

Learning Outcomes-based Curriculum Framework (LOCF)
for
Bachelor of Fine Arts
Animation
2021



PREAMBLE:

i. The learning outcomes are formulated to help students understand the objectives of the visual and performing arts courses at the undergraduate level and to get them acquainted with contemporary artistic and social needs. Students will be enabled to understand the philosophy behind their art and master the grammar and techniques of their chosen art form, develop artistic skills that would enhance their expression and communication abilities.

ii. Students will also be encouraged to explore and express their ideas and concepts, as well as to learn to use their art form creatively and critically; to learn to develop their understanding of the gained knowledge and to search for ways to express their thoughts and feelings through their medium of art.

iii. While selecting and designing materials for the syllabus, the faculty in Departments/Universities/Institutions may decide to vary their course content, with justifications. Objectives and organizing principles should be finalized keeping in view the local, regional, national, and global contexts of creation, appreciation, and evaluation. iv. This LOCF document is not prescriptive, but indicative. It does not prevent further rethinking or inclusion of specific elements in their courses, to suit the local context. v. The organization of the course may be structured to suit the institution's academic framework (annual, trimester, semester, etc.).

vi. Suitable modules could incorporate residencies, internships, interaction with gurus, etc, and appropriate credits awarded for the same.

vii. Further, teaching-learning processes may be suitably adapted, incorporating the similarities and diversities of culture and art practices.

viii. The Department/University/Institute may encourage its faculty to make suitable pedagogical innovations, in addition to teaching/learning processes suggested in the LOCF recommendations.

ix. The committee noted a diversity of nomenclatures in the Visual Arts fields in different Department/University/Institution and suggests the need for uniform nomenclature to avoid confusion in admissions/appointments. For example, an undergraduate program in Fine Arts

could be called: Bachelor of Fine Arts (with specialization in Painting, Sculpture, Applied Arts, etc)

x. The course designed could go beyond the primary field of study and expose students to domains such as literature, cinema, and the digital arts.

xi. Students may be encouraged to work on various art forms that are on the verge of extinction, besides the living traditions, as part of their learning process. The students may be encouraged to study such art forms from experts/ gurus who may not necessarily be from a formal institutional setup.

xii. Visual and Performing Arts programs should be formulated with more stress on practice.

xiii. Visits to museums, places of historical importance, art studios/ galleries, theatre spaces, and other appropriate locations must be made part of the curriculum. Such an arrangement will help students discover and familiarise themselves with both classical and contemporary art forms.

xiv. The role of digital arts and evolving multi-media methods must be emphasized and applied where appropriate.

xv. The Visual Arts curriculum, in particular, may be framed in such a way that it provides adequate exposure to the fine arts (painting & printmaking, sculpture) as well as the applied arts (advertising, animation, textile & fashion design, interior design, art management, etc.) with appropriate specialization where required.

The LOCF for Visual and Performing Arts is prepared on the contours and curricular framework provided by the UGC and may be modified without sacrificing the spirit of CBCS and LOCF. The courses can be prepared by the respective institutions keeping in mind the above points.

1. INTRODUCTION

The experience of art is a way of enriching the quality of human experience. It requires an intensity of interest in the creative faculties of human life, as well as an awareness of the surrounding social milieu. Any creative person and practicing artist needs knowledge of past/historical achievements, awareness of present/contemporary challenges, and an inkling of future/unseen possibilities in the realm of art; as well as refinement of taste, building up criteria, and decision about values. It is essential to put in hard work, rigorous practice, and lots of reading/listening/seeing. A dedicatedly professional approach is needed to pursue the arts. The artist of the next generation shall be a product of university education rather than of the self-taught kind; although the Ekalavya spirit has to be nurtured too, as over institutionalized education can be stifling.

The Learning Outcomes-based Curriculum Framework (LOCF) for BFA (Painting, Applied Arts, and Sculpture, etc) and BPA (Music, Dance, and Theatre) 4-year degree programs are designed to make the education of the arts more specific and systematic and on par with professional courses, as well as to revitalize existing courses in various institutions and open up areas of non-developed possibilities.

2. LEARNING OUTCOMES BASED APPROACH TO CURRICULUM PLANNING

The basic premise of the LOCF approach to curriculum is that students earn their degree based on:

- a) Demonstrated achievements of the outcomes (knowledge, understanding, skills, attitudes, and values) and,
- b) The academic standards are expected of a program of study.

The expected learning outcomes outlined in this document would help faculty members formulate their course syllabus based on qualification descriptors, program learning outcomes, and course learning outcomes. Revisiting this document periodically would help the faculty

members review and revise their syllabus to make teaching-learning more effective while empowering the learner to face the challenges once s/he graduates.

This document outlines:

- a) What the learners are expected to comprehend in the said art form
- b) Be able to do at the end of their course

This document, while providing some basic essential guidelines on setting up a course curriculum and syllabus also provides for flexibility and innovation for a faculty member in terms of course delivery.

The graduate attributes for Fine Arts are indicative and guide faculty members in formulating their course syllabus, reflect on the teaching-learning process, spell out learning outcomes, create and implement assessment modes that will help them deliver an effective course. Needless to say, the learning outcomes should always reflect the changes in the field of study. This document focuses on what is to be taught and what is learned by providing demonstrable outcomes. The idea is to integrate social needs and pedagogical practices in a manner that is responsive to the evolving needs of the field of study.

3. GRADUATES ATTRIBUTES IN THE SUBJECT

The Graduate Attributes (GAs) reflect particular qualities and abilities of an individual learner including gaining knowledge, application of obtained knowledge, professional and life skills, acquiring attitudes and human values that are necessary for Fine Arts graduates at the Higher Education Institutions (HEIs). The graduate attributes include capabilities to strengthen one's professional abilities for widening current knowledge and employability/self-employability skills, undertaking future studies for local and global application, performing creatively and professionally in a chosen career, and ultimately playing a constructive role as a socially responsible human being.

Any graduate of Fine Arts should be a learning thinker with an understanding of the core concepts in the arts and a responsibility towards society.

Graduate Attributes include:

- **Continuous Learning:** To engage in self-reflection and lifelong-learning through the arts, while keeping social awareness intact.
- **Artistic skills:** To acquire all the necessary skills needed to make one's performance and practice credible.
- **Experimentation:** a) To experiment with the medium, form, structure, colour, tone and texture, methods, and materials of the particular visual and performing art. b) To enhance aesthetic sensibility in everyday life.
- **Interpretative Skills:** To study and analyze the textual and performing traditions and practices as well as to critically and creatively interpret and enhance appreciation of beauty and utility.
- **Social Awareness:** To be aware of the diversity, complexity, and contestations of the past and present socio-cultural milieu of the country during the process of art-making.
- **Social Responsibility:** To build up the capacity to take up social and civic responsibilities relating to the environment and society.
- **Communication Skills:** To inculcate transferable skills including team building & leadership skills, creative & critical skills, and problem-solving skills suitable for a variety of fields of employment/self-employment.
- **Introspection:** To constantly introspect and assess oneself in the never-ending artistic journey

4. QUALIFICATION DESCRIPTORS

Students must be able to:

- Demonstrate a coherent and systematic knowledge and understanding of the developments in theory and practice in the Fine Arts.
- Identify, analyze, interpret, compare, evaluate, speak and write about the content and form of genres, artistic isms (Eg: realism, surrealism), schools (Eg: gharanas, pahari school, etc), periods, movements as well as to perform in various modes and styles, exploring a range of subjects and expressing in a variety of forms.
- Understand the role of Fine Arts in a changing world from the disciplinary perspective, as well as with its professional and everyday use.
- Think and perform clearly about one's role as a practitioner through a critical understanding of the texts, visual, and performing traditions.
- Communicate ideas, opinions, and values—both art and life.
- Recognize and explore the scope of the Visual and Performing Arts in terms of career opportunities, employment/self-employment, and lifelong engagement.

5. PROGRAMME LEARNING OUTCOMES

After completing the undergraduate program, a learner of Fine Arts (any stream) should be able to:

- Demonstrate a comprehensive understanding of the history of art and aesthetics theoretically
- Understand the nature of time, space, colour, form, tone and texture
- Critically evaluate masters as well as contemporary artists
- Create their own works of art using a range of methods and materials
- Execute art projects independently
- Participate in solo/group shows
- Teach fine arts to school students
- Become an applied arts entrepreneur

6. TEACHING-LEARNING PROCESS

Learning can be made a challenging, engaging, and enjoyable activity. Learners should be encouraged to engage in a rigorous process of learning and self-discovery while focusing on key areas of the discipline and spending required time on practice. Experimentation and emphasis on the process would make learning meaningful.

To achieve its objective of process-based learning, focused work, and holistic development, the Department/ University/Institution can use a variety of knowledge delivery methods. Use of Open Education Resources (OERs) would help students get exposure to a wider range of practices across the world:

Methodology for Fine Arts:

- Lectures
- Lecture-Demonstrations
- Guided Visualization & Seeing Sessions
- Analyses of Exhibitions
- Workshops – intensive & extensive
- Residencies with gurus
- Study tours
- Continuous Sketching & Drawings
- Tutorials - Assignments – Projects – Dissertations
- Presentations: Classroom Creations & Public Exhibitions

7. ASSESSMENT METHODS

While creating assessment methods, faculty members may keep in mind:

- Program Learning Outcomes (PLO)
- Course Learning Outcomes (CLO)

Alignment to Learning Outcomes: Every assessment method created for a course may be aligned with the overall objectives of the academic program while meeting the specific learning outcomes requirements of the particular course. Emphasis may be laid on both academic and professional skills required as suggested in the graduate learning descriptors. Evaluation Mode: The committee suggests a Continuous

Evaluation Mode: with constant feedback, rather than a one-time summative evaluation mode at the end of the semester/ year. The weightage given to each assessment module may vary according to the learning outcomes suggested in this document.

Weightage: However, faculty members may take care to ensure that the assessment activities are accorded different weightage and spread throughout the semester/ year. For example, more weightage may be given for practical/ portfolio components.

Flexibility, innovation, and transparency: Faculty members are encouraged to come up with flexible and innovative ways of assessing the learners. However, care should be taken to ensure that the learner is aware of the mode of assessment, number of assignments, and the corresponding deadlines, right at the beginning of the semester/year.

On the whole, assessment methods may attempt a balance between both theoretical and practical inputs in the course, including life skills required for them to meet the challenges after they graduate. Assessment methods could include innovative use of materials and methods and help in identifying areas for employment, self-employment/ entrepreneurship.

Review: It would serve well for the University/ Department/ Institution to periodically review the syllabus, methods, and approaches to teaching-learning, and assessments to check if they are aligned with the learning outcomes. Suitable amendments may be made as per the institution's procedures after the review process.

Semester Wise Distribution of Courses								
Semester	Category	Courses & Codes	Lectures	Tutorials	Practicals	Credits	Max. Marks	
FIRST	AECC 1	BFA 1.1 Environmental Studies	3	1	0	4	100	
	CC 1	BFAAN 1.1.1 Computer Graphics	0	0	6	6	100	
	CC 14	BFAAN4.2.2 Happiness Connect	3	1	0	4	100	
	SEC 1	BFAAN 1.1 Foundation Art I	0	0	4	4	100	
	GEC 1	BFA 4.1 (Choose one)		4	2	0	6	100
		a. Prehistory and Early Western Art						
		b. Cultural Studies						
		c. Life Study						
		d. Indian Art & Mythology						
						24	500	
SECOND	AECC 2	BFA1.1 English Communication	3	1	0	4	100	
	CC 2	BFAAN 1.2.1 2D Animation	4		2	6	100	
	DSE 4	BFA 3.4 (Choose One)		3	1	0	4	100
		a. Mind Management						
	b. Happiness & Fulfilment							
	SEC 2	BFA 2.2 Foundation Art II	0	0	4	4	100	
	GEC 2	BFA 4.2 (Choose one)		6	0	0	6	100
		a. Early Indian Art						
		b. UX/UI Design Fundamentals						
		c. Design & Communication Practice						
d. Packaging Design								

							24	500
THIRD	CC 3	BFAAN 2.1.1 3D Modeling & Surfacing I	0	0	6	6	100	
	CC 4	BFAAN 2.1.2 Video Editing I	4	0	2	6	100	
	SEC 3	BFA 2.3 Photography	0	0	4	4	100	
	GEC 3	BFA 4.3 (Choose one)		4	2	0	6	100
		a. Method & Materials						
		b. Contemporary Art						
c. Pre-Modern western Art								
d. History of Animation								
						22	400	
FOURTH	CC 5	BFAAN 2.2.1 3D Rigging & Animation I	0	0	6	6	100	
	CC 6	BFAAN 2.2.2 Digital Compositing I	4	0	2	6	100	
	SEC 4	BFA 2.4 Cinematography	0	0	4	4	100	
	GEC 4	BFA 4.4 (Choose one)		4	2	0	6	100
		a. Intro to Film Studies						
		b. Art Direction						
c. Music Appreciation								
d. TV Commercial								
						22	400	
FIFTH	CC 7	BFAAN 3.1.1 3D Modeling & Surfacing II	0	0	6	6	100	
	CC 8	BFAAN 3.1.2 Video Editing II	0	0	6	6	100	
	SEC 5	BFA 2.5 Printmaking	2	0	2	4	100	
	DSE 1	BFA 3.1 (Choose One)		4	0	2	6	100
		a. Storyboarding & Screenwriting						
b. Theater & Drama								
						22	400	

SIXTH	CC 9	BFAAN 3.2.1 3D Rigging & Animation II	0	0	6	6	100	
	CC 10	BFAAN 3.2.2 VFX I	2		4	6	100	
	DSE 2	BFA 3.2 (Choose One)		3	1	0	4	100
		a. History of Modern Western & Modern Indian Art						
		b. History of VFX						
	GEC 5	BFA 4.5 (Choose one)		0	0	6	6	100
		a. Digital Filmmaking I						
		b. Animation Filmmaking I						
		c. Documentary Filmmaking I						
		d. Photojournalism						
						22	400	
SEVENTH	CC 11	BFAAN 4.1.1 Digital Compositing II	4	0	2	6	100	
	CC 12	BFAAN 4.1.2 VFX II	4		2	6	100	
	DSE 3	BFA 3.2 (Choose One)					6	100
		a. Portfolio		0	0	6		
		b. Indian & Western Aesthetics		4	2	0		
	GEC 6	BFA 4.6 (Choose one)		0	0	6		100
		a. Digital Filmmaking II						
		b. Animation Filmmaking II						
c. Documentary Filmmaking II								
d. Video Journalism								
						22	400	
EIGHTH	CC 13	BFAAN 4.2.1 Internship	0	0	12	12	200	
Total						170	3200	

CORE COURSE- ANIMATION

CC1: COMPUTER GRAPHICS

UNIT 1	History of Computer graphics. Digital Image & Pixels, Raster vs Bitmap. Image Formats. Resolution & Aspect Ratio. Color Channels. Image Compression & Codecs. Bit-depth.
UNIT 2	Editing Application Interface and Navigation. Importing and Exporting Images. Cropping & Resizing. Color Space & Color Mode. Editing Tools. Transformations & Perspective Correction
UNIT 3	Brush types & options. Custom Brushes. Alpha Channels & Layer Masks. Selection Tools. Refining Selections. Understanding Scopes. Blend Modes. Color Correction & Grading.
UNIT 4	Image Restoration & Retouching Options. Filters & Plugins. Creative Image Manipulation Exercise.

Learning Outcomes:

Students will be able to

1. recite the different properties of Digital Images.
2. demonstrate the skills required to fix damaged old photographs.
3. create graphics designs based on themes.
4. design visually appealing image compositions.

Assignments:

1. Colorize black and white photographs.
2. Restore damaged old images.
3. Create Brochure & Leaflet Designs.
4. Color Correct and Color Grade photographs you have shot.
5. Create Animated GIF from a still Image.
6. Creative Image Manipulation Exercise.

CC2: 2D ANIMATION

UNIT 1	Character Drawing for Animation: Body Types, Gesture Drawing Basics, Staging Basics, Thumbnailing, Silhouette, Exaggeration, Volume: squash and stretch. Expressions.
UNIT 2	Intro to Blender Grease Pencil. Primitives, Structure - Points, Edit Lines, Strokes. Layers & Layer Features. Brush Options. Selection options. Materials creation & properties. Render Settings.
UNIT 3	Intro to Animation: Creating & Modifying Keyframes. Interpolation. Straight Ahead Animation Exercises: Bouncing Ball, Fluid Movement, Flame motion. Morphing. Pose-to-Pose Animation Exercises: Biped & Quadruped Walk Cycle
UNIT 4	Grease Pencil Modifiers - Generate Modifiers, Deform & Color Modifiers. Rigging Grease Pencil Objects. Full Body Character Animation.

Learning Outcomes:

Students will be able to

1. Develop fictional characters for animation.
2. Demonstrate 2D Animation skills using Blender.
3. Use the Grease pencil options in Blender.

Assignments:

1. Develop an original character and prepare a character sheet of the same.
2. Describe the principles of Animation with appropriate diagrams.
3. Create a Bouncing Ball Animation.
4. Create a Pendulum movement animation.
5. Create 2D Flame and Water Effects.
6. Animate a 2d Logo using grease pencil.
7. Create a Biped Walk Cycle.
8. Create a Quadruped Walk Cycle.
9. Create a facial rig for a 2d Character.
10. Make a flipbook animation.

CC3: 3D MODELING & SURFACING I

UNIT 1	Blender Interface, Navigating the Viewport, Pie Menus, 3D Cursor, Properties panel, Scenes Collections, Workspaces, Preferences. AddOns
UNIT 2	Adding Objects, Edit Mode, Multi-object Editing, Applying Transforms, Snapping, Pivot Manipulation. Types of Modeling methods: Polygon, Curve, Modeling with modifiers, Sculpting.
UNIT 3	Polygon Modeling Basics. Extrude, Bevel, Inset, Loop-cut, Multi-Cut, Fill & Create Faces. Modeling Simple objects from a cube. Modeling Low Poly Characters.
UNIT 4	UV Basics. The UV panel. UV Unwrapping & Projection. Creating Textures in Photoshop. Creating Basic materials for texturing.

Learning Outcomes:

Students will be able to

1. create 3D objects using Blender 3D Software..
2. demonstrate 3D modeling skills in Blender.
3. breakdown (Analyze) complex mechanical objects to simple 3D shapes for modeling.
4. Design realistic 3d environments for Games and Films

Assignments:

1. Create Simple 3D Objects in Blender.
2. Render a walkthrough of a textured interior scene of a bedroom with furniture.
3. Create a Low-poly Character .
4. Model a mechanical robot and apply texture.
5. Create a realistic environment with Composite ground texture and water body.

CC4: 3D RIGGING & ANIMATION I

UNIT 1	Introduction to rigging tools in Blender. Parenting and Hierarchy. Bones. Bone Properties, Structure.
UNIT 2	Skinning biped character, Posing and fixing weight issues, Introduction to Auto-rig Adon. Creating a complete biped rig. IK & FK.
UNIT 3	Introduction to animation In Blender. Keyframes. Interpolation Styles. Editing Keyframes. Keying Sets. Curve Editor, Dope-sheet. Animation Nodes. Pose Library, Selection Sets.
UNIT 4	Biped character walk cycle. Working with Actions. Motion Paths. Biped Action Animation reflecting Principles of Animation.

Learning Outcomes:

Students will be able to

1. demonstrate rigging techniques for mechanical objects.
2. create control rigs.
3. apply skinning and wiring techniques to the rigs.

Assignments:

1. Create a Rigged Car with controllers to open doors.
2. Rig a biped character for animation.
3. Make a car race animation.
4. Create a baby dancing 3D Animation.

CC5: VIDEO EDITING I

UNIT 1	Video Formats, Resolution, Color Spaces, Frame Rates, Introduction to Resolve CUT Page. Creating Smart Bins, Clip Attributes, Dual Sync Sound, Playing & Marking Clips. Creating Timelines, Timeline Navigation.
UNIT 2	Resolve EDIT Page, Insert, Overwrite and Three point Edits. Linking and Unlinking, Razor Edit, Copy & Paste, Moving & Swapping Clips, Edit Index.
UNIT 3	Trimming - Tops & Tails, Roll & Extend Edits, Slip & Slide, Dynamic Trim. Audio - Adjusting Clip Volume, Intro to Fairlight page, Adding Audio Effects, Reducing Noise.
UNIT 4	Adding Transitions & Effects. Creating Fusion Comps. Fusion Basic Compositing. Creating & Animating Text In Fusion. Rendering.

Learning Outcomes:

Students will be able to

1. define various formats of digital video.
2. understand the various editing features of an NLE.
3. apply the editing techniques to create video narratives.

Assignments:

1. Prepare/Shoot and Edit one short story.
2. Create an Animated Text Logo Reveal effect in Fusion.
3. Create a voiceover narrative with images and text.

CC6: 3D MODELING & SURFACING II

UNIT 1	Intro to Maya Interface, Transform, Parenting & Grouping, Hypergraph, Outliner, Image planes, Camera. Poly Modeling Tools -Polygon Components, Extrude, Extrude along Curve Bevel, Edge Loop, Cut, Bridge, Mirror Cut, Boolean, Quad Draw, MirrorGeo
UNIT 2	Intro to NURBS Modeling - Creating Curves, Creating Surfaces, Nurbs parameters, Trims, Combining Curves & Surfaces, Booleans, Texturing, Stitching Patches, Converting to Poly
UNIT 3	Material Basics, Creating and Applying Maps, Maya Hypershade, UV Workflows, UV Layouts, Types of UV Mapping, Multiple Projection, Editing UVs, UV Sets.
UNIT 4	Intro to Substance Painter: Creating projects and Importing Mesh, Understanding texture sets & Settings, Shader Setup, Importing content, Creating Base Material, Adding Details, Applying Smart materials, Applying Decals & Grunge, Exporting to Maya.

Learning Outcomes:

Students will be able to

1. analyze complex organic shapes and build 3D models from simpler objects
2. evaluate different approaches of modelling 3D objects and determine the optimal one.
3. paint textures in Substance Painter and Bake them for use in Maya.

Assignments:

1. Model a Sci-Fi 3D model and texture in Maya.
2. Create a fantasy creature in Maya, Unwrap it and Texture Paint in Substance Painter.

CC7: DIGITAL COMPOSITING I

UNIT 1	Introduction to node based compositing. Fusion Interface. Loading and Saving Media. Creating Fusion Comp in Resolve. Fusion Nodes - Background, Transform Nodes, Composite Nodes, TimeSpeed, Time Stretcher.
UNIT 2	Creating Basic Composites in Fusion. Dealing with Images with Alpha. Node Graph best Practices. The Inspector Panel. The Text Node. Creating Roto shapes. Adding and Deleting Control Points. Adjusting Roto Shapes. Animating Roto Shapes. Movement analysis for creating efficient Roto.
UNIT 3	Animation Basics. Animating Text Properties. The Keyframes Window. Manipulating keyframes. Fusion Color Tools, Color Correcting Footages, Color Matching Composites.
UNIT 4	Keying Basics, Intro to Keying Nodes, Preparing plates for keying, Keying semi transparent objects, Keying Hair, Preserving details.

Learning Outcomes:

Students will be able to

1. understand the pipeline of node based compositing programs..
2. apply compositing techniques to blend images and videos.
3. create text animation and motion graphics.

Assignments:

1. Create a simple motion graphics animation in Fusion.
2. Create an animated image slide in Fusion.
3. Isolate a moving organic object using Rotoscopy.
4. Use the keying tools in Fusion to isolate the subject in a chroma plate and blend it with a background.

CC8: 3D RIGGING & ANIMATION II

UNIT 1	Geometry Setup for Rigging, Joint Creation & Orientation, Rotation Order, Biped Character Rigging. FK & IK, Skinning & Weight Painting.
UNIT 2	Deformers: Deformer Set, Curve Wrap, Cluster, Lattice, Point on Curve, Sculpt, Soft Modification, Wire, Wrap, Wrinkle, Shrinkwrap, Tension, Texture, Nonlinear Deformers - Bend, Flare, Sine, Squash, Twist, Wave
UNIT 3	Constraints: Parent, Point, Orient, Scale, Aim, Closest Point, Point on Poly, Geometry, Normal, Tangent, Remove target. Character Sets Driven Keys: Using set driven keys to link attributes, Driven Keys Relationships, Viewing & Editing Driven Key Relations in Graph Editor.
UNIT 4	Animation Basics, Keyframe Animation, Graph Editor, Path Animation, Animation Layers, Animation File Formats

Learning Outcomes:

Students will be able to

1. demonstrate the rigging features in Maya.
2. develop custom rigging tools for specific tasks.
3. create animation of rigged Biped characters in Maya.

Assignments:

1. Create a Bouncing Ball Animation in Maya.
2. Create Animation using Deformers applied to an Object in Maya.
3. Rig & Animate a Biped character in Maya.
4. Rig & Animate a Robot character in Maya.

CC9: VIDEO EDITING II

UNIT 1	Color Theory for Video Editors, LUTs, Grading vs Correction, Highlights, Midtones & Shadows, Primary vs Secondary Colors, Contrast, Hue & Luma, Keying, Understanding and Reading Scopes - Wave form, RGB Parade, Histogram & Vector Scope
UNIT 2	Intro to Nodes in Resolve, Outside node, Parallel vs Layer Node, Split Combiner, Nesting & Sharing Nodes, Grouping Shots and Node Levels. Primary Vs Log Color wheels, Hue & Tint Controls.
UNIT 3	Qualifiers, Tracking, Animating Effects, Shot Matching, Stabilization, Resizing and Noise Reduction.
UNIT 4	Auto Grading Options, Pre- selected color ranges, Picking Black & White Points, The Cross Process Look, Bleach Bypass, High & Low Key look, Highlight Isolation and Stylizing. Rendering.

Learning Outcomes:

Students will be able to

1. understand the usage of different video scopes for analysis.
2. manipulate color in order to enhance or fix footages.
3. create videos with added motion graphics.

Assignments:

1. Edit footage according to the script they were shot upon & create a Montage.
2. Color correct problematic shots and match them for consistency.
3. Edit a scene with jump cuts reflecting the "French New Wave" era.

CC10: COMPOSITING II

UNIT 1	Point Tracking, Offset Tracking, Planar Tracking, Camera Tracking, Object Tracking, Tracker Outputs, Tracker Modifiers. Product Placement.
UNIT 2	The 3D Environment: Navigating, Transparency sorting, Transforms, Parenting, Cameras, Lighting & Shadows, Materials & Textures, Reflections & Refractions, BumpMaps, Projection Mapping, Geometry, Matte Objects, Position Pass, Point Clouds.
UNIT 3	Advanced Keying Methods, Advanced Color Matching and Creating Grading, Adding Distortion Effects to create animation From Static Frames, Cloning effects and Rig Removal.
UNIT 4	Multipass Compositing. Particle System: Creating Particles, Applying Forces, Adding Textures and changing properties, Rendering Particles.

Learning Outcomes:

Students will be able to

1. seamlessly blend CGI with live action footage.
2. integrate 3D in a Node based Compositing environment.
3. determine whether to use CGI or real stock footage for realistic compositions..

Assignments:

1. Composite a Sci-Fi 3D Environment with live action Character Movement.
2. Use Projection Mapping Techniques to add artificial wounds on a character.
3. Create a clean Plate from a Busy street Footage for compositing.
4. Create Muzzle Flash Effect using Particles and Integrate with live action.

CC11: VFX I

UNIT 1	Intro to Rigid Body Dynamics. Bullet Solver. Creating Rigid Sets, Soft bodies, Bullet Constraints, Ragdoll, nDynamics Simulation Framework nCloth
UNIT 2	Intro to nParticle Node, Fields & Forces, Passive Colliders, Emitters, Caching nParticles, Point Particle, Ball Particle, Cloud Particle, Particle Event Collider. Creating & Rendering Effects with nParticle.
UNIT 3	Maya Fluid Effects: Types of Fluid Effects, Fluid Container, Creating Emitter. Setting Container Properties: Density, Velocity, Temperature, Incandescent, Opacity Graph, Lighting, Creating Fluid Driven Particles Rendering Fluid Effects : Setting Render Layer for Beauty Pass & Shadow Pass.
UNIT 4	Bifrost Fluids: Overview & Concepts, Fluid simulation using Bifrost, Bifrost Emitters, Colliders, Motion Fields, Kill Fields, Kill PLanes, Kill Volume \$ Clipping input Mesh , Boundary Controls & Paint Attributes. Rendering Bifrost Simulation

Learning Outcomes:

Students will be able to

1. understand the Dynamics features in Maya..
2. apply Pyro simulation features for creating Fire effects.
3. create simple fluid effects using Bifrost in Maya.

Assignments:

1. Create a Domino Effect with a Pendulum initiating the effect using Bullet Solver.
2. Create an Abstract Particle Effect using nParticles.
3. Create a BonFire Effect in Maya
4. Make a Pouring Liquid into Glass Effect using Bifrost.

CC12: VFX II

UNIT 1	Creating Fluid Effects : Creating Liquid Simulation, Creating Foam, Using Colliders, Kill PLanes, Channel Fields, Motion Fields, Generating Meshes, Guided Simulations, Rendering Fluids.
UNIT 2	Intro to TyFlow for Max: TyFlow Objects, Settings, Cache, Particle Bind Solver PhysX, Retimer, Birth Operators, Constrain Operators, Material & Mapping Operators.
UNIT 3	TYFlow: Geometry Operators, Cloth Operators, Physx Operators, Actor Operators, Test Operators
UNIT 4	TYFLow: Helpers, Materials, Modifiers, Objets, Splines, TexMaps

Learning Outcomes:

Students will be able to

1. explain the use of operators in TYFlow
2. apply TYFlow nodes to create Rigidbody & Softbody effects.
3. develop custom tools for various vfx needs.

Assignments:

1. Create a Water Fountain and integrate with live action footage.
2. Create a Crowd simulation using Actors in TYFlow.
3. Create Paint disintegration effect.
4. Create Ground Breaking Effect.

5.

ABILITY ENHANCEMENT CORE COURSE

AECC 1: ENVIRONMENTAL SCIENCE

AECC 2: ENGLISH COMMUNICATION

SKILL ENHANCEMENT COURSE

SEC 1: FOUNDATION ART I

UNIT 1	Elements & Principles of Art, Basic Shape Drawing, Sketching Still Life, Buildings/Cityscapes.
UNIT 2	Human Body Anatomy, Figure Drawing with Basic Shapes, Caricatures, Gestures, Freestyle & Calligraphic Drawing
UNIT 3	Perceiving Shape, Form & Space, Difference between Shapes & Forms, Creating Shapes & Forms in Space, 3D Sketches, Positive & Negative Space, Designing Murals.
UNIT 4	Perspective Drawing - Single point, two - point and 3 point - perspective

Learning Outcomes:

Students will be able to

1. draw forms & shapes from observation.
2. identify perspective in images and real world.
3. apply perspective techniques for placing new images into existing ones and blend them seamlessly.

Assignments:

1. Draw still life images.
2. Figure drawing practise.
3. Draw and shade 3d objects with single, two and three point perspective.

SEC2: Foundation Art II

UNIT 1	Stick Drawing & Poses, Foreshortening Drawing, Rapid Pose Drawing. Animal anatomy and shape drawing. Study of Insects Anatomy. Drawing Fantasy Characters. The Golden Mean
UNIT 2	Expressions: Drawing Human and Animal Emotion and Expressions. Drapery and Hair Styles.
UNIT 3	Color Theory : Tints & Shades, Color Wheel, Color Schemes, Properties of Color, Setting Color Palette for Mise-en-scene
UNIT 4	Understanding the importance of balance, Visual Weight, Types of balances and usage. Natural balance, Formal & Informal Balance Composition, Drawing Characters in Perspective.

Learning Outcomes:

Students will be able to

1. determine correct proportions for figure drawing.
2. illustrate Character expressions in drawings.
3. use color as an expressive element in their artwork.

Assignments:

1. Draw an Original Fantasy Character
2. Use Color to express/emphasize one emotion of a character.
3. Create a balanced composition and describe the visual balance.

UNIT 1	The camera: Camera types & Parts. Menu items and Shooting Modes: Auto vs Scene vs Priority. Exposure : ISO, Shutter Speed & Aperture, White Balance.
UNIT 2	Intro to lighting: Single point, 2 point and 3point Lighting. Portraiture genres and lighting techniques. Studio vs Natural lighting. Black & White Photography. Night Photography. Product Photography.
UNIT 3	Composition rules. Photography as Contemporary art. Storyboarding Basics. Aspect Ratio & Frame rates. Staging & Composition, Direction of Action, Lighting & Depth. Script Breakdown & Storyboard creation using photographs.
UNIT 4	360 HDRI Creation, Photogrammetry, Taking photographs for creating Texture Maps.

Learning Outcomes:

Students will be able to

1. operate DSLR & Mirrorless Cameras.
2. compose balanced & visually appealing images.
3. analyze different lighting conditions and set up camera parameters accordingly.

Assignments:

1. Describe the Parts of a DSLR with their respective function.
2. Submit 5 photographs of different genres.
3. Create a 360 HDRI image.

UNIT 1	Art & Visual culture: Film Aesthetics & Cinematographic Techniques Principles of Cinematography, and the Imaging Device. Physics of light, Color & Application in Practical Cinematography Dynamic Range.
UNIT 2	Understanding how to focus and tools to achieve better focus, Shallow DOF, Exposure, ND Filters, Using Zebra Stripes, Choosing right shutter speed, White Balancing. Shooting Time Lapse.
UNIT 3	Rules of composition, 180 rule, Camera Movements, Camera Rigs, Lighting Fundamentals, Indoor and out-door lighting techniques. Single and Multi point Lighting, Using Gels and Colored lights.
UNIT 4	Location Audio Recording, Equipments and Usage, Creative Lighting and Camera Techniques. Creating Depth.

Learning Outcomes:

Students will be able

1. to explain various principles of cinematography.
2. illustrate the different camera movement techniques.
3. develop their own personal style of filming.

Assignments:

1. Light and Shoot a two person interview indoors.
2. Shoot and Edit a short film no more than 2 minutes long.

SEC5: PRINTMAKING

UNIT 1	History of Printmaking: Generally, students will begin exploration to understand positive/negative space, and spatial thinking.
UNIT 2	Mono prints: A monoprint is a one of a kind print achieved by applying colored inks to a smooth surface and then transferring that image to paper. . Monoprinting is a wonderfully spontaneous art form which is well suited to mixed media techniques.
UNIT 3	Linoleum block prints: Linocut is a printmaking technique, a variant of woodcut in which a sheet of linoleum is used for the relief surface. A design is cut into the linoleum surface with a sharp knife, V-shaped burin, with the raised (uncarved) areas representing a reversal (mirror image) of the parts to show printed.
UNIT 4	Dry Point/ Wood Cut/ Etching

Learning Outcomes:

Students will be able

1. To develop vocabulary of printmaking terms and techniques.
2. To develop an understanding of the principles of design and composition in relation to the printmaking process.
3. To effectively experiment with a variety of materials and techniques in printmaking.

Assignments:

Submission of class works.To be examined by a board of one External and one Internal Examiners.

DISCIPLINE SPECIFIC ELECTIVE

DSE1: STORYBOARDING & SCREENWRITING

UNIT 1	Storyboarding Fundamentals and necessity, Aspect ratio, Frame rates, Story Panels, Establishing Shot. Film Grammar - Acts, Sequences & Scenes, Types of Shots & Camera Moves, Transitions
UNIT 2	Types of Shots & Camera Moves, Transitions. Software based Production Management. Script Breakdown, Shot List
UNIT 3	Screenplay Fundamentals. Formatting & Layout. Software. Basic Character Construction. Understanding Suspense, Drama & Conflict. Scope of the story. The Three Act Structure. Locating Plot twists.
UNIT 4	Animated storyboards in Blender, Using Blender 3D to create PreViz of a short film as the script demands. World Cinema, Festivals & Awards, Case Study.

Learning Outcomes:

Students will be able to

1. outline the entire production pipeline of a visual narrative.
2. apply the standard format to their story for production.
3. write original screenplays.
4. breakdown scripts and draw static storyboards based on it.
5. create animated 2D & 3D Previsualization videos according to scripts.

Assignments:

1. Make a storyboard for an original short story.
2. Write a script for a short film no more than 4 minutes
3. Mention the Personnels involved in the production process and their responsibilities.
4. Describe the 3 Act Structure of a Narrative.
5. Write an essay on one animated film you watched.

DSE2: HISTORY OF MODERN WESTERN AND INDIAN ART

UNIT 1	Other Important Bombay painters associated with Progressive Artists Group: Akbar Padamsee, Tyeb Mehta, Krishan Khanna, Jahangir Sabavala, Ram Kumar. Madras and South School: KCS Panniker, Sultan Ali, Nand Gopal, PT Reddy, AK Ramachandran.
UNIT 2	Baroda School: N. S. Bendre, K.G. Subramanyam, G.M. Sheikh, Bhupen Khakhar, Sankho Choudhury, Mahendra Pandya, Vivan Sundaram. Significant Women Painters: Naina Dalal, Nalini Malani, Anjali Ela Menon, Arpita Singh, Aparna Kaur, Pillay Pochkhanwala. Independent developments and some contemporary trends in Contemporary Indian Art.
UNIT 3	Impressionism, Realism, Fauvism, Cubism,
UNIT 4	Dadaism: Duchamp, Man Ray, Pop Art, Op Art, Dali, Expressionism: Nolde, Munch, Paul Klee, Kandinsky Futurism: Giacomo Balla, Gino Severini, <i>Umberto Boccioni</i>

Learning Outcomes:

After completion of this course successfully the students will be able to:

1. Write program/script to solve History of Modern Indian and western Art's problems.
2. Also students will be able to evaluate their own practice.

DSE3: INDIAN AESTHETICS AND WESTERN AESTHETICS

UNIT 1	Developments of theories of rasa, Dhvani, Bhava, Alankar, Auchitya, Riti, Guna-Dosh, Vyanjana etc.
UNIT 2	Detailed studies related to Rasa-nishpatti, its forms and types. Shadanga – the six limbs of Indian Art.
UNIT 3	Concept of Art and Beauty, Rabindranath, Tolstoy, Kant,
UNIT 4	Edward Bullough (Psychical Distance), Croce (Theory of Intuition), Clive Bell (Theory of Significant Form).

Learning Outcomes:

1. Write and implement the concept of Aesthetics.
2. Implement the aesthetical and philosophical concepts and understanding mentioned there in their practical papers.

GEC1: PRE-HISTORY & EARLY WESTERN ART

UNIT 1	Pre-Historic: Altamira, Lascaux, Sumerian, Assyrian, Babylonian,
--------	--

UNIT 2	Ancient Egyptian Art: Tomb sculptures and paintings
UNIT 3	Ancient Greece- Archaic and Classical.
UNIT 4	Hellenistic, Etruscans and Ancient Roman – Paintings & Sculptures

Learning Outcomes:

After completion of this course successfully the students will be able to:

1. Write a program/script to solve History of Ancient Western Art's problems.
2. Implement the historical concepts and techniques mentioned there in their practical papers.
3. Perform some of common & unique knowledge explained in the paper simultaneously to meet professional requirements.

UNIT 1	Introduction: Basic introduction of Ancient & Early Indian Art: Ajanta, Ellora, Elephanta caves: cave paintings, sculptures, and rock-cut architecture. Important art historical sites: Aihole, Udaigiri/ Khandagiri, Bhaja, Karla, Bagh, and Badami etc.
UNIT 2	Traditional, Tribal art and Folk art - Folk art in India: Madhubani, Warli, Pat Chitra, Sanjhi etc. - Child Art
UNIT 3	The Sunga, Kushan, and Gupta Period: Buddhist art of Shunga period, Gandhar and Mathura art.
UNIT 4	Hindu art and architecture of Odisha: Lingaraja, Puri, Konark, Chausath Yogini.

Learning Outcomes:

After completion of this course successfully the students will be able to:

1. Write a program/script to solve the History of Ancient Indian Art's problems.
2. Implement the historical concepts and techniques mentioned there in their practical papers.
3. Perform some of common & unique knowledge explained in the paper simultaneously to meet professional requirements.

UNIT 1	In Importance of Methods and Materials, Nature and Characteristics of Drawing and Painting media such as pencil, crayon, charcoal, pen and ink, watercolour gouache, pastel and oil paint.
UNIT 2	Introduction to Mural and Print making media. Fresco Buono, Fresco Secco, Mosaic method: direct and indirect method, distemper and application of various techniques in Mural makings,
UNIT 3	Material Study: Folk & Tribal Art of India: Madhubani, Kalamkari and Pat-Chitra, Miniature Painting.
UNIT 4	HinNew Media Art, Video art, Installation Art Etc.

Learning Outcomes:

After completion of this course successfully the students will be able to:

1. Engage in a variety of visual arts experiences
2. Use materials to convey feeling, idea or thought.
3. Elaborate visual information by adding details in an artwork to enhance emerging meaning.

UNIT 1	History of Early Film, Mise-en-Scene, Cinema Verite, Film Noir, German Expressionism, Italian Neorealism.
UNIT 2	French New Wave, New Wave Filmmakers and their work, Andrew Dix - "Film & Narrative", Godard and the evolution of contemporary cinema.
UNIT 3	Documentary Films, Montage, Adoor Gopalakrishnan
UNIT 4	Writing Film Review, Film & Music, Film Genres

Learning Outcomes:

Students will be able to

1. recite early Filmmaking Practices.
2. classify the visual component of a film.
3. contrast and justify the various approaches to filmmaking.
4. critically analyze and write reviews on films.

Assignments:

1. Write an Essay on the various elements of mise-en-scene.
2. Describe the historical, political & philosophical background of FilmNoir.
3. Create a Montage of 10 seconds.
4. Write a review on a Film that inspired you.

UNIT 1	Film Production Pipeline, Production Personnels and Roles. Equipment and usage. Film Production Documents. Animation Pipeline.
UNIT 2	Stop-Motion Filmmaking. Matte Paintings and Miniature Sets. Practical Effects: Smoke, Pyro, Dust & Fluid Effects. Special Effects Makeup fundamentals.
UNIT 3	Audio Fundamentals: Digital & Analogue Audio, Sound Properties Audio Equipment & Usage. Voiceover & Foley sound recording. Audio post processing techniques.
UNIT 4	Animation Film Case Study: Snow white & the seven dwarfs, Spirited Away, The Humpty Dumpty Circus. Creating Video essay.

Learning Outcomes:

Students will be able to

1. understand various types of film production pipeline.
2. breakdown shots for production.
3. create original art work using matte painting and set design .
4. identify and appreciate the art work in animated films.

Assignments:

1. Prepare a pipeline and Budget report for a stop-motion short film.
2. Design a miniature set.
3. Create matte paintings to be used as backdrops in compositing.
4. Plan and shoot a stop motion animation.
5. Shoot practical effects for compositing.
6. Create special effects makeup.
7. Record sound effects and post process to enhance them.
8. Make a video essay on any of the animated films that inspired you.

UNIT 1	VFX Pipeline. Various Vfx softwares & Hardwares. Chroma Shoot fundamentals and best practices.
UNIT 2	Tracking best practices. Object tracking. Digital Set extension.
UNIT 3	Motion Capture & Motion Control. 360 Video fundamentals.
UNIT 4	VFX Case Study: Avatar, Rise of the planet of the Apes, Bahubali. Creating Video essay.

Learning Outcomes:

Students will be able to

1. understand Visual Effects production pipeline.
2. plan and shoot plates for chroma keying.
3. develop skills for object tracking and replacement.
4. identify and appreciate the VFX art work in films.

Assignments

1. Plan and shoot chroma plates for background replacement.
2. Integrate a sci-fi weapon with live action character motion.
3. Create a futuristic city environment and integrate live action.
4. Create a Post Apocalyptic environment and integrate live action.
5. Write an analysis report On usage of VFX in any notable Film or Commercial.