	00	02	02	60	15	35	50

Course Objectives:-

- To understand the principles of character design and its importance in animation.
- To develop skills in creating original characters with distinct personalities and visual appeal.
- To explore different character archetypes and their role in storytelling.
- To learn how to design characters that are suitable for animation, considering factors such as movement, expression, and silhouette.
- To gain proficiency in using traditional and digital tools and techniques for character design.
- To apply design principles and techniques to create characters that serve specific narrative and thematic purposes.
- To develop a portfolio of original character designs suitable for animation projects.

Course Outcomes:-

- Mastery of character design principles.
- Creation of original characters for animation.
- Proficiency in traditional and digital design techniques.
- Adaptation of designs to animation requirements.
- Development of a professional character design portfolio.

Course Contents		
Unit	**Unit Name**	**Lectures**
Unit 1	**Intro. to Character design**	**2**
	1.1. Overview of character design principles 1.2. Importance of character design in animation 1.3. Analysis of iconic animated characters	
Unit 2	**Understanding Character Archetypes**	**2**
	2.1. Exploration of common character archetypes (hero, villain, sidekick, etc.) 2.2. Character archetypes in storytelling and animation	
Unit 3	**Design Fundamentals**	**4**
	3.1. Fundamentals of shape language, 3.2. silhouette, and proportion in character design 3.3. Exercises in gesture drawing and quick sketches	
Unit 4	**Developing Character Personalities**	**3**
	4.1. Techniques for defining character traits and personalities 4.2. Creating character backstories and profiles	

Unit 5	Expressive Character Design	2
5.1. Expressive features and body language in character design 5.2. Emotion and gesture studies		

Unit 6	Designing Characters for Animation	5
6.1. Considerations for animation: movement, flexibility, and readability 6.2. Creating turnaround sheets and model sheets		

Unit 7	Digital Tools for Character Design	2
7.1. Introduction to digital character design software (e.g., Adobe Photoshop, Procreate) 7.2. Digital painting techniques for character design		

Unit 8	Color Theory and Character Design	5
8.1. Basics of color theory and its application in character design 8.2. Creating color palettes for characters		

Unit 9	Designing Characters for Different Genres	2
9.1. Designing characters for comedy, drama, action, etc. 9.2. Adapting character design to suit different animation styles		

Unit 10	Finalizing Character Designs	2
10.1. Finalizing character designs based on feedback 10.2. Creating presentation materials (portfolio, reel, etc.)		

Reference:
- The Animator's Survival kit (Richard Williams)
- Disney Animation: The Illusion of Life
- Acting for Animators
- Cartoon Animation by Preston Blair

SEMESTER II

Title of the Course: : Digital Graphics (Photoshop)								
Year: I					**Semester: II**			

CourseType	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
Subject I	ANM-151-T	02	00	02	30	15	35	50

Course Objectives:-

- To make the students understand raster graphic software.
- To acquaint them with the basic utilities of Photoshop
- To help them manage graphic, print media and concept design work.

Course Outcomes:- Student will be able to:-

- Recall theoretical knowledge of print and digital media.
- Explain various concepts of digital art.
- Illustrate the usage of various tools for raster graphic software.
- Identify various points of raster designing and vector art style.
- Compare Concept Art and Fantasy Art while converting from paper to digital format.
- Understanding of various photo editing techniques, including color correction, retouching, cropping, and resizing.

Course Content		
Unit	**Unit Name**	**Lectures**
Unit 1	**Introduction to Raster Software**	2
	1.1. Basic History of Photoshop. 1.2. Understanding the interface. 1.3. Using the tools and its overview. 1.4. Using option bar and other panels. 1.5. Customizing the workspace.	
Unit 2	**Working with Selection**	4
	2.1. About selecting and selection tools. 2.2. Understanding the select panel 2.3. Moving the selected area. 2.4. Manipulating selections 2.5. Cropping an image and erasing within selection. 2.6. Refining the edge of a selection	

Unit 3	**Basic Photo Correction**	**5**

3.1. Resolution and Image Size.
3.2. Understanding retouching, healing and stamp tool
3.3. Using Content Aware tool
3.4. Replacing color in image.
3.5. Straightening, Cropping and replacing images.
3.6. Understanding Transform tools

Unit 4	**Photo Editing using filters and effects**	**6**

4.1. Adjusting color balance
4.2. Using curves, hues, saturation, levels
4.3. Understanding blend modes
4.4. Understanding CMYK, RGB, Lab, Black and White color modes
4.5. Understanding Filter panel

Unit 5	**Mask, layers and channels**	**4**

5.1. Working with masks and channels and action
5.2. Creating masks
5.3. Understanding layers and layer panel
5.4. Rearranging, applying gradients and applying layer style.
5.5. Understanding clip mask

Unit 6	**Text, shapes and Design**	**4**

6.1 Understanding text tool
6.1 Designing paragraph
6.1 Understanding shape tool
6.1 Composing design using text and shapes
6.1 Customizing and creating design mockups

Unit 7	**Digital art**	**7**

7.1. Understanding brush tool and setting
7.2. Creating custom brushes
7.3. Understanding lights, shadow , highlight and different texture
7.4. Creating digital art using trace method and photo(smudge tool)
7.5. Creating digital concept art from scratch
7.6. Understanding the concept of photo bashing and making matte painting

Unit 8	**3D in Photoshop**	**5**

8.1 Understanding 3D workspace
8.2 Importing 3D files
8.3 Using 3D panels to adjust lighting and surface texture
8.4 Create 3D objects and animations
8.5 Painting onto 3D file
8.6 Manipulating 3D objects
8.7 Merging 2D onto 3D layer
8.8 Video | 3D painting - The next level

8.9	3D rendering and saving	
Unit 9	**Video Layer in Photoshop**	**6**
9.1.	Video Editing in Photoshop	
9.2.	Edit video and animation files	
9.3.	Paint frames in video layers	
9.4.	Import video files and image sequence	
9.5.	Create frame animations	
9.6.	Create timeline animation	
Unit 10	**File Formats**	**2**
10.1	Understanding different file format	
10.2	Importing and Exporting.	

Reference Books: https://helpx.adobe.com/pdf/photoshop_reference.pdf

Adobe Master Class Advance Composition in Adobe Photoshop CC 2nd Edition(bringing the impossible to reality - Bret Malley

Title of the Course: : Lab Course on ANM-151-T								

Year: I				Semester: I				

CourseType	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
Subject I	ANM-152-P	00	02	02	60	15	35	50

Course Objectives:-

- To make the students understand raster graphic software.
- To acquaint them with the basic utilities of Photoshop
- To help them manage graphic, print media and concept design work.

Course Outcomes:-

Student will be able to:-

- Adjust scanned or digital camera images for better screen display or printing. Photoshop lets you easily change the file format of graphical images to use as email attachments, on Web pages, or in printed documents such as brochures and newsletters.
- Edit photographs, especially those taken with a digital camera or digitized with a scanner. Photoshop becomes an electronic darkroom. On the left, you can see the original digital photograph of the Golden Gate Bridge, taken by Lorene Romero. The right side shows the same photograph with a quick Photoshop edit.
- Restore old and/or damaged photographs. The original 1921 photo, on the left, was scanned into Photoshop, restored, and colorized. You will learn to do this before the course is over.
- Modify images or start from scratch to create original artwork. Photoshop becomes an electronic playroom both for painting with pixels as well as for working with scalable objects like lines, shapes, and text. This cat face artwork was done by Nicholas Ogg.

Course Content

Practical List	30 hrs.

1. Adding and removing elements from background
2. Create any product. (Biscuit Cover, Chock let Cover, Cream Cover, Kurkure Cover, lays Cover, etc.)
3. Converting black and white photo to Color
4. Removing scratches and restoring old photos
5. Coloring Cartoon/Comic Character
6. Coloring Comic Page/Pages
7. Photo Manipulation
8. Create Typographical Text
9. Movie Poster Design
10. Create any 3D Modeling with Adobe Photoshop
11. Publicity designs of any product
12. Digital Painting
13. Matt Painting.

Title of the Course : Print Design (InDesign)								
Year: I					Semester: II			
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CE	EE	Total
Subject II 2(T)	ANM-153-T	02	00	02	30	15	35	50

Course Objectives :

- Learn text formatting, image importing, and page layout tools.
- Gain proficiency in InDesign from basic print layouts to interactive projects.
- Apply all toolbars for effective page design.
- Integrate typography and graphics seamlessly in projects.

Course Outcomes :

- Proficiency: Master InDesign's tools for print and digital media.
- Design Skills: Learn typography, color theory, and layout composition.
- Efficiency: Work faster with shortcuts and best practices.
- Portfolio: Build a showcase of your design work.
- Collaboration: Utilize collaboration features for teamwork.
- Certification: Gain recognition with Adobe certifications.
- Career: Access roles in design, marketing, and publishing.

Course Content

Unit	Unit Name	Lectures
Unit 1	Introduction to Indesign	05
	1.1 Arranging palettes 1.2 Customizing workspace 1.3 Palette menus 1.4 Navigation and magnification 1.5 Layers 1.6 Context menus 1.7 Selecting objects	
Unit 2	Documents setup	05
	2.1 Starting new documents and page size 2.2 Master pages 2.3 Footers 2.4 Placeholder master 2.5 Applying master and overriding master 2.6 Editing master pages	

Unit 3	Frames	05
3.1 Modifying and resizing text frames 3.2 Modifying and resizing graphic frames 3.3 Wrapping graphics 3.4 Creating and duplicating frames 3.5 Rotating and aligning objects		
Unit 4	**Importing and editing text**	**05**
4.1 Managing fonts 4.2 Working with styles 4.3 Aligning text 4.4 Threading text 4.5 Changing number of columns 4.6 Changing text alignment 4.7 Character style 4.8 Find and Replace		
Unit 5	**Typography**	**05**
5.1 Vertical spacing 5.2 Baseline grid 5.3 Space above and below paragraph 5.4 Font and type style 5.5 Paragraph alignment 5.6 Special font features and drop cap		
Unit 6	**Working with color**	**05**
6.1 Adding color to swatch palette 6.2 Applying color to objects 6.3 Dash stroke 6.4 Gradient 6.5 Tint 6.6 Spot color 6.7 Apply color to text 6.8 Apply color to object 6.9 Creating and applying gradient swatch		
Reference Book: 1. Adobe InDesign CC: A Complete Course and Compendium of Features: 2. Adobe® InDesign® Classroom In A Book		

Title of the Course : Lab course on ANM-153-T

Year: I					Semester: II			

Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CE	EE	Total
Subject II	ANM-154-P	00	02	02	60	15	35	50

Course Objectives :

- Learn text formatting, image importing, and page layout tools.
- Gain proficiency in InDesign from basic print layouts to interactive projects.
- Apply all toolbars for effective page design.
  Integrate typography and graphics seamlessly in projects.

Course Outcomes :

- Proficient layout design for print and digital media.
- Mastery of InDesign's formatting, image import, and layout tools.
- Versatile project creation including flyers, brochures, and eBooks.
- Seamless integration of typography and graphics.
- Preparation for careers with a diverse design portfolio.

Course Content

Assignment List:

- **Create a Flyer:** Design a flyer for an event or promotion, incorporating text, images, and graphics.
- **Design a Newsletter:** Layout a newsletter with multiple articles, headlines, images, and columns.
- **Produce a Brochure:** Develop a tri-fold brochure for a business or organization, showcasing products, services, or information.
- **Design a Magazine Spread:** Create a double-page spread for a magazine, including feature articles, images, and advertisements.
- **Develop a Booklet:** Design a booklet for a topic of your choice, such as a guide, manual, or portfolio.
- **Design a Business Card:** Create a professional business card layout with proper dimensions and branding elements.
- **Interactive PDF:** Produce an interactive PDF document with hyperlinks, buttons, and multimedia elements.
- **Create an eBook:** Layout and design an eBook with chapters, headings, images, and a cover page.
- **Portfolio Presentation:** Compile your previous assignments into a cohesive portfolio presentation with consistent branding and layout.
- **Typography Exercise:** Experiment with different fonts, sizes, and styles to create typographic compositions or posters.

Title of the Course: : Production Process								
Year: I				**Semester: II**				
CourseType	**Course Code**	**Credit Distribution**		**Credits**	**Allotted Hours**	**Allotted Marks**		
		Theory	**Practical**			**CIE**	**ESE**	**Total**
Subject III	ANM-155-T	02	00	02	30	15	35	50

Course Objectives:-

- Introduction to 2D Animation: Provide an overview of the history, principles, and techniques of 2D animation, including key milestones and influential artists.
- Pre-production Planning: Teach students how to develop a concept into a viable animation project by focusing on scriptwriting, character development, and creating a cohesive visual style.
- Storyboarding: Emphasize the importance of storyboarding in the pre-production phase, teaching students how to visually plan their animation sequence by creating sketches or digital storyboards.
- 4. Character Design: Explore the principles of character design, including anatomy, proportion, personality traits, and visual storytelling, enabling students to create compelling and memorable characters for their animations.

Course Outcomes:-

Student will be able to:-

- Describe the working of stop motion industry.
- Differentiate techniques between cut-out animation and claymation.
- Classify armature and miniature modelling.
- Explain the process of handling materials for clay modelling and cutout animation.
- Review the techniques of tool handling.

Course Content

Unit	Unit Name	Lectures
Unit 1	**Pre-Production-**	**3**
1.1. The idea and story 1.2. How to develop a story? 1.3. Where Do Ideas Come From?The Script , Script Terms (e.g. Action, Angle on, Beat) 1.4. Script Process, Springboard (not as common), Premise 1.5. Outline (Animation Writing Development-----------) 1.6. First draft, Second draft, Polish 1.7. Script Format 1.8. Slug lines / scene headings 1.9. Action description, Dialogue 1.10. Parenthetical, Transitions 1.11. Script Writing software		
Unit 2	**Developing Script for Animation**	**2**
2.1 The 3-D Script vs. the 2-D Script 2.1 Theatrical 2.1 Direct-to-video 2.1 Television 2.1 Television Animation and Feature Animation		

Unit 3	**Visual Development**	1
	3.1 Concept Art or Production Design (Three types of ConceptArts)	

Unit 4	**Character Design and Background design**	5

4.1 Intro to character design
4.2 Personality
4.3 Appeal
4.4 Costume
4.5 Drawing for Character (Character Model Sheets, Props.)
4.6 What is Reference Map? Research –BG, Color,Composition etc….

Unit 5	**Storyboards**	6

5.1 Story Board Elements,
5.1 Types of Story Boards
5.1 What is Visual Literacy in Storyboards?
5.1 Application of animation principles in Storyboard.
5.1 Aspect ratio
5.1 Shot choice
5.1 Composition within your picture frame
5.1 FG-BG-MG
5.1 Perspective,
5.1 Focal Point
5.1 Depth,
5.1 Camera lenses
5.1 The Story Point
5.1 Emotional response
5.1 Storyboarding - Script Analysis - Thumbnails –Final Storyboard
5.1 Digital Storyboarding
5.1 The Conventions of the Cinema for storyboarding.
5.1 Animatic

Unit 6	**Production (in Various Techniques)**	3

6.1 What is 2D Animation

6.2 Advantages and disadvantages and solutions

6.3 Separation of characters and background intraditional 2D animation

6.4 Traditional Tools

6.5 Digital Traditional: Software for Traditional2D Animation

6.6 Exposure Sheet

Unit 7	**Stop Motion Animation**	2

7.1 Puppet Animation
7.2 Pixilation
7.3 Cut out
7.4 Sand and Plasticize
7.5 Concept and Pre Production
7.6 Production Design to Puppet and PropBuilding
7.7 Camera and Lighting
7.8 Animation
7.9 Speech and lip syncing
7.10 Post production

Unit 8	3D Animation	3

8.1.   Modeling
8.2.   Material and textures
8.3.   Which software needs to be used? Agony ofChoice.
8.4.   Layout and Cameras
8.5.   Rigging
8.6.   Character Animation and Motion Capture
8.7.   Lighting
8.8.   Effects and Simulations
8.9.   Rendering Live Action Film Which software needs to be used? Agony ofChoice.
8.10.   Layout and Cameras
8.11.   Rigging
8.12.   Character Animation and Motion Capture
8.13.   Lighting
8.14.   Effects and Simulations
8.15.   Rendering Live Action Film

Unit 9	Post Production	3

9.1   VFX
9.1   Sparks
9.1   Pixie Dust
9.1   Dust
9.1   Smoke
9.1   Lens flare
9.1   Rain/Snow
9.1   Camera shake
9.1   Rotoscoping , Fire/water
9.1   Compositing
9.1   Editing
9.1   Final Output

Unit 10	Sound in Post Production	2

10.1   Voice Recording.

10.2   Foley and sound effects

10.3   Speech that is over-dubbed or recorded.

Reference Links

https://www.masterclass.com/articles/what-is-concept-art

https://dreamfarmstudios.com/blog/3d-animation-pipeline/

Reference Books:

- Animation Writing Development Script Pitch by Jean AnnWright – Focal Press
- Professional Storyboarding_ Rules of Thumb by SergioPaez and Anson Jew
- Writing for Animation, Comics, and Game by ChristyMarks – Focal Press
- Animation - From Concept to Production by Hannes Rall -CRS Press
- The Fundamentals of Animation by Paul Wells andSamntha Moore - Bloomsbury Publication

Title of the Course: : Lab Course on ANM-155-T								
Year: I				**Semester: II**				
CourseType	**Course Code**	**Credit Distribution**		**Credits**	**Allotted Hours**	**Allotted Marks**		
		Theory	**Practical**			**CIE**	**ESE**	**Total**
Subject III	ANM-156-P	00	02	02	60	15	35	50

Course Objectives:-

● Introduction to 2D Animation: Provide an overview of the history, principles, and techniques of 2D animation, including key milestones and influential artists.
● Pre-production Planning: Teach students how to develop a concept into a viable animation project by focusing on scriptwriting, character development, and creating a cohesive visual style.
● Storyboarding: Emphasize the importance of storyboarding in the pre-production phase, teaching students how to visually plan their animation sequence by creating sketches or digital storyboards.
● 4. Character Design: Explore the principles of character design, including anatomy, proportion, personality traits, and visual storytelling, enabling students to create compelling and memorable characters for their animations.

Course Outcomes:-

Student will be able to:-

- Describe the working of stop motion industry.
- Differentiate techniques between cut-out animation and claymation.
- Classify armature and miniature modelling.
- Explain the process of handling materials for clay modelling and cutout animation.
- Review the techniques of tool handling.

Course Content

Assignment 1 :
1. Create layout for 2d animation.
2. Create layout for 3d animation.
Assignment 2 :
3. Create three shot storyboard.
4. Create five shot storyboard.
Assignment 3 :
5. Create 12 shot storyboard.
Assignment 4 :
1. Create 24 shot storyboard.
Assignment 5 :
1. Create layout for 2d animation exterior.
2. Create layout for 2d animation interior.
Assignment 6 :
1. Create color storyboard.
Assignment 7 :
1. Create concept art for 2d animation short film.
Assignment 8 :
1. Create concept art for props.

Assignment 9 :

    1. Create concept art game environment.

Assignment 10 :

    1. Create concept art game environment.

Reference Links
https://www.masterclass.com/articles/what-is-concept-art
https://dreamfarmstudios.com/blog/3d-animation-pipeline/

Reference Books
- Animation Writing Development Script Pitch by Jean AnnWright – Focal Press   - Professional Storyboarding_ Rules of Thumb by SergioPaez and Anson Jew   - Writing for Animation, Comics, and Game by ChristyMarks – Focal Press   - Animation - From Concept to Production by Hannes Rall -CRS Press   - The Fundamentals of Animation by Paul Wells andSamntha Moore - Bloomsbury Publication

Title of the Course : Basics of Image Editing and Video Editing

Year: I				Semester: II				

Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CE	EE	Total
GE/OE 2(P)	ANM-157-OE	00	02	02	30	15	35	50

Course Objectives :

- To introduce students to the fundamental principles and techniques of photo editing and video editing.
- To provide hands-on experience with industry-standard photo editing and video editing software.
- To develop students' understanding of visual storytelling principles and techniques.
- To enable students to critically analyze and evaluate the effectiveness of edited photos and videos.
- To cultivate creativity and artistic expression through photo and video editing projects.
- To foster collaboration and communication skills through group editing projects and critiques.
- To explore advanced editing techniques and tools for enhancing photos and videos.
- To familiarize students with the ethical considerations and legal issues related to photo and video editing.

Course Outcomes :

- Students will demonstrate proficiency in using software such as Adobe Photoshop, Adobe Premiere Pro, or similar tools for editing photos and videos.
- Students will be able to apply basic editing techniques such as cropping, color correction, and image manipulation to enhance the visual quality of photos and videos.
- Students will understand the principles of composition, lighting, and visual aesthetics, and apply them effectively in their editing projects.
- Students will be able to create cohesive narratives and convey emotions through editing choices in both photos and videos.
- Students will develop a portfolio of edited photos and videos showcasing their technical skills and creative vision.
- Students will participate in peer critiques and provide constructive feedback on their classmates' work.
- Students will demonstrate the ability to adapt to new editing challenges and incorporate feedback to improve their editing skills.

Course Content		
Unit	**Unit Name**	**Lectures**
Unit 1	**Introduction of Lightroom**	**02**
	1.1 The Library, Develop, Slideshow, and Web Modules 1.2 Importing Photos 1.3 Creating a Collection 1.4 Keywords, Metadata 1.5 Color Correction and Editing Intro 1.6 Cropping, Fill Light, Lens Distortion 1.7 Exporting for the Web	
Unit 2	**Importing & Reviewing Photos**	**03**
	2.1. The import processes 2.2. Importing from a camera or the hard disk 2.3. Evaluating photos before importing 2.4. Importing to a specific folder 2.7. Importing from other catalogs or watched folder 2.8 Viewing and managing images 2.9 Switching views 2.10 Flagging and deleting images 2.11 Grouping images in the Quick Collection	
Unit 3	**Organizing and selecting**	**03**
	3.1 Organizing folders 3.2 Using collections to organize images 3.3 Applying keyword tags 3.4 Using flags and ratings 3.5 Adding metadata 3.6 Finding and filtering files 3.7 Reconnecting missing files and folders	
Unit 4	**Developing and Editing**	**04**
	4.1 Quick Develop 4.2 The Develop module 4.3 Undoing, redoing, and remembering changes 4.4 Removing spots 4.5 Applying basic color corrections 4.6 Making discrete color adjustments 4.7 Synchronizing settings 4.8 Local corrections	
Unit 5	**Publishing Photos**	**03**

	5.1 Publishing photos from the library	
	5.2 The Lightroom Web module	
	5.3 Creating and customizing a web gallery	
	5.4 Specifying output settings	
	5.5 Previewing the gallery	
	5.6 Saving custom templates	
	5.7 Exporting and uploading web galleries	
	5.8 Creating Backups and Exporting Photos	
	5.9 Preventing data loss	
	5.10 Backing up the catalogue file and library	
	5.11 Exporting photos	
Unit 6	**Introduction to Filmora**	**02**
	6.1 Create a New Project	
	6.2 Open an Existing Project	
Unit 7	**Import Video, Audio, and Images**	**02**
Unit 8	**Edit and Arrange Elements in the Timeline**	**05**
Unit 9	**Add Effects, Filters, Titles, Masks and Music**	**05**
	9.1 Types of Titles	
	9.2 Add Titles	
	9.3 Edit and Customize Text	
	9.4 Text Animation	
	9.5 Text Presets	
Unit 10	**Export Video and Share**	**01**

Title of the Course : Digital Photography								
Year: I				Semester: II				
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CE	EE	Total
SEC 2(P)	ANM-158-SEC	00	02	02	30	15	35	50

Course Objectives :

- **Understanding Equipment:** Familiarize students with the basic components of digital cameras and filmmaking equipment, including cameras, lenses, tripods, and lighting.
- **Technical Proficiency:** Develop fundamental skills in operating digital cameras, understanding exposure, aperture, shutter speed, ISO, and their relationship in both photography and filmmaking contexts.
- **Composition and Framing:** Teach principles of composition and framing for both photography and filmmaking, including rule of thirds, leading lines, framing, and perspective.
- **Lighting Techniques:** Introduce various lighting techniques for different scenarios, including natural light, artificial light, and studio setups, and their impact on image quality and storytelling.
- **Storytelling and Narrative**: Explore the basics of visual storytelling and narrative construction, emphasizing how to convey emotion, mood, and meaning through images and sequences.
- **Editing Basics:** Provide an overview of basic editing techniques for both photography and filmmaking, including cropping, color correction, and basic video editing software.

Course Outcomes :

- **Creative Expression:** Students will develop a personal style and aesthetic in their photography and filmmaking, effectively utilizing composition, lighting, and framing techniques to convey emotion, mood, and narrative.
- **Problem-Solving Skills:** Students will be able to identify and address technical challenges in photography and filmmaking, such as exposure issues, lighting problems, and composition dilemmas, through critical thinking and creative problem-solving.
- **Portfolio Development:** Students will compile a portfolio of their own photographic and cinematic work, showcasing their technical skills, creative vision, and ability to effectively communicate ideas through visual media.
- **Critical Analysis:** Students will critically analyze and evaluate their own work and the work of others, providing constructive feedback and identifying areas for improvement in terms of technical execution, creativity, and storytelling effectiveness.

Course Content		
Unit	**Unit Name**	**Lectures**
Unit 1	**Evolution of Photography**	**03**
	1.1. Definition of Photography 1.2. Origin of Camera World 1.3. Urge of Invention of Photography	
Unit 2	**Digital Photography**	**03**
	2.1. Basics of Digital Photography 2.2. Camera Equipment 2.3. Various Camera and Lenses 2.4. Camera Settings 2.7. Creative Photography (Angles in Photography)	
Unit 3	**Basics Of Lighting**	**06**
	3.1 What are major sources of lights? 3.2 Types of Lights in Photography. (Main / Key Light, Fill Light, Cut Light/Kick Light, Background Light). 3.3 Flash Operating Modes	
Unit 4	**Composition**	**06**
	4.1 What is composition in Photography? Its significance. 4.2 Types of Composition: Symmetrical, Radial, Diagonal, Letter Box, Tall Crop, Rule of third, Overlapping, Frame in Frame, Geometrical Shapes & Forms.	
Unit 5	**Analytical Thinking and Study**	**05**
	5.1 Finding Right Mind-set 5.2 Framing the Unexpected 5.3 Photographing People 5.4 Developing Photographic Voice 5.5 Field Activity or Assignment	
Unit 6	**Outdoor Assignment**	**07**
	6.1 Outdoor portrait with reflector 6.2 Effects of aperture (DOF) 6.3 Effects of shutter speed: Fast shutter, Slow shutter, Panning 6.4 Group photo: Formal, Informal 6.5 Silhouette 6.6 Architectural photography 6.7 Perspective: Linear, Arial	

6.8 Pattern: Natural, Artificial

6.9 Photographs of Fruits, Earthenware, Flowers, Crockery, Metal ware, Glassware, Food, and Jewellery etc.

6.10 Lighting for Rough & Smooth Texture

6.11 Lighting for form & shape

6.12 Silhouette

6.13 Portrait

6.14 High key

6.15 Low key

Reference:

Digital Photography Complete Course Beginner's Photography Guide 2nd Edition: