

Progressive Education Society's
Modern College of Arts, Science and Commerce (Autonomous),
Shivajinagar, Pune 5

(An Autonomous College Affiliated to Savitribai Phule Pune University)

Framework of Syllabus

For

B. Sc. (Animation)

Choice Based Credit System (CBCS) Syllabus Under National
Education Policy (NEP)

To be implemented from Academic Year 2024-2025

Level:- 4.5 (First Year) Sem:I

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	ESE	Total
Subject 1 T(2)+ (T/P)(2) or T(4)	24CsAniU1101	Graphic Designing I	2		2		20	30	50
	24CsAniU1102	Lab Course on 24CsAniU1101		2		4	20	30	50
Subject 2 T(2)+ (T/P) (2) or T(4)	24CsAniU1201	2D Animation I	2		2		20	30	50
	24CsAniU1202	Lab Course on 24CsAniU1201		2		4	20	30	50
Subject 3 T(2)+ (T/P)(2) or T(4)	24CsAniU1301	Computer Application –I (Web Technology : HTML , Adv HTML)	2		2		20	30	50
	24CsAniU1302	Lab Course on 24CsAniU1101		2		4	20	30	50
IKS T(2)	24CpCopU1901	Generic IKS	2		2		20	30	50
GE/OE (T/P) (2)	24CsAniU1401	Lab Course on Foundation Art		2		4	20	30	50
SEC (P) (2)	24CsAniU1601	Lab Course on Foundation Art		2			20	30	50
AEC T(2)	24CpCopU1701 / 24CpCopU1702	MIL-I (Hindi) / MIL-I (Marathi)	2		2		20	30	50
VECT (2)	24CpCopU1801	Environmental Science	2		2		20	30	50
Total			12	10	12	10			550

Level:- 4.5 (First Year) Sem:II

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	ESE	Total
Subject 1 T(2)+ T/P(2) or T(4)	24CsAniU2101	Graphic Designing II	2		2		20	30	50
	24CsAniU2102	Lab Course on 24CsAniU2101		2		4	20	30	50
Subject 2 T(2)+ P(2)	24CsAniU2201	2D Animation II	2		2		20	30	50
	24CsAniU2202	Lab Course on 24CsAniU2201		2		4	20	30	50
Subject 3 T(2)+ P(2)	24CsAniU2301	Computer Application –II (C Programming)	2		2		20	30	50

	24CsAniU2302	Lab Course on 24CsAniU2101		2		4	20	30	50
GE/OE (T/P)(2)	24CsAniU2401	Lab Course on Calligraphy & Typography		2		4	20	30	50
SEC P(2)	24CsAniU2601	Lab Course on Introduction to 3D Design		2		4	20	30	50
AEC T(2)	24CpCopU2703	English Communication Skills I	2		2		20	30	50
VEC T(2)	24CpCopU2801	Democracy, Election and Governance	2		2		20	30	50
CC(2)	24CpCopU2001 / 24CpCopU2011 / 24CpCopU2021 / 24CpCopU2031 / 24CpCopU2041 / 24CpCopU2051 / 24CpCopU2061 / 24CpCopU2071	Physical Education / Cultural Activities / NSS / NCC / Fine Arts / Applied Arts / Visual Arts / Performing Arts	2		2		20	30	50
Total			12	10	12	20			550

Level:- 5.0 (Second Year) Sem:III

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2 or 4), (T/P)(2)	24CsAniU3101	Elements of 3D Designing I	2		2		20	30	50
	24CsAniU3102	Graphic Design	2		2		20	30	50
	24CsAniU3103	Lab Course on 24CsAniU3101 & 24CsAniU3102		2		4	20	30	50
VSC P(2)	24CsAniU3501	Lab Course on Digital Editing		2		4	20	30	50
IKS (T/P)(2)	24CsAniU3901	Indian Art Culture	2		2		20	30	50
FP P(2)	24CsAniU3002	Field Project I		2		4	20	30	50
Minor (T/P)(2+2 or 4)	24CsAniU3301	Computer Application –II (Object Oriented Programming)	2		2		20	30	50
	24CsAniU3302	Lab Course 24CsAniU3301		2		4	20	30	50
GE/OE (T/P) (2)	24CsAniU3401	Lab Course on Graphic Designing		2		4	20	30	50
AEC T(2)	24CpCopU3703	English Communication Skills II	2		2		20	30	50
CC T(2)	24CpCopU3001	Online Course on Yoga	2		2		20	30	50
Total			12	10	12	20			550

Level:- 5.0 (Second Year) Sem:IV

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2 or 4), (T/P)(2)	24CsAniU4101	Elements of 3D Animation	2		2		20	30	50
	24CsAniU4102	Motion Graphics	2		2		20	30	50
	24CsAniU4103	Lab Course on 24CsAniU4101 & 24CsAniU4102		2		4	20	30	50
VSC P(2)	24CsAniU4501	Lab Course on Creative Writing		2		4	20	30	50
CEP P(2)	24CpCopU4003	Community Engagement Project		2		4	20	30	50
Minor (T/P)(2+2 or 4)	24CsAniU4301	Computer Application –II (Java Script)	2		2		20	30	50
	24CsAniU4302	Lab Course on 24CsAniU4301		2		4	20	30	50
GE/OE (T/P) (2)	24CsAniU4401	Lab Course on e-content Development (Video Production)		2		4	20	30	50
SEC T(2)	24CsAniU4601	Production Process	2		2		20	30	50
AEC T(2)	24CpCopU4701 / 24CpCopU4702	MIL-II (Hindi) / MIL-II (Marathi)	2		2		20	30	50
CC T(2)	24CpCopU4001	Health and Wellness	2		2		20	30	50
Total			12	10	12	20			550

Level:- 5.5 (Third Year) Sem:-V

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2+2+2 or 4 + 2+2 or 4 + 4) P(2+2 or 4)	24CsAniU5101	Game Designing	2		2		20	30	50
	24CsAniU5102	VFX I	2		2		20	30	50
	24CsAniU5103	Lab Course Digital Photography		4		8	40	60	100
	24CsAniU5104	Lab Course on 24CsAniU5101		2		4	20	30	50
	24CsAniU5105	Lab Course on 24CsAniU5102		2		4	20	30	50
Major Elective (T/P) (2+2 or 4)	24CsAniU5201	Advanced 3D Animation	2		2		20	30	50
	24CsAniU5202	Lab Course on 24CsAniU5201		2		4	20	30	50
	OR								
	24CsAniU5203	Digital Audio Work (Sound Recording)	2		2		20	30	50
	24CsAniU5204	Lab Course on 24CsAniU5203		2		4	20	30	50
VSC P(2)	24CsAniU5501	Lab Course on Simulation and Dynamics		2		4	20	30	50

FP (2)	24CsAniU5001	Field Project II		2		4	20	30	50
Minor (T/P) (2)	24CsAniU5302	Lab Course on Computer Application –III (C#)		2		4	20	30	50
Total			06	16	12	32			550

Level:- 5.5 (Third Year) Sem:-VI

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2+2+2 or 4+2+2 or 4+4) P(2+2 or 4)	24CsAniU6101	Game Production	2		2		20	30	50
	24CsAniU6102	VFX II	2		2		20	30	50
	24CsAniU6103	Lab Course on Cinematography		4		4	40	60	100
	24CsAniU6104	Lab on 24CsAniU6101		2		4	20	30	50
	24CsAniU6105	Lab on 24CsAniU6102		2		4	20	30	50
Major Elective (T/P) (2+2 or 4)	24CsAniU6201	Lab Course on Props and Prosthetics		4		8	40	60	100
	OR								
	24CsAniU6203	Post Production	2		2		20	30	50
	24CsAniU6204	Lab Course on 24CsAniU6203		2		4	20	30	50
VSC P(2)	24CsAniU6501	Lab Course on e-Journalism		2		4	20	30	50
OJT (2)	24CsAniU6004	On Job Training		4		8	40	60	100
Total			06	16	06	32			550

Semester V

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5

Third Year of B.Sc. (Animation)
(2024 Course under NEP 2020)
Course Code : 24CsAniU5101
Course Name : Game Designing

Teaching Scheme: TH: 2 Hours/Week

Credit 02

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

- Creative & Logical thinking ability
- Knowledge of Designing and Logic building

Course Objectives:

- To Study Gaming Pipeline
- To learn building game logics
- To Study Logic Bricks and Logic Nodes
- To learn Blender Functions and tools
- To learn Game Physics.
- To learn the use of Substance Painter.

Course Outcomes:

On completion of the course, student will be able to–

- Design and create game assets
- Develop games using logics
- Proficient in game designing.
- Create proper documentation.
- Understand the functioning of gaming pipeline
- Make PBR textures on their own.

Course Contents

Unit 1	Introduction to Blender	2 lectures
	• Installation • Interface • Tools • Modifiers	
Unit 2	Pre-Production	3 lectures
	• Brainstorming Ideas • GDD-Game Design Document	
Unit 3	Modelling	4 lectures
	• Low Poly assets • Polygon modelling • Meshflow	
Unit 4	UV Mapping	3 lectures
	• UV unwrapping • Tips and Tricks to Unwrap smartly	
Unit 5	Texturing	4 lectures
	• Substance painter • Procedural Texturing	
Unit 6	Introduction to UpBGE	2 lectures
	• Shortcuts • LogicBricks • Editor	
Unit 7	Game look and feel	2 lectures
	• Immersive look and feel of game • Managing assets • Lighting	
Unit 8	Building with Logic Bricks	4 lectures
	• Sensors • Controllers • Actuators	
Unit 9	Building with Logic Nodes	4 lectures

	• Events • Inputs • Values	
Unit 10	Game Testing and Exporting	2 lectures
	• Creating bug report • Finalizing the Game • Building the final output	

Reference books:

- The Art Of Game Development with Unity- Hariom Jagtap
- Learning Blender - Oliver Villar
- Blender 3D Basics (2nd edition) - Gordon Fisher
- Blender 3D By Example - Second Edition : Oscar Baechler

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5
Third Year of B.SC (Animation)
(2024 Course under NEP 2020)

Course Code: 24CsAniU5102
Course Name: VFX -I

Teaching Scheme: TH: 2 Hours/Week

Credit : 2

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

- Animation and VFX Skills
- Advanced knowledge of VFX Compositing & Motion Graphics

Course Objectives:

- To understand Visual Effect techniques
- To developed a new technique in the VFX Process
- To create interactive interface design of Film, Media, News and advertise.

Course Outcomes:

On completion of the course, the student will be able to–

- Understand VFX & Motion Graphics concepts
- Creating VFX Environment in the film
- Compose and Render the movie scene in digital videos format
- Students will have improved their visualization power to explore new ideas in film composition

	Introduction to Visual Effect	12 lectures
	• What Makes an Effect? • Why create an effect? • Film, Video digital and string • Film Format • Video Format • Methods of creating video effects	

er 2	VFX Production Pipeline	6 lectures
	• What is pipeline • Overview of film production • Economics of film Production • Stages of VFX production • Visual Effect Terms	
Chapter 3	Paint and color correction	6 lectures
	• Studying Paint process for VFX • Using paint • Stroke/Shape • Using Clone and reveal tool • Tracking and stabilizing • Wire removal • Create a clean plate using Photoshop	
Chapter 4	Tracking Technique	5 lectures
	• 2D Tracking • 4 point Tracker • 3D Camera Tracking • Tracking features. • Solving the camera • Creating the scene	
Chapter 5	Chroma shooting setup and composition	6 lectures
	• Basic shooting setup • Equipment for shooting on chroma setup(curtain, Light, reflector, crane) • Composite components fabric • Reflective media • Overview of mating compositing technique • Basic chroma keying Technique	
Chapter 6	Getting around node based VFX application	6 lectures
	• Understand the workflow of node oriented application • Understanding interface • Node and node graph • Region of interest • Customizing your layout	
Chapter 7	Rotoscopy	8 lectures
	• Introduction to Rotoscope (Silhouette) • Basic rotoscoping technique • Roto with tracking and stabilizing • Double poly roto, hard & soft edge roto	

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5
Second Year of Bsc. (Animation)
(2024 Course under NEP 2020)
Course Code: 24CsAniU5103
Course Name : Lab course on Digital Photography

Teaching Scheme: TH: 4 Hours/Week

Credit 04

Examination Scheme: CIA: 40 Marks

End-Sem: 60 Marks

Prerequisite Courses:

- Creative & Logical thinking ability
- Basic knowledge of photography

Course Objectives:

- To understand working of Video camera
- To understand different aspects of Cinematography

Course Outcomes:

On completion of the course, student will be able to–

- Students will have improved their visualization power to explore new ideas.
- Operate a Video camera
- Obtain Framing and composition skills
- Learn Composition and framing rules
- Manage a professional Studio setup
- Obtain post processing skills

Practical List

Sr. No.	Name of the experiment
1	Basic Exposure Triangle Exploration
2	Portrait Photography
3	Landscape Photography
4	Macro Photography

5	Night Photography
6	Black and White Photography
7	Action and Motion Photography
8	Composition Techniques: Rule of Thirds and Leading Lines
9	Self-Portrait
10	Post-Processing with Lightroom or Photoshop
11	Creative Photography Using Reflections
12	Portfolio

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5

Third Year of B.Sc. (Animation)
(2024 Course under NEP 2020)
Course Code : 24CsAniU5104

Course Name : Lab Course on 24CsAniU5101 (Game Designing)

Teaching Scheme: TH: 4 Hours/Week

Credit 02

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

- Creative & Logical thinking ability
- Knowledge of Designing and Logic building

Course Objectives:

- To Study Gaming Pipeline
- To learn building game logics
- To Study Logic Bricks and Logic Nodes
- To learn Blender Functions and tools
- To learn Game Physics.
- To learn the use of Substance Painter.

Course Outcomes:

On completion of the course, student will be able to–

- Design and create game assets
- Develop games using logics
- Proficient in game designing.
- Create proper documentation.
- Understand the functioning of gaming pipeline
- Make PBR textures on their own.

Assignments List :

	Assignments
1	Create a Storyboard of your own game idea

2	Create a GDD(Game Design Document) for your own game
3	Low-Poly asset of a game background asset
4	Low-Poly asset of a game weapon asset
5	Use a low poly asset and give detailed textures to it.
6	Low-Poly to Mid-Poly asset of a game environment: Interior
7	Low-Poly to Mid-Poly asset of a game environment: Exterior
8	Create Coin collection system in UpBGE
9	Create Enemy system in UpBGE
10	Create a Hyper-Casual game using Logic bricks in UpBGE
11	Create a Hyper-Casual game using Logic nodes in UpBGE
12	Create a detailed launch ready game with documentation(GDD)

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5
Third Year of B.SC (Animation)
(2024 Course under NEP 2020)

Course Code: 24CsAniU5105
Course Name: Lab Course on 24CsAniU5102 (VFX -I)

Teaching Scheme: TH: 4 Hours/Week

Credit : 2

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

- Animation and VFX Skills
- Advanced knowledge of VFX Compositing & Motion Graphics

Course Objectives:

- To understand Visual Effect techniques
- To developed a new technique in the VFX Process
- To create interactive interface design of Film, Media, News and advertise.

Course Outcomes:

On completion of the course, the student will be able to–

- Understand VFX & Motion Graphics concepts
- Creating VFX Environment in the film
- Compose and Render the movie scene in digital videos format

Students will have improved their visualization power to explore new ideas in film composition

Course Contents

- Adobe After Effect CC Guide
- Nuke Book 3.0
- The visual arsenal by Bill Byrne
- The Green Screen Handbook by Jeff Foster
- Silhouette FX Book 5.0

Assignments List :

Sr.no.	Assignment name
1	Remove the wire of a flying character using paint technique in After Effect
2	Compose a Scene in adobe after effect by using Camera tracking technique
3	Take a 4 Second Video (Image Sequence) and trace a Video Using technique Manual Roto. render in RGB & Alpha file.
4	Take a 4/5 Second Video (Image Sequence) and to trace a footage (Rotoscopy) frame by frame/ manually in silhouette. Remove the character from BG. render in RGB & Alpha file..
5	Take a 4/5 Second Video (Image Sequence) and to trace a footage (Rotoscopy) Using following rotoscopy Technique. render in RGB & Alpha file. frame by frame, Manually, Per frame Tracking Open Polly Close Polly Make a Roto Showreel properly.
6	Take a 4 Second Video (Image Sequence) and trace a Video in Nuke. Render the project in RGB & Alpha file. Make a Roto Showreel properly.
7	Make a rotoscopy in silhouette. Export the shape and compose the scene in Nuke. Replace the background Matt and compose properly.
8	Compose a Scene in node based application i.e. Nuke using Images. Render in .avi Format.
9	Studying the Chroma shooting Setup (Indoor /outdoor) and Design an own Storyboard. Shoot your conceptual Video by referring the Storyboard. Compose this Scene in Nuke. Render in .avi Format.
10	Make a minimum 5 Second Scene in Node Base application. To compose a scene using chroma technique (Chroma composition)
11	Make a clean plate in Photoshop & Compose the scene in Nuke.
12	Paint/Clean plate the Footages with proper Color balance.
13	Create a scene to converge Day to Night. Using color Correction and Light Nodes.
14	Take a raw video in Nuke and make Color Correction

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5
(2024 Course under NEP 2020)
Course Code : 24CsAniU5201
Course Name : Advanced 3D Animation

Teaching Scheme: TH: 2 Hours/Week

Credit: 02

Examination Scheme: CIA: 20 Marks

End-Sem: 30 Marks

Prerequisite Courses:

- Creative & Logical thinking ability
- Basic knowledge of 3d software

Course Objectives:

- To understand different aspects of computer based animation
- To learn how to create appalling computer based animation

Course Outcomes:

On completion of the course, the student will be able to–

- Create 3d characters Animation
- Develop visualization skills.
- Create professional artworks.

Course Contents

Chapter 1	Animation	6 lectures
	• Biped animation key poses study • Quadruped Animation study • Object motions observations • Expression and Lip sync • Realistic and Imaginary Animation study	
Chapter 2	Layouts	6 lectures
	• Understanding layouts • Camera setup in layout • Reference objects and characters • Reference environment • Placing objects / Character in selected place in the scene. • Create shot layouts	
Chapter 3	Animating characters	6 lectures

	• Adding main blocking key poses • Adding inbetweens • Smooth animation using graph editor • Adding Lip sync in characters • Adding facial Expressions	
Chapter 4	Animation output	6 lectures
	• Check animations using Playblast • Add lights • Check render outputs • Use Render sequence	
Chapter 5	Animation project	6 lectures
	• Story • Character design • Environment design • Storyboard • Scene and shot breakdowns • Animation layout • Final animation • Lighting • Rendering	

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5

(2024 Course under NEP 2020)

Course Code : 24CsAniU5202

Course Name : Lab Course on 24CsAni5202 (Adv. 3d Animation)

Teaching Scheme: TH: 4 Hours/Week

Credit: 02

Examination Scheme: CIA: 20 Marks

End-Sem: 30 Marks

Prerequisite Courses:

- Creative & Logical thinking ability
- Basic knowledge of 3d software

Course Objectives:

- To understand different aspects of computer based animation
- To learn how to create appalling computer based animation

Course Outcomes:

On completion of the course, the student will be able to–

- Create 3d characters Animation
- Develop visualization skills.
- Create professional artworks.

Assignment List

Sr. No.	Assignment Name
1	Human Character Walk Cycle
2	Human Character Run Cycle
3	Quadruped walk cycle
4	Quadruped Run cycle
5	Human Character LipSync

6	Human character facial expression
7	Human Jump Cycle
8	Human action Shot
9	Human Character Dancing
10	Fighting Shot 2 Character
11	Multiple Camera Animation
12	Multiple Character Animation in one Shot

Progressive Education Society's

Modern College of Arts, Science and Commerce,

Shivajinagar, Pune - 5

Third Year of B.Sc. (Animation) (2024 Course under NEP 2020)

Course Code : 24CsAniU5203

Course Name: Digital Audio Work(Sound Recording)

Teaching Scheme: TH: 2 Hours/Week

Credit: 2

Examination Scheme: CIA: 20 Marks

End-Sem: 30 Marks

Prerequisite Courses:

- Sound Making Skills
- Advanced knowledge of Audio Recording & Audio Compositing

Course Objectives:

- To understand The Audio Recording & Audio Compositing techniques
 - To developed a Current technique in the Sound Making & Sound editing Process
 - To create interactive interface design of Film, Media, News and advertise.

Course Outcomes:

On completion of the course, the student will be able to–

- Understand Audio Recording & Audio Editing concepts
- Creating the Folly sound of the character in the film.
- Compose and Render the Audio in digital Audio format

- Students will have improved their Listening power to explore new ideas of Audio in film composition

Course Contents

Chapter 1	Sound Basics	12 lectures
	• History of Sound • Use of Sound • Analogue & Digital Technologies	
Chapter 2	Introduction to Sound Equipment	6 lectures
	• Audio Signal Routing • Recording methods and workflow • Microphones • Studios and Acoustics • Study of location recording equipment and workflows • Dialogue recording on location	
Chapter 3	Sound Recording in Audacity	6 lectures
	• Production sound to DAW • Introduction to Audacity • Studying the interface of Audacity • Sound recording process • Stereo & Mono Sound tracks	

Chapter 4	Foley Sound	4 lectures
	• Study of Foley sound • Equipment used for Foley sound • Recording of Foley sound • Mixing of Foley sound	
Chapter 5	Sound Editing	8 lectures
	• Setting up DAW for post-production • Dialogue Editing and cleaning • Track Laying • Basics of Sound Design	
Chapter 6	Advanced Post Production	5 lectures
	· Noise reduction for dialogue · Dialogue dubbing · Studying the Process of sound dubbing · Use of equalizer, reverb, compression.	

- The Art of Music Production: The Theory and Practice, Burgess, Richard, J., Oxford University Press (2013)
- The Recording Engineer's Handbook, Owsinski, Bobby, Cengage Learning PTR (2013)
- Audio Engineering 101: A Beginner's Guide to Music Production, Dittmar, Tim, Focal Press (2011)

- What is Music Production? A Producer's Guide: The Role, the People, the Process, Hepworth-Sawyer, Russ and Golding, Craig, Focal Press (2010)
- Creative Recording Volume 1: Effects and Processors, White, Paul, Music Sales America (2006)
- Creative Recording Volume 2: Microphones, Acoustics, Soundproofing and Monitoring, White, Paul, Music Sales America (2006)
- Audacity Guide

Progressive Education Society's

Modern College of Arts, Science and Commerce,

Shivajinagar, Pune - 5

Third Year of B.Sc. (Animation) (2024 Course under NEP 2020)

Course Code : 24CsAniU5204

Course Name: Lab Course on 24CsAniU5203

(Digital Audio Work (Sound Recording))

Teaching Scheme: TH: 4 Hours/Week
Examination Scheme: CIA: 20 Marks

Credit: 2
End-Sem: 30 Marks

Prerequisite Courses:

- Sound Making Skills
- Advanced knowledge of Audio Recording & Audio Compositing

Course Objectives:

- To understand The Audio Recording & Audio Compositing techniques
 - To developed a Current technique in the Sound Making & Sound editing Process
 - To create interactive interface design of Film, Media, News and advertise.

Course Outcomes:

On completion of the course, the student will be able to–

- Understand Audio Recording & Audio Editing concepts
- Creating the Folly sound of the character in the film.
- Compose and Render the Audio in digital Audio format
- Students will have improved their Listening power to explore new ideas of Audio in film composition

Sr.no.	Assignment name
1	Write the script and Make a small Informative Video. Record the Voice, Dialogue Narration and Foley sound effect. Edit in Premier pro.

2	Record the Narration of film 30second Audio clip in audacity. Remove the Noise, Add echo and Normalize Effect .Match and edit Video and audio in Premier.
3	Take a minimum 1 minute cartoon video clip record the dialogue (Dubbing) of those characters and change the pitch and cleared the audio.
4	Make a minimum 5 minutes E Content Video .Record the Voice related to topic and Record the some special sound effect. edit and composes in After Effect.
5	Make a 2/3 minutes short film .Record the dialogue narration, Foley sound and edit yourself.
6	Make a Short Documentary Film.Record the dialogue narration, Foley sound and edit yourself.
7	Make a Simple Advertisement Video on Product Selling
8	Write the script and Make a small Horror Short Film. Record the Voice, Dialogue Narration and Foley sound effect. Edit in Premier pro.
9	Make Fully Animated shortfilm Project with Sound effect. (Minimum 1 Min. & Maximum 3 Min.)

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5
Third Year of B.Sc. (Animation)
(2024 Course under NEP 2020)

Course Code : 24CsAniU5501
Course Name : Lab Course on Simulation and Dynamics

Teaching Scheme: Pr : 4 Hours/Week

Credit : 02

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

Introduction to 3D Graphics or equivalent industry experience. Basic understanding of 3D modeling, animation principles, and digital visual effects concepts.

Course Objectives:

- Navigate Houdini confidently
- Understand procedural workflows
- Model assets using SOPs
- Create basic simulations (RBD, Pyro, FLIP)
- Use attributes & VEX at an intro–intermediate level
- Light, render, and present final shots

Course Outcomes:

Understand and apply the fundamentals of Houdini's procedural, node-based workflow for simulation and dynamics tasks. Prepare and organize geometry correctly for use in rigid body, fluid, pyro, and cloth simulations. Generate fire and smoke effects using Pyro simulations and modify their behavior through node-based parameters.

Course Contents

Unit 1	Introduction to Houdini	4 Lectures
	• Procedural thinking for simulations • Houdini UI & navigation • Node networks & data flow • Geometry basics (points, primitives) • Transformations & scale for sims • SOP vs DOP context	
Unit 2	SOPs for Simulation Prep	6 Lectures
	• Essential SOP nodes (Merge, Group, Blast, Transform) • Attribute basics (Cd, N, pscale, v) • Scatter & Copy to Points • Noise & deformation for variation • Collision geometry prep	
Unit 3	Simulation Controls	6 Lectures
	• Attribute creation using nodes (Attribute Create, Paint) • Using groups to control simulations • Velocity creation using nodes • Using masks & falloffs	
Unit 4	Rigid Body Dynamics	8 Lectures

	• RBD Bullet Solver (SOP-level workflow) • Fracturing: • Voronoi Fracture • Boolean Fracture • Packed primitives • Constraints (Glue, Hard) using nodes • Activation & timing (node-based)	
Unit 5	Camera	6 Lectures
	• Camera Solve (Matchmove) • Object Tracking (Basic) • Direct FX Integration • Motion FX / Motion • Camera Solver	
Unit 6	Pyro Simulations (Fire & Smoke)	5 Lectures
	• Pyro SOP workflow • Smoke vs fire setups • Emission from geometry • Shaping smoke using nodes: • Disturbance • Turbulence • Dissipation • Caching & resolution control	
Unit 7	Vellum Dynamics (Cloth & Soft Bodies)	7 Lectures
	• Vellum cloth setup • Soft bodies & grains • Constraints & stiffness • Collisions & pinning	

Unit 8	Final FX Project	6 Lectures
	• Destruction + smoke • Water interaction with objects • Cloth + RBD interaction	

Assignments List :

Sr.no.	Assignment name
1	Create Procedural Geometry Setup.
2	Scale & Transform for Simulations
3	Collision Object Creation
4	Debris & Scatter Setup.
5	Basic RBD Drop Simulation.
6	Fracturing Geometry
7	Destruction FX Shot
8	Smoke Simulation (Pyro)
9	Fire or Explosion Simulation
10	FLIP Fluid Pour.
11	Hair Simulation
12	Vellum Cloth or Soft Body

13	Final Multi-Simulation FX Shot
14	Portfolio

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5
Third Year of B.Sc. (Animation)
(2024 Course under NEP 2023)
Course Code : 24CsAniU5302
Course Name : Lab Course on Computer Application III(C#)

Teaching Scheme: TH: 2 Hours/Week

Credit 02

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

- Object oriented Concepts
- scripting Concepts

Course Objectives:

- To understand the basic concepts of C# and its applications.
- To study .Net Framework for C#.
- To study ASP.NET Server.
- To Study Concepts of OOP's.
- To Gain the ability to solve complex programming challenges.
- To Develop proficiency in C# programming.

Course Outcomes:

On completion of the course, student will be able To –

- Remembering basic concepts and terms.
- Understanding syntax, structure, and basic concepts of C# and ASP.NET.
- Applying practical programming techniques and concepts in real-world scenarios.
- Analyzing and choosing the appropriate techniques and structures based on given problems.
- Evaluating code for optimization, quality, and efficiency.
- Creating complex systems and solutions in both desktop and web environments.

Course Contents

Section 1	C#	
Unit 1	Introduction to C#	4 lectures
	● Introduction to C# ● Applications of C# ● Features of C# ● C# IDE	
Unit 2	C# Syntax using .net Framework	4 lectures
	● C# syntax ● C# input and output ● Variables and Data Types ● Type Casting ● Operators and Strings ● Math functions and Booleans	
Unit 3	Arrays and Control Statements	4 lectures
	● C# Arrays ● Conditional Statements ➤ if statement ➤ if else statement ➤ Switch statements ● Iterative Statements(Loops) ➤ for loop ➤ while loop ➤ do while loop	
Unit 4	Classes in C#	4 lectures
	● Classes and objects ● Constructors and Class members ● C# Access Modifiers ● Inheritance using C# ● Polymorphism and Abstraction ● C# Exceptions ● Event handling	
Section 2	ASP dot NET	
Unit 5	Introduction to ASP . NET	4 lectures
	● What is ASP . NET	
Unit 6	Server Control.Control Structure and Functions	5 lectures
	● HTML Webpages and Forms ● Request and Response in Non ASP.NET pages ● Server Controls ● Data types and Data Collections ● Control Structures	

Section 1	C#	
Unit 7	Events and ASP.NET Server Controls	5 lectures
	• ASP.NET page and Web Control Events • ASP.NET Controls • HTML Server Controls	

Reference books:

- Beginning Visual C#, Wrox Publication
- Professional Visual C#, Wrox Publication
- Inside C#, by Tom Archer ISBN: 0735612889 Microsoft Press © 2001, 403 pages
- Beginning ASP.NET 3.5, Wrox Publication
- Programming ASP.NET 3.5 by Jesse Liberty, Dan Maharry, Dan Hurwitz, O'Reilly Hill, ISBN 129051005

Assignment List:-

SR.NO	Practical
Practical 1	Write a program to declare Variables, take input from the user for assigning the value and Display it using output function in C#
Practical 2	Write a C# program to perform All Arithmetic Operations.
Practical 3	Write a C# program to find Simple Interest. Take inputs from user.
Practical 4	Write a C# program to create an array and:- • find length of the array • reverse the array • delete and add the element • Copy the array elements
Practical 5	Write a C# program to reverse the Number. Take the number input from the user.
Practical 6	Write a C# program to print Fibonacci Series.

Practical 7	Write a C# program to define a Class And creating its Objects.
Practical 8	Write a C# program to Demonstrate Single and Hierarchical Inheritance
Practical 9	Write a C# program to Demonstrate Multiple and Multilevel Inheritance
Practical 10	Write a C# program to print the output as following:- <pre> 1 1 2 1 2 3 1 2 3 4 1 2 3 4 5 </pre>
Practical 11	Write a C# program to demonstrate Function Overriding.
Practical 12	Creating HTML Form Using ASP.NET HTML server controls.

Semester VI

Progressive Education Society's

Modern College of Arts, Science and Commerce,

Shivajinagar, Pune - 5

Third Year of B.Sc. (Animation)

(2024 Course under NEP 2020)

Course Code : 23CsAniU6101

Course Name : Game Production

Teaching Scheme: TH: 2 Hours/Week

Credit 02

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

- Creative & Logical thinking ability
- Knowledge of Game Development

Course Objectives:

- To study Game developing
- Understanding Gamescripting
- To Study C# Gaming Script
- To learn Unity Functions and tools
- To learn Game Physics.
- To learn the life cycle of Unity Engine

Course Outcomes:

On completion of the course, student will be able to—

- Proficiently write C# game scripts.
- Understand the workflow of Gaming development pipeline.
- Develop games using C# Scripts
- Proficient in game development.
- Understand the functioning of Game Engine.
- Test and Release their game in gaming platforms.

Course Contents

Unit 1	Introduction to Unity	2 lectures
	• Installation • Interface • Tools	
Unit 2	Unity Basics and Workflow	3 lectures
	• 3D Assets • Materials • Textures • Prefabs	
Unit 3	Game Objects and Components	4 lectures
	• Understanding Unity's GameObject-Component system (2D and 3D) • Adding and managing GameObjects (Cube, Sphere, Light, Camera) • Adding components (Rigidbody, Collider, Mesh Renderer, etc.)	
Unit 4	Scripting in C#	4 lectures
	• Introduction to C# and Unity's scripting API • Managing scripts with GameObjects • Understanding MonoBehaviour • Input handling (keyboard, mouse) • Working with Unity's physics system (Rigidbody, forces) • Unity Life cycle	
Unit 5	Scene Management	2 lectures
	• Creating and saving scenes • Loading and transitioning between scenes • Scene setup for games	
Unit 6	Lighting and Shadows	3 lectures
	• Setting up different types of lights (Point Light, Directional Light, SpotLight, Reflection probes) • Adjusting light intensity and color	

	Understanding shadows and lightmapping	
Unit 7	Audio in Unity	2 lectures
	- Adding sound effects to objects - Working with AudioSource and AudioListener components - Background music and sound management	
Unit 8	Animation and UI Basics	4 lectures
	- Unity's Animator system - Creating and using animations (using Animator Controller) - Basic animations (movement, scaling, rotation) - Designing basic UI (Buttons, Text, Images) using the Unity UI system - Creating GUI and HUD	
Unit 9	Physics in Unity	4 lectures
	- Adding and using physics components (Colliders, Rigidbody) - Handling collisions and triggers - Applying forces to objects (gravity, push, pull) - Introduction to Android System	
Unit 10	Testing and Building	2 lectures
	- Testing and optimizing the game - Building the game - Basic debugging and error handling	

Reference books:

- The Art Of Game Development with Unity- Hariom Jagtap
 - Unity for Absolute Beginners - Sue Blackman
 - Unity Game Designer Play book- Unity
 - Game Development with Unity - Arihant Pal

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5
Third Year of B.SC (Animation)
(2024 Course under NEP 2020)

Course Code: 24CsAniU6102
Course Name: VFX -II

Teaching Scheme: TH: 2 Hours/Week

Credit : 2

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

- Animation and VFX Skills
- Advanced knowledge of VFX Compositing & Motion Graphics

Course Objectives:

- To understand Visual Effect techniques
- To developed a new technique in the VFX Process
- To create interactive interface design of Film, Media, News and advertise.

Course Outcomes:

On completion of the course, the student will be able to–

- Understand VFX & Motion Graphics concepts
- Creating VFX Environment in the film
- Compose and Render the movie scene in digital videos format
- Students will have improved their visualization power to explore new ideas in film composition

Course Contents

- Nuke Book 3.0
- The visual arsenal by Bill Byrne
- The Green Screen Handbook by Jeff Foster

Chapter 1	3D Compositing	12 Lectures
	• Overview • Camera view scene mode, 3D scene geometry • Working with cards, modifying objects • Working of light in composition • Animating Camera	

	Projecting texture with the project 3D view.	
Chapter 2	Stereoscopic 3D Conversion	6 Lectures
	- Stereoscopy and psychological aspects of 3D - Stereoscopic shorting in 3D max or Maya 2D & 3D conversion - Anaglyphic conversion	
Chapter 3	The basics of match moving	6 Lectures
	- Understanding the match moving process 2) Typical match move 3D to 2D and back again 3D camera tracking - Layer Base and node base 2D tracking 3D calibration	
Chapter 4	Camera Animation	6 Lectures
	3D Tracking in Nuke - Tracking features. - Solving the camera - Scanline Render nodes. - Building a Camera Projection Scene - Importing the Geometry objects - Animating the Camera 2D Compositing Inside 3D Scenes - Importing Photoshop layers - Creating the frame - Compositing the screen into the 3D scene - Rendering the Scene	
Chapter 5	Chroma Composition	7 Lectures
	- Node based chroma composition - Luma keys - All four of node based Chroma keyers - Proper use of Add mix & Key mix Nodes - How to merge multiple Key nodes - Use of Roto node, Merge Node, Pre-mult node Multi node for Chroma removal	
Chapter 6	Rendering	4 Lectures
	- Reviewing in a node view - Frame cycle - Output node - Render resolution and format - Rendering output	
Chapter 7	VFX Show Reel	8 Lectures

	• Artist Profile • Work presentation • Interview Skill • Show reel	
--	--	--

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5
Second Year of Bsc. (Animation)
(2024 Course under NEP 2020)
Course Code: 24CsAnmU6103
Course Name : Lab Course on Cinematography

Teaching Scheme: TH: 8 Hours/Week

Credit 04

Examination Scheme: CIA: 40 Marks

End-Sem: 60 Marks

Prerequisite Courses:

- Creative & Logical thinking ability
- Basic knowledge of photography

Course Objectives:

- To introduce students to the principles and language of cinematography.
- To develop technical understanding of cameras, lenses, and video formats.
- To build knowledge of lighting techniques for film and digital media.
- To enhance skills in framing, composition, and camera movement.
- To develop practical skills in shooting short films, advertisements, and documentaries.
- To provide understanding of color grading and post-production workflow.

Course Outcomes:

- After successful completion of this course, students will be able to:
- Understand and apply fundamental principles of cinematography.
- Operate professional video cameras and select appropriate lenses.
- Design effective lighting setups for various scenes and moods.
- Execute different camera movements (pan, tilt, dolly, tracking, handheld, etc.).
- Shoot and compose scenes suitable for short films, ads, and digital content.
- Perform basic video editing and color grading using software such as:
- Adobe Premiere Pro
- DaVinci Resolve
- Produce a short cinematic project demonstrating technical and creative skills.

Unit 1	Introduction to Cinematography	4 Lectures
	- History and evolution of cinematography - Role of cinematographer (Director of Photography – DOP) - Film language and visual storytelling - Types of cameras (DSLR, Mirrorless, Cinema Cameras) - Video formats, frame rates & resolution - Aspect ratios (16:9, 2.35:1, etc.))	
Unit 2	Camera & Lens Techniques	6 Lectures
	- Exposure Triangle in video (Aperture, Shutter Speed, ISO) - Shutter angle concept - Types of lenses (Prime, Zoom, Wide, Telephoto) - Lens perspective & focal length impact - Depth of field in motion picture - Camera movements: Pan, Tilt, Dolly, Crane, Handheld, Gimbal - Introduction to equipment like tripods	
Unit 3	Lighting for Cinema	6 Lectures
	- Principles of lighting - Three-point lighting setup - Key light, Fill light, Back light - High key & Low key lighting - Indoor vs Outdoor lighting - Natural light cinematography - Mood creation using light - Color temperature & white balance	
Unit 4	Composition & Visual Aesthetics	8 Lectures

	● Rule of thirds in motion ● Leading lines & framing ● Blocking & staging ● Shot sizes (Wide, Medium, Close-up, Extreme Close-up) ● Camera angles (High, Low, Dutch angle) ● Visual continuity ● Storyboarding basics	
Unit 5	Sound & Production Basics	6 Lectures
	● Basics of sync sound ● Types of microphones ● Audio recording fundamentals ● Set management & coordination ● Shot division & production planning	
Unit 6	Post-Production & Color Grading	5 Lectures
	● Basics of video editing workflow ● Timeline editing ● Transitions & cuts ● Introduction to color correction ● LUTs (Look Up Tables) ● Basic grading techniques using: ● Adobe Premiere Pro	
Unit 7	Genre-Based Cinematography	7 Lectures
	● Cinematography for Short Films ● Commercial & Advertisement Lighting ● Documentary Cinematography ● Music Video Style Shooting ● Corporate Video Production ● Web Series & OTT Visual Style	
Unit 8	Industry Practice	6 Lectures

	• Film production workflow • Working with production houses • Portfolio & showreel creation	
--	---	--

Practical List

Sr.No.	Name of the experiment
1	Static Shots using camera composition
2	Moving Shots using camera composition
3	Report News Studio using green screen
4	Experiment with Lights using diffusers, reflectors, softbox
5	Portfolio development
6	Shooting Action Sequences & Continuity Editing
7	Commercial Work
8	Creating a Time-Lapse or Slow-Motion Scene
9	Cinematic One-Take Shot
10	Recreating a Famous Movie Scene
11	Create a 1-2 minute silent short film
12	Produce your own Shortfilm

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5
Third Year of B.Sc. (Animation)
(2024 Course under NEP 2020)
Course Code : 23CsAniU6104
Course Name : Lab Course on 24CsAniU6101 (Game Production)

Teaching Scheme: TH: 4 Hours/Week

Credit 02

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

- Creative & Logical thinking ability
- Knowledge of Game Development

Course Objectives:

- To study Game developing
- Understanding Gamescripting
- To Study C# Gaming Script
- To learn Unity Functions and tools
- To learn Game Physics.
- To learn the life cycle of Unity Engine

Course Outcomes:

On completion of the course, student will be able to–

- Proficiently write C# game scripts.
- Understand the workflow of Gaming development pipeline.
- Develop games using C# Scripts
- Proficient in game development.
- Understand the functioning of Game Engine.

Test and Release their game in gaming platforms.

Assignments List :

Sr.No	Assignments
1	Terrain Creation
2	Interactive GUI

3	Create and Import a game ready environment
4	Coin Collection system using Unity
5	Enemy system using Unity
6	Create a Hyper Casual Game in Unity
7	Make a TPS movement system
8	Create a TPS Game with 2 Levels
9	Make a FPS movement system
10	Create a FPS Game with 2 Levels
11	Create a Android Game
12	Create a car game

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5

Third Year of B.SC (Animation)
(2024 Course under NEP 2020)

Course Code: 24CsAniU6104

Course Name: Lab Course on 24CsAniU6104 (VFX -II)

Teaching Scheme: TH: 4 Hours/Week

Credit : 2

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

- Animation and VFX Skills
- Advanced knowledge of VFX Compositing & Motion Graphics

Course Objectives:

- To understand Visual Effect techniques
- To developed a new technique in the VFX Process
- To create interactive interface design of Film, Media, News and advertise.

Course Outcomes:

On completion of the course, the student will be able to–

- Understand VFX & Motion Graphics concepts
- Creating VFX Environment in the film
- Compose and Render the movie scene in digital videos format
- Students will have improved their visualization power to explore new ideas in film composition

Course Contents

- Nuke Book 3.0
- The visual arsenal by Bill Byrne
- The Green Screen Handbook by Jeff Foster

Sr.No	Assignments
1	Compose and create a meaningful scene using Images, Video & Chroma Video. (Camera Animation)
2	Compose a 3d Scene in nuke use of Camera tracking technique.

3	Compose a Scene in nuke use of Camera tracking technique. Placed the suitable 3D object in the scene.
4	Make a 3D scene by using (2D to 3D Conversion) Images in nuke. use of a camera projection(Camera Animation)
5	Write the script & Storyboard of Choma scene .Compose a Scene using Advanced chroma Technique (color correction, Tracking and match-moving)
6	Write the script & Storyboard of Choma scene .Compose a 3D object in the Live Recorded Video Scene using Advanced chroma Technique (color correction, Tracking and match-moving)
7	Make the clean plate scene, remove the unwanted parts of the video footage and make (Paint /Wire remove) the realistic scene
8	Compose a scene, 3D object in real shoot video using Camera tracking and camera projection technique in node based application.
9	Create an Animated (2D/3D) Scene & Compose a Digitally with CGI.
10	Create a VFX scene Stereoscopic Shooting (Using 3Ds Max or Maya Camera tool) and Compose in Nuke
11	Create a Stereo Scene (Anaglyph conversion in nuke)
12	Trace the character in silhouette and Make a Stereo Scene of a live action video(Anaglyph conversion in nuke)

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5

Third Year of B.Sc. Animation
NEP 2024 Pattern
Major Elective (P)
Course Code : 24CsAniU6201

Course Name : Lab Course on Props and Prosthetics

Teaching Scheme: Pr : 8 Hours/Week

Credit : 04

Examination Scheme: CIA : 40 Marks

End-Sem : 60 Marks

Prerequisite Courses:

- Detailed knowledge of Film making process.
- Knowledge of Art and Design.
- 3D modeling skills.

Course Objectives:

- To Study the historical aspects of Props and Prosthetics in Cinema.
- To learn the process of making Props.
- To undergo the entire research regarding the use of Props and prosthetics.
- To acquire a skill to create suitable props as per the script requirements.
- To study different materials used to develop props and prosthetics.

Course Outcomes:

On completion of the course, student will be able to –

Recognize the importance of Props and Prosthetics in Cinema.

Design and develop adequate stylized props for a film project.

Understand the role of props and prosthetics in visual storytelling.

Design, fabricate, and manage props for film and television.

Course Contents

Unit 1	Introduction to Props and Prosthetics; Definition and scope	6 Practicals
--------	--	--------------

	• Props vs Set Dressing vs Costumes • Practical effects vs CGI • History of props and prosthetics in cinema • Evolution from theater to modern filmmaking • Case Studies: Citizen Kane, Baahubali, Avatar	
Unit 2	Storytelling Through Props Props as narrative tools	6 Practicals
	• Symbolic and thematic props • Hero props vs background props • Character-specific props • Period accuracy and cultural sensitivity • Exercise: Script breakdown for prop requirements	
Unit 3	Types of Props	6 Practicals
	• Hand props • Set props • Consumable props • Mechanical and breakaway props • Weapons (realistic, rubber, replicas) • Food props and fake consumables • Safety considerations	
Unit 4	Prop Design & Fabrication Concept art and sketches	6 Practicals
	• Materials: wood, metal, plastic, foam, resin, 3D printing • Aging, distressing, and texturing • Scaling and proportion for camera • Color theory and lighting impact	

Unit 5	Props Management & Continuity	6 Practicals
	• Prop master roles and responsibilities • Cataloging and labeling • Continuity tracking across scenes • Storage, transport, and maintenance • On-set protocols	
Unit 6	Introduction to Prosthetics	6 Practicals
	• What are prosthetics in film • Difference between makeup, SFX makeup, and prosthetics • Medical vs cinematic prosthetics • Ethics and realism	
Unit 7	Prosthetic Materials & Tools	6 Practicals
	• Latex, silicone, gelatin, foam latex • Adhesives and removers • Molds and casting • Sculpting tools and armatures • Hygiene and skin safety	
Unit 8	Prosthetic Design & Sculpting	6 Practicals
	• Life casting • Sculpting facial features and body parts • Character transformation design • Aging, injuries, scars, fantasy creatures	

Practical Assignments

Sr.No	Assignments
1	Design and create Mythological weapons.
2	Design and create Historical weapons.
3	Design and create Futuristic SciFi weapons.
4	Create Different types of Masks.
5	Create a war canon.
6	Design and create a Grand Entrance with pillars and arc.
7	Design and create Fake furniture for stunt scenes.
8	Design and create A Super Hero Costume.
9	Design and create A Haunted house Props for horror scene.
10	Create A Set of Historical Fort.
11	Design and create A UFO model.
12	Design and create A Prosthetic of an Alien.
13	Design and create A Prosthetic of a Ghost.
14	Create An Effect of blood splatter.
15	Create A Make-up of Aging, injuries, scars for action scene.

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5
Third Year of B.Sc. (Animation)
(2024 Course under NEP 2020)
Course Code : 24CsAniU6202
Course Name : Post Production

Teaching Scheme: TH: 2 Hours/Week

Credit :2

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

- Film & VFX Making Skills
- Advanced knowledge of Audio Recording Video Compositing

Course Objectives:

- To understand The Audio Recording & Video Compositing techniques
- To developed a Current technique in the Film Post Production Process
- To create interactive interface design of Film, Media, News and advertise.

Course Outcomes:

On completion of the course, the student will be able to–

- Understand Camera Concept, Audio, Video Synchronization & VFX Concept
- Creating the Folly sound of the character in the film.
- Compose and Render the Final Film Video format
- Students will have improved their Listening power to explore new ideas of Audio, Video and VFX in film composition

Course Contents

Chapter 1	Film Production Process	12 lectures
	• Stages of Film Production Process • Pre Production • Production • Post Production	
Chapter 2	Planning for post production	6 lectures
	• post production supervisor • scheduling • budgeting • the lab Working • dailies Working Schedule Shit	
Chapter 3	Shooting	6 lectures
	• Storyboard • Script • Camera Setup • Multi camera Setup • Shooting Equipment • Chroma Setup	
Chapter 4	VFX	8 lectures
	• Rotoscopy • Chroma Composition • Match moving • 3D Composition • Scene Composition • Paint	
Chapter 5	Sound Recording	4 lectures
	• Dialogue Recording • Dubbing • Narration • Foley Sound • Sound Editing • Musical Score and Sound Effects • Synchronization	
Chapter 6	Post-production	4 lectures
	• Video Formats . • The VFX Editor • Change Orders • Scheduling • The Reviewing Process . • Composition • Final Approval	
Chapter 7	Editing & DI	3 lectures

Reference Book:

- The green Screen Handbook Real Word Production Technique Jeff Foster Foreword by Jonathan Erland, Composite Components Company
- The Recording Engineer's Handbook, Owsinski, Bobby, Cengage Learning PTR (2013)
- Audio Engineering 101: A Beginner's Guide to Music Production, Dittmar, Tim, Focal Press (2011)
- What is Music Production? A Producers Guide: The Role, the People, the Process, Hepworth-Sawyer, Russ and Golding, Craig, Focal Press (2010)
- Creative Recording Volume 1: Effects and Processors, White, Paul, Music Sales America (2006)
- Creative Recording Volume 2: Microphones, Acoustics, Soundproofing and Monitoring, White, Paul, Music Sales
- The art of techniques of vfx for film maker, editor, and cinematographer by ERAN DENUR

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5
Third Year of B.Sc. (Animation)
(2024 Course under NEP 2020)
Course Code : 24CsAniU6203
Course Name : Lab Course on 24CsAni6202 (Post Production)

Teaching Scheme: TH: 4 Hours/Week

Credit :2

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

- Film & VFX Making Skills
- Advanced knowledge of Audio Recording Video Compositing

Course Objectives:

- To understand The Audio Recording & Video Compositing techniques
- To developed a Current technique in the Film Post Production Process
- To create interactive interface design of Film, Media, News and advertise.

Course Outcomes:

On completion of the course, the student will be able to–

- Understand Camera Concept, Audio, Video Synchronization & VFX Concept
- Creating the Folly sound of the character in the film.
- Compose and Render the Final Film Video format
- Students will have improved their Listening power to explore new ideas of Audio, Video and VFX in film composition

Course Contents

Assignment List:-

Sr. No.	Assignment name
1	Write a short script on a conversation between 2/3 people and record the scene or story. Re-record the dialogue in Audacity and make a meaningful complete audio visual with music.
2	Make an Advertisement on a College, Product, Cosmetics, Corporate subject. Record the Narration, Dialogue in audacity. Edit the meaningful complete audio visual with music.
3	Make the Short Informative Video. Record the Narration and dialogue of the Informative video in Audacity remove the noise, Apply Sound Effect on audio. Synchronize and edit in

	Premier.
4	Make a story board of an action scene. Capture the Scene and record the dialogue and Foley sound in Audacity. Edit and synchronize the Audio with its Video in Premier.
5	Take a minimum 1 minute cartoon video clip record the dialogue of those characters and change the pitch and cleared the audio.
6	Make a documentary film. Use of narration, Background music and synchronize the Audio with its Video.
7	Take a 1 min Scene of any movie. Re-record the dialogue in our voice and Lip Synch it properly.
8	Write the Script on Educational Topic (E-Content).Make a E-Content Video.
9	Make a short Horror film. Use of Narration, Dialogue, Background Music and Folly Sound for the short film. Create a Color Correction, Title, Subtitle, Credit list in premier pro. (Group Assignment)
10	Make a short film. Use of Narration, Dialogue, Background Music and Folly Sound for the short film. Create a Color Correction, Title, Subtitle, Credit list in premier pro. (Group Assignment)

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune - 5
Third Year of B.Sc. (Animation)
(2024 Course under NEP 2020)
Course Code : 24CsAniU6501
Course Name : Lab Course on e-Journalism

Teaching Scheme: TH: 2 Hours/Week

Credit 02

Examination Scheme: CIA : 20 Marks

End-Sem : 30 Marks

Prerequisite Courses:

- Basic knowledge of media
- Good observation skills
- Basic knowledge of design tools

Course Objectives:

- To Study fundamentals of online journalism
- To learn the ethics and Values of eJournalism
- To develop a visual Perspective towards Journalism.
- To broaden the understanding of media
- To better the use of multimedia tools
- To learn design for media and journalism.

Course Outcomes:

On completion of the course, student will be able to–

- Create visually engaging Content
- Design interactive content for online audiences
- Merging journalism with creative design.

Course Contents

Unit 1	Introduction to eJournalism and Digital Media	5 lectures
	● Definition of eJournalism ● Differences between traditional and digital journalism. ● Key online journalism platforms: Blogs, news websites, social media.	

	• Design in online news and storytelling. • Understanding UI UX	
Unit 2	Principles of Journalism and Ethics	5 lectures
	• Core principles of journalism: Accuracy, fairness, objectivity, and accountability. • Ethical challenges in online journalism: Clickbait, misinformation, and bias. • Copyright, plagiarism, and fair use in digital media.	
Unit 3	Storytelling in the Digital World	6 lectures
	• Narrative structure for digital platforms • Interactive storytelling • Using multimedia elements (audio, video, images). • Storyboarding for digital journalism projects.	
Unit 4	Web Design and User Experience (UX)	6 lectures
	• Introduction to UX/UI design principles for journalists. • Designing for readability and engagement: Typography, layout, and color theory. • Mobile-first design: Optimizing content for smartphones and tablets.	
Unit 5	Multimedia Journalism	6 lectures
	• Use of Video and Audio • The role of social media • Social media design • Infographics, shareable content, and hashtags.	
Unit 6	Experiential Learning	2 Lectures
	Create a blog using multimedia tools	

References

- "The Elements of Journalism" by Bill Kovach and Tom Rosenstiel.
- "Designing for the Web" by Jeffrey Zeldman.
- "The Art of Digital Storytelling" by Richard Koci Hernandez.
- "Journalism Ethics at the Crossroads: Democracy, Fake News, and the News Crisis" by Jonathan E. H. Lee.

