

DEEN DAYAL UPADHYAY KAUSHAL KENDRA

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Voc. 3D ANIMATION

COURSE SYLLABUS

M.Voc. 3D ANIMATION					
COURSE SYLLABUS – RESTRUCTURING - 2019-20 Batch onwards					
S. No.	SUBJECT CODE	SUBJECT TITLE	T/L/P	CATEGORY	CR
SEMESTER–I					
1	Major Core - 1	Animation Principles and Story Development	T	MC	6
2	Major Core - 2	Advanced Drawing for Animation	L	MC	6
3	Major Core – 3	Claymation and Stop Motion	L	MC	6
4	Major Core - 4	Advanced Graphic Design	L	MC	4
5	Elective Subject -1	A. Photography	L	ES	4
	Elective Subject -2	B. Videography			
6	Soft Skills	Communication & Creative Writing	T	SS	4
Total Credits for Semester - I					30
SEMESTER–II					
7	Major Core - 1	2D Animation	L	MC	6
8	Major Core - 2	Storyboarding	L	MC	6
9	Major Core – 3	3D Modeling and Texturing	L	MC	6
10	Major Core - 4	Digital Matte Painting	L	MC	4
11	Elective Subject -1	A. Character Designing	L	ES	4
	Elective Subject -2	B. Layout Designing			
12	Extra Disciplinary Elective	Scriptwriting	T	EDS	2
13	Soft Skills	Life Skills Training	L	SS	2
Total Credits for Semester - II					30
SEMESTER–III					
14	Major Core - 1	Advanced 3D Modeling	L	MC	6
15	Major Core - 2	3D Animation	L	MC	6
16	Major Core – 3	Dynamic Simulations	L	MC	6
17	Major Core - 4	Research Methodology	T	MC	4
18	Elective Subject -1	A. Gaming and Apps Designing	L	ES	4
	Elective Subject -2	B. Technical Animation			
19	Extra Disciplinary Elective	Documentation & Presentation Skills	L	EDS	2
20	Soft Skills	Digital Communication skills	T	SS	2
Total Credits for Semester - III					30
SEMESTER–IV					
21	Major Core - 1	Lighting and Rendering	L	MC	4

22	Major Core - 2	Advanced Compositing	L	MC	4
23	Major Core – 3	Media Laws and Ethics	T	MC	4
24	Elective Subject -1	A. Rotoscopy	L	ES	4
	Elective Subject -2	B. Character Animation			
25	Soft Skills	Professional Skills for Media	L	SS	2
26	Project	Project & Internship	P	PJ	12
Total Credits for Semester - IV					30

SEMESTER - I

TITLE OF THE PAPER : ANIMATION PRINCIPLES AND STORY DEVELOPMENT

Course Code : 19PAN1MCO1

No. of Hrs/week : 6

Credits : 6

Course Objectives:

- To provide an overview of the history of Animation and the fundamentals of Animation
- Giving exposure to various Types of Animation - Traditional to CGI Animation till date
- Students will be given a solid foundation of the principles of animation
- To guide the student through the various stages of the production process
- Students will be exposed to many creative process of story writing and concept development
- Students will be given Introduction to 2D Cel animation and essential observational studies

Learning Outcomes:

After completing this subject, Students will be able to:

- Experiment different types of animation and will be familiar with technical terms and and Pioneers of Animation
- Apply principles of animation in their works and will have exposure to Storyboard, character turn around, pose sheet, expression chart etc.
- Breakdown different stages of animation production and apply in their work
- Understand the requirements for creating 2D Cel animations and digital animations
- Develop a story idea and convert to script for animation and to storyboard

Unit-I: History of Animation, Animation Studios and Animators

10 Hours

Animation Definition, History of Animation – Starting from Early approaches to motion in art, Animation before film, Early Animation devices, Traditional Animation – The silent era, Walt Disney & Warner Bros., Snow White & the seven dwarfs, The Television era, Stop-motion, CGI Animation - till date. Major animation studios all over the world, Pioneer Animators, The nine old men and Experimental animations.

Unit-II: Different Types of Animation

20 Hours

- Traditional Animation - Cel Animation or hand drawn Animation
- Stop Motion Animation – Puppet Animation, Clay Animation, Cut-out Animation, Silhouette Animation, Model Animation, Object Animation etc.
- Computer Animation – 2D Animation, 3D Animation

Unit-III: The 12 basic Principles of Animation

20 Hours

Squash and stretch, Anticipation, Staging, Straight Ahead Action and Pose to Pose, Follow Through and Overlapping Action, Slow In and Slow Out, Arc, Secondary Action, Timing, Exaggeration, Solid drawing, Appeal.

Unit-IV: Animation Production Process, Camera Angles and Shots

20 Hours

Understand Animation Requirements, Basic steps in Pre-Production, Production and Post-Production.

Animation techniques, Technical advancements in animation. Animation equipment - Cel - Light box - Peg holes and Peg bars - Line/Pencil tests, Field charts. Animation Glossary - The exposure sheet (X Sheet), Key frames, In-betweens, Clean-up etc. Layers, Ease in & Ease out, X-Sheet handling, Field Chart usage, Camera Panning, Zoom-in & Zoom-out, Cut-shot, Dissolve transform, trick shot, hook-up poses etc. Layout and composition, Understanding various Camera Angles, Shots and Transitions

Unit-V: Story Development

20 Hours

How to create story for animation – Developing story idea or concept, Resources and ideas from life, different genres, types of stories, sources of storyline, creative exercises to create story, Character development in the story, Characterization dialogues, Target audience, animation script, shot, scene, sequence, screenplay, story-boarding, designing the Plot, Plot development and plot devises, story narration, Elements of story, Conflict, Resolution, Storytelling and Visualization of the story.

Teaching Methodology:

Extensive Theory & Practical sessions, Seminars and Presentations, Drawing Sessions, Traditional Animation Sessions using Light-box, Workshops, Guest Lectures, Industry Experts, Assignments, Industry Visits, Movie Showcase

Assignments:

Seminars, Presentations, Group Presentations, Story creation, story-board creation, Flip book animation, Experiment different types of animation – Stop motion, cut-out, silhouette, Cel etc. Cel animation samples - Bouncing Ball, Walk cycle etc. Animation Movie Studies – Analysing Traditional Animation Movies – Snow White and Seven Dwarfs, Bambi, Pocohontas, Lion King, Dumbo, Mulan, Prince of Egypt etc.

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Written = 100 Marks

Essential Reading:

1. The Illusion of Life: Disney Animation - Frank Thomas and Ollie Johnston
2. The World History of Animation: Stephen Cavalier
3. Cartoon Animation - Preston Blair
4. Timing for Animation: Harold Whitaker and John Halas
5. How to Make Animated Films: Tony White
6. Character Animation-2D Skills for Better 3D: Steve Roberts
7. The Animator's Survival Kit - Richard Williams
8. Story: Substance, Structure, Style and the Principles of Screenwriting by Robert McKee
9. The Way of the Storyteller by Ruth Sawyer

Recommended Reading:

1. The Anime Encyclopaedia: A Guide to Japanese Animation Since 1917: Lowry
2. Animation from Pencils to Pixels: Classical Techniques for the Digital Animator: Tony White
3. History of Animation - https://en.wikipedia.org/wiki/History_of_animation
4. Principles of Animation - https://en.wikipedia.org/wiki/12_basic_principles_of_animation
5. YouTube Video - <https://www.youtube.com/watch?v=haa7n3UGyDc&feature=youtu.be>
6. Enchanted Drawings: The History of Animation: Charles Solomon
7. Cartoons: One Hundred Years of Cinema Animation: Giannalberto Bendazzi
8. Of Mice and Magic: Leonard Maltin
9. Before Mickey: The Animated Film, 1898-1928: Donald Crafton
10. The Animator's Workbook: Step-By-Step Techniques of Drawn Animation: Tony White
11. Comic Book Design: The Essential Guide to Creating Great Comics and Graphic Novels, Gary Spencer Millidge
12. The Animation Book: A Complete Guide to Animated Filmmaking--From Flip-Books to Sound Cartoons to 3- D Animation, Three Rivers Press; ISBN-10: 0517886022

TITLE OF THE PAPER : ADVANCED DRAWING FOR ANIMATION

Course Code : 19UAN1MC02

No. of Hrs/week : 6

Credits : 6

Course Objectives:

- To become fluent with capturing the human and animal form, proportions, structure, volume and shading techniques.
- To explore the look and feel for animation through concept art. Planning character design, layout design, illustration style, composition, staging & backgrounds.
- To study the Thumbnails for storyboard and Animation.
- To focus on Line of Action, Rhythm, Twisting, balance of human figures, movement of figure in extreme poses.

Learning Outcomes:

- Capable of drawing gender proportions with differentiation in age.
- Understand the concepts of Anatomy and drawing.
- Understand the principle used in story boarding.
- Will be able to draw postures and gestures from live characters
- Gain knowledge about the elements of Anatomy.

Unit-1: Proportion and Perspective:

Hours: 10

Study of Ideal proportion of male and female figure with different ages and other different props. To introduce Gesture Drawing: Outdoor study of leaves, plants, trees, flowers for building background design.

Unit-2: Anatomy and Drawing:

Hours: 20

Understanding of the relationship of bones and muscles at rest and in movement. To be able to translate this to creating and maintaining correct volumes. Studying human and animal movement through sequential drawings, gesture drawing

Unit-3: Live Pose Study:

Hours: 20

Understanding the character design, background design, character pose, camera angles and story board frame by frame. Dynamic Figure Drawing of solid live poses with quick gesture drawings. Understanding of Mechanics and pivot points in skeleton emphasise the construction of drawings.

Unit-4: Basics of story board Fundamental:

Hours: 20

Study of Thumbnails for story board, layout and Animation. To study the principle of Animation.

Unit-5: Action and Emotion:

Hours: 20

Motion drawing including Human, Animal and Birds. Focus on human emotion, extreme poses, weight, balance and expression. Methods of lip-syncing to sound breakdowns.

Teaching Methodology:

Extensive practical sessions, drawing session, Field Visits for out-door studies, Zoo Park, museum etc.

Assignments:

Outdoor and indoor study human in action, study light and shade using still life, Different poses of human, animal, cartoon and birds.

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Practical = 100 Marks

Essential Reading:

1. Dynamic Figure Drawing by Burne Hogarth
2. The Vilppu Drawing manual – Glen Vilppu
3. The Art of Animal Drawing – Ken Hultgren
4. Bridgman’s complete guide to drawing from life
5. Anatomy and Drawing – Victor Perard

Recommended Reading:

1. Animals in Motion – Eadweard Muybridge
2. The Human Figure in Motion - Eadweard Muybridge
3. Betty Edwards, The New, Drawing on the Right Side • of the Brain, Harper Collins Publishers, 2001
4. Betty Edwards, The New, Drawing on the Right Side of • the Brain, Workbook Souvenir Press Ltd., London, 2002
5. The Animator’s Survival Kit – Richard Williams
6. The Animator’s workbook – Tony White
7. Animation from Script to Screen – Shamus Culhane
8. The Illusion of Life: Disney Animation.
9. Cartoon Animation by Preston Blair

TITLE OF THE PAPER : CLAYMATION AND STOP MOTION

Course Code : 19PAN1MCO3

No. of Hrs/week : 6

Credits : 6

Course Objectives:

- To provide an overview of clay-modeling & stop-motion animation
- Understanding the process of clay-modeling & stop-motion animation
- Introduction to techniques of clay-modeling and software for stop-motion animation

Learning Outcomes:

- The student will be able to create a clay model and make it animate.

- Create backgrounds for an animation video.
- Create a short animation Video using Stop-Motion

Unit-1: Basics of Clay Modeling

Hours: 18

Model from a still life set-up in the classroom, a sculptural equivalent in clay, emphasizing inter-relationships of form, space and surface, use different types of clay; plasticine, terracotta

Unit-2: Types of Clay Modeling

Hours: 18

Create different characters in clay, Cartoons, human figures, Animals, Props etc.

Clay Modeling Techniques: Sculpting tools handling, Clay handling techniques, Analyzing and understanding the challenges faced during clay modeling and shooting, Props & lip-synch handlings, Preparation of a prototype work product/pre-visualisation for review. Puppet building – puppet construction-puppet Animation.

Unit-3: Process and techniques of stop-motion animation

Hours: 18

Camera angles, Character positioning, Frame by Frame controls, Positioning and actions of secondary characters and Props, Different types of stop motion animation.

- Traditional frame-by-frame capture
- Claymation, Cut-out animation, Silhouette animation, Found object animation, hand drawn animation

Unit-4: Introduction to stop-motion animation software

Hours: 18

Introduction to available software for Stop-Motion Animation, Learning to use Monkey Jump Software, Preparation of the following stop motion animation end-products, Film, Television series, Advertisement, Education content, Application of stop motion animation techniques, adding audio to animation

Unit-5: Concept Creation for Stop Motion Animation

Hours: 18

How to create action and movement of form, how to create your own concept, understanding the limitations and challenges of the medium, Creation and Execution of the concept

Teaching Methodology:

Extensive Practical sessions with required theory classes, Drawing Sessions, Sculpting using clay, Studio Practice, Workshops & Seminars, Guest Lectures, Industry Experts, Assignments, Industry Visits

Assignments:

Use clay to create a stop-motion animation, use objects like coins, puppets, marbles, toys and mannequins to create a stop-motion animation. Create a short animation to show

movement

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Practical = 100 Marks

Essential Reading:

1. The Art of Stop motion animation: Ken A Priebe
2. Stop motion: Craft skills for model Animation: Susannah Shaw
3. Stop motion: Passion, Process and Performance: Barry JC Purves
4. Creating 3D Animation - The Aardaman Book of Film making: Peter Lord & Brian Sibley
5. Stop motion Armature Machining: A Construction Manual: Tom Brierton

Recommended Reading:

1. A Century of Stop Motion Animation from Melies to Aardaman: Ray Harry Hausen
2. Stop motion Filming and Performance: Tom Brierton
3. Stop motion Puppet Sculpting: Tom Brierton

TITLE OF THE PAPER : ADVANCED GRAPHIC DESIGN

Course Code : 19PAN1MCO4

No. of Hrs/week : 4

Credits : 4

Course Objectives:

- A detailed understanding of Design elements and its Principles
- Importance of colour theory, typography and texture
- Common uses of graphic design
- To know how to create texture for 3D elements.
- To know techniques of Restoration.

Learning Outcomes:

- Understand the elements and Principles of design.
- Understand the color theory, texture and typography.
- Understand the tools, modes, and techniques for clean plate.
- Capable of working with 3D files, video, advanced layer manipulations, animated GIF images.

Unit-1: Introduction:

Hours: 10

Graphic design and its role in visual communication, Introduction to Drawing, Free flowing designs, Geometric Designs, Positive and Negative space, Elements of Design –Dot, Line, Shape, Value/Tone, Texture, Space. Principles of Design – Balance – Symmetrical or

Asymmetrical, Repetition / Rhythm, Focus / Emphasis / Dominance, Unity / Harmony, Scale, Proportion, Contrast, Depth.

Unit-2: Color Theory:

Hours: 10

Colour wheel, lightness, saturation hue, Typography-typefaces, point size, tracking, kerning, and leading, Page layout techniques-image placement, text layout and style, Texture- use and simulation of textures- natural, Experimental design using artificial texture, Photography as texture background, Textured typography

Unit-3: Common uses of graphic design:

Hours: 10

Identity (logos and branding), Publications (magazines, newspapers and books), Print advertisements, posters, Website graphics and elements, signs and product packaging, kiosk layout.

Unit-4: Clean Plate:

Hours: 15

Selection tools, Input/output formats and color spaces. Canvas size vs. Image size, Resizing and resampling images, Layer and blending modes, Selection tools, cropping images, Essential keyboard shortcuts, Retouching techniques, Contrast and Color balance, histogram. Alpha channels

Unit-5: Working with 3D:

Hours: 15

Working with Video and 3D files, Texture Painting for 3D objects: Revisiting clone brush and Healing brush, Texture painting. Manipulations: Advanced Layer Manipulations, Image Optimization, understanding animation and making moving images, Animated GIF Images.

Teaching Methodology:

Extensive Theory & Practical sessions, Drawing & Coloring Sessions, Computer Lab sessions, Workshops & Seminars, Guest Lectures, Industry Experts, Assignments, Industry Visits

Assignments:

Concept Designs in color, Abstract designs representing Principles & Elements of Design, CGI – Software outputs

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Practical = 100 Marks

Essential Reading:

1. Kelly McCathran and video2brain, “Adobe Photoshop CS6: Learn by Video”: Core Training in Visual Communication by (Jun 18, 2012)
2. Peter Lourekas and Elaine Weinmann,” Visual QuickStart “GuideA, ug 18, 2012
3. Philip B. Meggs, Alston W. Purvis, Meggs’ “History of Graphic Design”, 5th Edition November 2011.

4. James D. Foley, Andries van Dam, "Computer Graphics: Principles and Practice in C" Publisher: Addison, Wesley Professional (2nd Edition) 2nd Edition 1982.

Recommended Reading:

1. Multimedia – <http://www.slideshare.net/kenshin1017/introduction-to-multimedia-4663053>
2. Elements & Principles of Design – <http://teaching.ellenmueller.com/drawing-i/resources/elements-principles-of-2d-design/>
3. Design Principles – http://www.design-skills.org/design_principles_guidelines.html

TITLE OF THE PAPER : PHOTOGRAPHY

Course Code : 19PAN1ES01

No. of Hrs/week : 4

Credits : 4

Course Objectives:

- Techniques of Photographic Composition is intended to help students understand the basic knowledge of image making using digital camera. Students will be introduced to basic picture composition.

Learning outcomes:

- Understand the visual composition techniques and technical skills
- Capable of working on the DSLR Camera.
- Familiarity with photographic materials as well as artistic composition and design.
- Understand the lighting techniques used in photography.

Unit-1: Aesthetics:

Hours: 12

The Psychology of Visual Perception - Visual Aesthetics - Art of Filmmaking - Stages in Brief.

Unit-2: Composition:

Hours: 12

Photography as a communication tool - Basics of visual composition - Visuals - Image Sizes - Camera Angles - Elements and Principles of picture composition - Balance and Structure - Composing movement, rule of space - Rule of odd - Rule of third - Golden triangle etc. - Perspective and depth of field - foreshortening.

Unit-3: Camera:

Hours: 12

Basic features of DSLR camera - human eye and camera - Principles of Image formation - Properties of light and its control - Shutter - Lenses and exposure controls - Aperture, focus and depth of field, depth of focus. Colour Temperature, Direction, and Quality of Light etc. Measurement of light - Light meters. Histogram - Understanding basics of histogram.

Unit-4: Shooting for Chroma-key:

Hours: 12

Modern day Travelling Mattes and how they work: Luma-Key matte, Chroma-key matte, Difference mattes, Blue Screen matte, Green Screen mattes, etc. Green Vs. Blue screen, shadow matting, poorly lit green screens and its problems, Pulling the Mattes, different type Keyes

Unit -5: Lighting Techniques for Chroma-key Shoot:

Hours: 12

Basic Setups for Shooting Green Screen: Lights- Key, Fill, Back, Side Spill suppressor light - Matte keying fabrics and materials, Flood lights an Umbrella lights, Lighting the backing, Lighting the talent, creating tracking markers for motion tracking, White balancing the camera before shooting, Shooting with HD camera. Matching with background objects, Interacting with the background and objects

Teaching Methodology:

- Classroom Lectures
- Workshops
- Guest lectures
- Interaction with Industry Experts

Assignments:

- Photographs and Videos
- In-door Study & Outdoor Study
- Two projects by shooting green screen and composite it with a background

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Practical = 100 Marks

Essential Reading:

1. Jack Newbart, [1989] Industrial Photography, Am Photo, Watson Guptill Publications, New York.
2. Basic Principles of Photography: Gerald Millerson
3. Grammar of Shot (Second edition): Roy Thompson (Focal Press)
4. Freeman, Michael. *The Photographer's Eye: Composition and Design for Better Photography*
5. Bordwell and Thompson, *Film Art: An Introduction*

Recommended Reading:

1. Nichols,Bill. *Movies & Methods*
2. Langford J. J.*Basic Photography*
3. How to read a film: James Monaco
4. The T.V. Production: Handbook - Zetti Herbert
5. Elements of film: Lee .R. Bobker
6. The Art of Pictorial Composition: Wolohomok

Course Code : 19PAN1ES02

No. of Hrs/week : 4

Credits : 4

Course Objectives:

- Techniques of Videography Composition is intended to help students understand the basic knowledge of Film making using Video camera.
- Students will be introduced to basics of video composition indoor and outdoor.

Learning outcomes:

- Knowledge and handling skills of different video cameras with proficiency
- Gain knowledge of the variety of video cameras and their formats.
- Exposition and exploration of different concepts (news, events, marriage, documentation)
- Understand the various compositional techniques.
- Understand the aesthetics of Lighting and Video production.

Unit-1: Video Camera Types and Formats:

Hours: 12

Analog vs. Digital - FPS, Video Formats, NTSC, PAL SEQCAM - Different Types of Video Cameras - VHS, U-Matic, Beta, DV, Dig Beta, HDTV
Video Production Techniques - Film Cameras/Persistence of Vision

Unit-2: Basics of Video Camera:

Hours: 12

Video Camera Operations - Parts of the Camera, Camera, Mounting Devices/Lens/Filters - Types of Camera Shots, Camera Angles, Camera Movements - Studio Setup and Operations - Single Camera and Multi-Camera Setup

Unit-3: Compositional Techniques:

Hours: 12

Emphasis, DOF, Focus-Rule of Third/180 Degree rule - Framing, Aspect Ratio, Wide Screen Video, Framing Subject - Lead Room, Headroom - Composition & Movement - Different Types of Lens, Filters

Unit-4: Lighting Techniques:

Hours: 12

Three Point Lighting -Lighting for Indoor/Outdoor - Artificial, Natural Light, Hard and Soft Lights – Reflectors - Indoor Lights

Unit –5: Production Techniques:

Hours: 12

Aesthetics of Video Production – Grammar - Basic Videography Rules

Teaching Methodology:

- Classroom Lectures
- Workshops
- Guest lectures
- Interaction with Industry Experts

Assignments:

- Photographs and Videos
- In-door Study & Outdoor Study
- Two projects by shooting green screen and composite it with a background

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Practical = 100 Marks

Essential Reading:

1. Jack Newbart, [1989] *Industrial Photography*, Am Photo, Watson Guptill Publications, New York.
2. *Basic Principles of Photography*: Gerald Millerson
3. *Grammar of Shot (Second edition)*: Roy Thompson (Focal Press)
4. Mascelli, Joseph V. *Five Cs of Cinematography*

Recommended Reading:

1. *How to read a film*: James Monaco
2. *The T.V. Production: Handbook* - Zetti Herbert
3. *Elements of film*: Lee .R. Bobker
4. *The Art of Pictorial Composition*: Wolohomok

TITLE OF THE PAPER : COMMUNICATION AND CREATIVE WRITING

Course Code :

No. of Hrs/week : 4

Credits : 4

Course Objectives:

- To educate students on the various Communication processes and types and thereby refining their attitude towards personal and professional success.
- To empower students to interact, participate, involve in all written and oral presentations and assignments.
- To learn the principles of generating ideas and creative writing-beginning with paragraphs to writing short stories and essays.

Learning outcomes:

- to communicate in speech and writing following the process of communication and overcoming the barriers.
- To be able to give presentation and attend viva more assertively.
- To have understood the importance of perennial learning and interactive listening.

Unit-1: Basic Principles of Communication **Hours: 12**

Introduction-Understanding Communication-The Communication purpose/goal, process, barriers, channels and types. Importance of Communication in the 21st century.

Unit-2: Introduction to speaking and presentation skills **Hours: 12**

Self-introduction and concept introduction techniques – selling and negotiation skills, effective listening, effective reading, rebuttals, FAQs, for power presentations.

Nonverbal communication and behavior in GDs, public speaking and interviews.

Unit-3: Introduction to Writing **Hours: 12**

The power of words in thinking, speaking and writing- same words as different parts of speeches. Styles of writing, types of compositions, appreciation of stories and poems.

- R. K. Narayan's short story, *The Axe*
- Native American poem, *How to make Good Baked Salmon from the River*
- An Extract from the French novella, *The Man Who Planted Trees*

Unit-4: Types of Writing **Hours: 12**

Creative writing (processes and challenges of creative writing). Fictional and Non-Fictional writings- Short Story Writing and Poetry Compositions. Media writing- Characteristics of Print and Broadcast Media, New media, Travel internet, mobile phones and writing for blogs.

Unit -5: Grammar for eloquent communication **Hours: 12**

Subject verb agreement, prepositions, tenses, active passive voice, direct indirect speech and punctuation. Describe the organization's health, safety and security policies and procedures.

Teaching Methodology:

- Student presentations orally and written
- Classroom Lectures
- Group Discussion
- Workshops
- Guest Lectures

Assignments:

- Extensive Creative Writing Projects
- Group Production of Literary Magazine
- Short paragraphs and idea generation and development into stories.

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Written = 100 Marks

Essential Reading:

1. Adair, John. *Effective Communication*. London: Pan Macmillan Ltd., 2003
2. Prasad, H. M. *How to Prepare for Group Discussion and Interview*. New Delhi: Tata McGraw-Hill Publishing Company Limited, 2001.

3. The Cambridge Introduction to Creative Writing- DAVID MORLEY, Cambridge University Publications, First edition, 2007
4. The Cambridge Introduction to Creative Writing- DAVID MORLEY, Cambridge

Recommended Reading:

1. Guffey, Mary Ellen. Essentials of Business Writing. Ohio: SouthWestern College Pubg., 2000.
2. Strunk, William, Jr. and White, E.B. The Elements of Style, 3rd ed. (Macmillan, 1979)
3. Barkas, J.L. How To Write Like a Professional (Arco, 1984).
4. Rules for Writers (Book 7), Bedford/St. Martin's; 7th edition (2011)
5. Kumar.J. Keval, (2008). Mass Communication in India, JAICO Publication India Pvt. Ltd

SEMESTER - II

TITLE OF THE PAPER : 2D ANIMATION

Course Code : 19PAN2MC01

No. of Hrs/week : 6

Credits : 6

Course Objectives:

- To guide the students from developing an idea through to a story creation, to storyboards, animatic, character designing and animating it.
- Introduction to 2D Animation software
- To teach Storyboarding for Animation, Digital Pre-production and Animatics
- To teach them to apply fundamental principles of animation in both traditional cel-animation and in digital space.
- Appropriately plan out their animated scenes visually; To get an understanding of composition and visual storytelling; To gain a basic understanding of character and scene design.
- Student will study advanced timing and weight through a series of projects designed to demonstrate the principles of animation.

Learning Outcomes:

After completing this subject, Students will be able to:

- Communicate ideas effectively in visual, oral and written forms.
- Create animated sequences from the development of the original concept through design to final film or video production.
- Communicate ideas, believable action and emotion effectively by employing principles of animation and performance in all aspects of drawing.

- Integrate the concepts, principles and theories involved in the physics of animation in all aspects of drawing.
- Animate objects and figures

Unit-1: Introduction to 2D Animation Software

10 Hours

Introduction to Adobe Animate software, Workspace and Workflow overview, Customize the workspace, Using the Stage and Tools Panel, Understanding timeline, Tools and their usage, Property inspector - Library panel - Color panel, Understanding layers, Layer folder, Drawing using pencil, line and brush tools - About overlapping shapes – Snapping – Working with color, strokes and fills - choosing colors, choosing line style, designing and alignment of elements, drawing panels - Time-line animation. Working with project - Importing artwork - Scale content / stage size. Using Rulers, guides, grid, Test and Publish. Learn about vector and bitmap graphics - Selection objects - Moving, copying and deleting objects - Arranging object - Stack, Align, Group, Break apart groups and object.

Unit-II: Symbols and Tweening animation

20 Hours

Basics of Animation, Methods of Animation, Technical Animation creation. Applying layer type - adding sounds. Working in the timeline, Key frame Animation, working with symbols, Classic Tween, Motion tween, Shape tween, Break apart and distribute. Intro to Motion, Guide Motion, Guide Paths, Mask layers, Creating Buttons, Using Fonts, Setting up scenes for first project, Publishing movies, Working with custom colours and gradients, Practicing principles of Animation. Timing for Animation: Ease in & Ease out, Camera Panning, Zoom-in & Zoom-out, Cut-shot, Dissolve transform. Using symbols, instances and library assets - Symbols overview - Types of symbols - Create symbols - Convert animation on the Stage into a movie clip.

Unit-III: BG & Layout Creation

20 Hours

Background Designing, Layout Creation, Over-layers creation - Story-boarding to Animatics – Storyboard – Using Camera, visual continuity, Hook-ups, OL & UL, Props, transitions. Camera panning techniques. Visualise the Characters, Location and story props. Creation of Animatic - Scanning storyboard panels and synchronizing it with the sound tracks. Layout Composition – Background, Composition, Background colouring, - Camera Movements Staging, Scaling.

Unit-IV: Timelines and ActionScript

20 Hours

Creating motion - Creating key frames - Representations of animation in the Timeline - Frame rates - Frame-by-frame animation - Onion skinning – Move the playhead. Create frame-by-frame animation, Character Construction, Character Rigging, Symbol Construction, Symbol Animation, Symbol Library Management, Creating Buttons, Button states, working with scenes, Mask layers, Ease-in, Ease-out. Using Principles of animation, Loops, Cycles and Holds, Walk cycles, SFX in Flash. Introduction to action scripting in flash and using it

for interactivity.

Unit-V: Animation and Interactivity

20 Hours

About Inverse Kinematics, Bone styles, Pose layers – Add bones to symbols – Add bones to shapes – On stage controls Animate an armature in the timeline - Mask layers - Using Timeline effects - Special effects - Filter – Animation Filters - Create preset filter libraries - Blend modes in Flash - Working with text - Working with sound - Working with video, Publish settings. Applying the principles of animation. Understanding and applying complex movie clip properties, layers, library, Buttons etc. How to use story-board effectively, how to plan the action before starting animation, how to work in a team for animation. Creating your own / group project, Understanding the different industries and domains where 2D animations can be used like – Entertainment, Education, Technical, e-learning etc.

Teaching Methodology:

Extensive Theory & Practical sessions, Drawing & Colouring Sessions, Computer Lab sessions, Workshops & Seminars, Guest Lectures, Industry Experts, Assignments, Industry Visits

Assignments:

Characters and Props creation in 2D and Flash, Background with over-layers' creation, Staging, Character Animation in Flash, Animation with EFX, 2D Compositing in Flash, Sample animations - Bouncing Ball Animation, Walk Cycle, Run Cycle, 4 Leg Walk cycle, Fly Cycle.

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Practical = 100 Marks

Essential Reading:

1. The Encyclopedia of Animation Techniques: A Comprehensive Step-By-Step Directory of
2. techniques
3. An Inspirational Gallery of Finished Works: Richard Taylor
4. How to Write for Animation: Jeffrey Scott
5. Writing for Animation, Comics and Games: Christy Marx
6. Animation Writing and Development: From Script Development to Pitch: Jean Ann Wright
7. Animation: The Whole Story- Howard Beckerman

Recommended Reading:

1. How to Draw What You See: Rudy De Reyna
2. Figure Study Made Easy: Aditya Chari
3. Figure Drawing Without a Model: Ron Tiner

4. Classic Human Anatomy: The Artist's Guide to Form, Function and Movement: Valerie L. Winslow
 5. Anatomy for the Artist: Sarah Simblet
 6. The Art of Animal Drawing: Construction, Action, Analysis, Caricature: Ken Hultgen
 7. Animal Drawing: Anatomy and Action for Artists: Charles R. Knight
 8. Animal Anatomy for Artists: Eliot Goldfinger
 9. Bird Anatomy for Artists: Natalia Balo
 10. Animation from pencils to pixels: classical techniques for digital animators, Tony White
 11. Animation Art: From Pencil to Pixel, the world of Cartoon Anime and CGI- Jerry Beck
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TITLE OF THE PAPER : STORYBOARDING

Course Code : 19PAN2MC02

No. of Hrs/week : 6

Credits : 6

Course Objectives:

- How to create a story-board and understanding the standard practices
- Character designing techniques and acquiring professional skills in designing characters

Learning Outcomes:

- Understand the importance of story board in the field of animation and film industry.
- Gain knowledge of developing story board for any given concept.
- Understand the shots, camera angles and techniques involved while developing a story board.
- Learn the types of story board, creation and development.
- Capable of creating the workflow and pre-production process.

Unit-1: Basics of Story Board

Hours: 18

Understanding the Concept and Story Development: Introduction to Principles of Drawing, Scripting & Story boarding for animation: Creation and Development. Storyboard – Definition, Importance of storyboarding, Storyboard formats, Composition rules – Concept of panels and its usages, Camera angles and shots, visual continuity, Hook-ups, OL & UL, Props, transitions.

Unit-2: Types of Story Board

Hours: 18

Introduction of Story Board and Types of Story Board. Scripting & Story boarding for animation. Creation and Development.

Unit-3: Techniques of Shots & Cameras

Hours: 18

Applying Angles and Shots: Understanding different camera angles and shots and applying in your own group project. Camera Panning techniques, Zoom-in & Zoom-out, Cut - shot,

Dissolve transform, trick shot, hook-up shot etc. Using standard symbols in story-board to depict the camera angles, zooming options etc. Creating your own animatics

Unit-4: Introduction to Character Design & Props

Hours: 18

Props Design: Create your own cartoon character and its relative props. Understanding the Character Bible: size relation chart and their respective props etc.

Unit-5: Workflow of 2D

Hours: 18

Understanding the 2D Animation Workflow: Understanding the entire pre-production process involved in 2D Animation. Story-boarding to Animatics – Camera panning techniques. Visualise the Characters, Location and story props. Create a story-board for their own characters, dialogues, Experiment different types of story-board, Creation of Animatic - Scanning storyboard panels and synchronizing it with the sound tracks.

Teaching Methodology:

Extensive Theory & Practical sessions, Drawing & Coloring Sessions, Workshops & Seminars, Guest Lectures, Industry Experts, Assignments, Industry Visits

Assignments:

Story creation, story-board creation, animatics creation, character turn-around and other charts.

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Practical = 100 Marks

Essential Reading:

1. How to Draw Animation- Learn the Art of Animation from Character Design to Storyboards and Layouts: Christopher Hart
2. The Art of the Storyboard - Storyboarding for Film, TV, and Animation: John Hart
3. Exploring Storyboarding: Wendy Tumminello
4. The Art of the Storyboard - Storyboarding for Film, TV, and Animation: John Hart

Recommended Reading:

1. Directing the Story by Francis Glebas
 2. Prepare to Board! Creating Story and Characters for Animation Features and Shorts, 2nd Edition by Nancy Beiman (2012)
 3. http://truecenterpublishing.com/photopsy/camera_angles.htm
 4. **Cartooning: Character Design (HT291) (How to Draw & Paint) Paperback – April 1, 2006 by Editors Of Walter Foster (Editor), Sherm Cohen (Illustrator) (Amazon.Com)**
 5. Sketching for Animation by Peter Parr
 6. The Illusion of Life Disney Animation by Frank Thomas and Ollie Johnston
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TITLE OF THE PAPER : 3D MODELING AND TEXTURING

Course Code : 19PAN2MC03

No. of Hrs/week : 6

Credits : 6

Course Objectives:

- The objective of the subject is to impart the skills to visualize objects in 3D and also to learn the methodologies of creating 3D environments.
- To make students understand the detailed process of 3D modeling, Texturing in the created models.

Learning Outcomes:

Students will:

- Learn to work with polygonal primitives. Understand the usage of primitives in developing a model.
- Understand the basic texturing techniques in Maya
- Develop skills of set modelling and environment with polygons, shaders and materials in Maya
- Have hands-on experience in modelling with NURBS
- Learn the basic skills in UV texturing and UV mapping.

Unit-1: Introduction to modeling tools

Hours: 18

Modeling with polygon – Modeling props and objects - working with faces, edges and vertex -- advantage of low poly modeling and high poly model _ introduction to the basic texturing in Maya

Unit-2: Set Modeling

Hours: 18

Introduction to set modeling - modeling castle, building etc – advanced props modeling - measurements and scale in Maya - Modeling an environment With polygons, types of shaders and materials in Maya

Unit-3: Introduction to Texturing

Hours: 18

Modeling with subdivision surfaces – subdivision surface levels – refining surface components – texturing techniques for subdivision surfaces –NURBS Topology.

Unit-4: Conversion of Polygons

Hours: 18

modelling with Polygons using nurbs curves – Modeling with NURBS - Modeling with tools like loft, revolve etc – Convert nurbs to polygons - polygons to nurbs

Unit-5: UVs & Photoshop Texturing

Hours: 18

UV texturing: preparing the textures from Photoshop for Set modeling - UV mapping and types of UV mapping - Uses of hybershade - nodes in hybershade

Teaching Methodology:

Extensive Theory & Practical sessions, Drawing Sessions, Guest Lectures, Industry Experts, Assignments, Industry Visits. 3D Animation Movie Studies – Analyzing 3D Animation Movies – Toy Story Tangled, Rio, Up, Rango etc.

Assignments:

Creating a New 3d world with different props in it _ And texture that using shaders and textures

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Practical = 100 Marks

Essential Reading:

1. DariushDerakhshani, “Introducing Autodesk Maya 2015, Jon Wiley & Sons, (2014).
2. Maraffi, Chris (2004). Maya Character Creation: Modeling and Animation Controls. New Riders.
3. 1. Animation from pencils to pixels: classical techniques for digital animators, Tony White ISBN-10: 0240806700
4. 2. 3D Automotive Modeling: An Insider's Guide to 3D Car Modeling and Design for ... By Andrew Gahan
5. 3. Introducing Autodesk Maya 2012 By DariushDerakhshani.

Recommended Reading:

1. 3ds Max Speed Modeling for 3D Artists by Thomas Mooney.
2. Beginning Blender: Open Source 3D Modelling, Animation, and Game Design by Lance Flavell, Apress
3. 3D Modelling and Animation by Michael G, Igi Publishing.
4. The fundamentals of 3D Modeling , texturing and Animation Author Chopine, Focal press
5. 3D Modeling For Beginners: Learn everything you need to know about 3D Modeling Author: Danan Thilakanathan
6. 3D Modelling, Animation, and Rendering, Michael E. Mortenson, Createspace.
7. Exploring 3D Modeling with Cinema 4D, Author Munir Hamad
8. Blender 3D Printing , Vicky Somma
9. Autodesk Maya 2018, Prof Sham Tickoo Purdue.

TITLE OF THE PAPER : DIGITAL MATTE PAINTING

Course Code :

No. of Hrs/week : 4

Credits : 4

Course Objectives:

- Using drawing tablet effectively

- Demonstrate how to utilize the tools within Photoshop
- Identify the steps required to create a concept project
- Apply an understanding of Composition, Perspective, and the Anatomy of Light
- Define the characteristics of Perspective
- Apply artistic direction from their instructor and peers to their own work

Learning Outcomes:

- Understand the basics of brushes and the basic tools involved in digital painting.
- Capable of creating shapes, layers with brushes.
- Acquire knowledge about the uses, scopes, and key frames of Rotos.

UNIT-1: Digital Paint Introduction

Hours: 12

The Photoshop Workspace, Brush Basics - Pen Tool Basics - Capture Brush Tip Shapes Adding and changing Brush Dynamics -Painting and Blending Techniques - watercolour and oil painting using Photoshop-Illustration techniques.

UNIT-2: Set Design for 2D Animation

Hours: 12

Creating Shape Layers and Paths - Stroking Paths with Brushes – Drawing - Sketching and painting of the background elements - Value and color in character creation - Mood lighting - Using and blending edges in painting, Creating textures and patterns, Painting a cloud, Painting simple and fantasy backgrounds.

UNIT-3: Masking Techniques

Hours: 12

Creating, Saving, and Loading Selections - Combining and Modifying Selections - Channels and Masking Techniques - preparing the background plate - articulated mattes - plate restoration, plate extension - adding 3D elements - creating sky mattes, static matte - set extension - color grading.

UNIT-4: Rotoscopy

Hours: 12

Rotoscoping - Uses and advantages of rotoscoping, Creating rotos with splines, Hierarchical parent and child roto shapes, Interpolation technique, Keyframe rotos, Final inspection, Rotoscope motion blur and semi transparency

UNIT-5: Retouch

Hours: 12

Wire/Rig removal techniques, Removing unnecessary elements from the frames.

Teaching Methodology:

Extensive Theory & Practical sessions, Drawing Sessions using tablets, Guest Lectures, Industry Experts, Assignments, Industry Visits.

Assignments:

Creating the BG environment using Photoshop

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Practical = 100 Marks

Essential Reading:

1. Digital Character Design and Painting: Don Seegmiller
2. Bold Vision: A Digital Painting Bible: Gary Tonge
3. Digital Fantasy Painting: Michael Burns

Recommended Reading:

1. Graphic Design New Basics, Author: Princeton Architectural Press.
 2. Beginners Guide to Digital Painting in Photoshop by Aleksande and Tilbury.
 3. Practical Techniques of Digital Art Masters by 3dtotal Publishing.
 4. An Insight into Creative Drawing by 3dtotal Publishing.
 5. A Guide for the Realist Painter, by James Gurney , 2010
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TITLE OF THE PAPER : CHARACTER DESIGNING

Course Code :

No. of Hrs/week : 4

Credits : 4

Course Objectives:

- To guide the students towards understanding the concept of storyboard and standard practices.
- Create sample storyboards and generate an animatic using the same.
- Helping the students to understand the underlying principles and techniques in character design
- Guiding the students towards creating their own character concepts for animation.
- Character designing techniques and acquiring professional skills in designing characters.

Learning Outcomes:

- Understand the Principles of drawing.
- Understand the designing of cartoon characters.
- Concept of Drawings of human, animal and birds in motion.
- Understand the concept of visual continuity in Storyboards and Animatics.
- Designing of character specifications in animation.
- Capable of preparing character turn arounds, Line ups and model sheets.

Unit-1: Understanding the Concept and Story Development

Hours:12

Introduction to Principles of Drawing, Scripting & Story boarding for animation:
Creation and Development.

Unit-2: Character Design fundamentals

Hours:12

Styles in character design, Character Design specification and description, Character stereotypes, Using shape and form language in character design. Layering elements in character design. Collecting references, Silhouette exploration techniques, flushing out the design, Clean up, Colour theories and application techniques, Lighting, Final illustration render.

Unit-3: Principles of Characters and Props Design

Hours:12

Different types of characters, different body shapes for cartoon characters, Head shapes and characteristics, Hands. Designing additional props for the character, Character turn around and model sheets, Character line-up, Generating pose and expression for reference.

Unit -4: Understanding the Character Bible

Hours:12

Original character creation and its turn-around including Front, ¾ pose, profile and Back poses, size relation chart and their respective props etc.

Unit-5: Storyboards and Animatics

Hours:12

Storyboards: Definition, Why we need storyboards, Types of storyboards, Storyboard formats. **Elements of storyboard:** Perspective, Staging, Composition, Lighting and color. **Storyboard for Animation and motion pictures:** Basic camera movements in motion pictures, Illustrating camera motion in storyboards, Different types of shots, Principles of camera angles, Concept of visual continuity. The 180 degree rule. Transitions **Animatics:** Definition of animatics, Uses of animatics. Creating sound tracks to use in animatics, creating animatic using simple video editing software (Shortcut).

Teaching Methodology:

Extensive Theory & Practical sessions, Drawing & Coloring Sessions, Computer Lab sessions, Workshops & Seminars, Guest Lectures, Industry Experts, Assignments, Industry Visits

Assignments:

- Designing a character for 2D animation using Photoshop.
- Generate 4 stages of character design along with a final rendering for presentation.
- Develop the turnaround for the same character.

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Practical = 100 Marks

Essential Reading:

1. The Encyclopedia of Animation Techniques: A Comprehensive Step-By-Step Directory of

2. techniques
3. An Inspirational Gallery of Finished Works: Richard Taylor
4. How to Write for Animation: Jeffrey Scott
5. Writing for Animation, Comics and Games: Christy Marx
6. Animation Writing and Development: From Script Development to Pitch: Jean Ann Wright

Recommended Reading:

1. How to Draw Animation- Learn the Art of Animation from Character Design to Storyboards and Layouts: Christopher Hart
2. The Art of the Storyboard - Storyboarding for Film, TV, and Animation: John Hart
3. Exploring Storyboarding: Wendy Tumminello
4. How to Draw What You See: Rudy De Reyna
5. Figure Study Made Easy: Aditya Chari
6. Figure Drawing Without a Model: Ron Tiner
7. Classic Human Anatomy: The Artist's Guide to Form, Function and Movement: Valerie L. Winslow
8. Anatomy for the Artist: Sarah Simblet

TITLE OF THE PAPER : LAYOUT DESIGNING

Course Code :

No. of Hrs/week : 4

Credits : 4

Course objectives:

- After a storyboard is complete, before animation begins, the stage must be set for the scene to take place. This is the job of the layout artist.
- Following an explanation of the role of layout in animation, students are introduced to the procedures, techniques, and terminology encountered in this aspect of production.
- Students learn how to create layouts for the establishing shot, the repeating (or hook-up) pan, and the vertical pan.
- Students learn how to break down a storyboard sequence and create multi-level scenes.
- They also delve into topics such as animated backgrounds, warped perspective, and soft focus layouts.

Learning Outcomes:

Students will have the opportunity to learn the process for creating a background image for 2D and 3D animation.

- The fundamentals of drawing background.
- To construct complex forms in perspective.
- Understand the styles in background.

- To practice drawing from reference and memory.
- Applying proven principles towards creating their own background.

Unit-1: Understanding the BG Design

Hours:12

Background Designing, Layout Creation, Over-layers creation in 2D and 3D. Sketching exercises, Perspective fundamentals, Drawing curved surfaces using perspective, Drawing complex 3D Forms in perspective. Understanding Light and shadows.

Unit-2: Applying BG Layouts and Over Layers

Hours:12

Drawing organic and inorganic subjects in background, Basic architectural elements, Composition principles, Composing elements of environment, Layering foreground mid-ground and background, Line weights and their application, Creating shadows using hatching and cross hatching techniques, Choosing colors for the background. Understanding layers and their properties in both 2D cel animation and Flash animation, About overlapping layers.

Unit-3: Introduction to Compositing

Hours:12

Picture Plane, Closed & Open Composition, Gestalt, Positive & Negative Space, Point of View. Concept Creation based on the Elements and Principles of Design. Drawing from reference, Drawing from memory, Live sketching Assignments.

Unit-4: Background Styles

Hours:12

Studying and Understanding different Background design styles, Creating spec sheet for your own style. Introduction to 3D backgrounds and working with the layout design. Creating Relevant props in 3D for the film and Virtual Reality.

Unit-5: Create BG, Layout and 2D Compositing

Hours:12

Create background, layout and over layers, props etc. for your own story and apply the compositing techniques. Creating reference sheet. Finding the shape and form, applying perspective to the design sketch, Layering elements of layout for animation effects (such as parallax, focus pull etc.). Detailing the Background sketch, Creating moods using light and color. Rendering the Background.

Teaching Methodology:

Extensive Theory & Practical sessions, Drawing Sessions, Guest Lectures, Industry Experts, Assignments, Industry Visits. 3D Animation Movie Studies – Analyzing 3D Animation Movies – Toy Story Tangled, Rio, Up, Rango etc.

Assignments:

Room Model with objects, Over-layer handling, Set model creation in 3D with texturing, lighting. Experiment exercise on unwrapping techniques using a simple model. How to create photo-realistic textures consistent with the creative look of the production. For eg. Students can shoot the tree texture from the campus and wrap it to the tree form created in MAYA and

show a tree trunk.

Evaluation Methodology:

Internal 50% - CIA-I + CIA-II + III Component = 30 + 30 + 40 Marks = 100 Marks

External 50% - Semester Examination – Practical = 100 Marks

Essential Reading:

1. The Art of 3D Computer Animation and Effects: Isaac Kerlow
2. Autodesk Maya 2014 Essentials: Paul Naas
3. 3D Automotive Modeling: An Insider's Guide to 3D Car Modeling and Design: Andrew Gahan

Recommended Reading:

1. The Art of the Storyboard - Storyboarding for Film, TV, and Animation: John Hart
2. Exploring Storyboarding: Wendy Tumminello
3. How to Draw What You See: Rudy De Reyna
4. Figure Study Made Easy: Aditya Chari

TITLE OF THE PAPER : SCRIPTWRITING

Course Code :

No. of Hrs/week : 2

Credits : 2

Course Objectives:

- To make students understand the concept of script writing
- To make students understand basic idea generation techniques for short story writing and patterns and procedures for script writing.
- To guide and direct them on making scripts based on genres of their choice.
- Reading of fiction and nonfiction texts and watching of documentary, feature and short films for critical appreciation.

Learning outcomes:

- Identifying, honouring and recording ideas at their inception stage.
- Basic understanding of the visual art of story-telling.
- Self –learning through creation of short stories and scripts.

Unit-1: Elements of story and script

Hours: 6

Introduction to plot, characterization, conflict, synopsis, and three-part narrative structure.

Unit-2: Genre and media:

Hours: 6

Animation genres, key script formats, structure of films, television and radio scripts, and characteristics of animation scripts.

Unit-3: Idea generation and story creation:

Hours: 6

Developing the story ideas, developing the conflicts and relationships between antagonist and protagonist, developing the the sub-plots, character arc and plot twists.

Unit-4: Understanding the professional art:

Hours: 6

Inter-textual adaptation techniques, scene construction, scene break, transformation of scene down into screenplay.

Unit -5: Artist and audience centred scripts:

Hours: 6

Audience specific, genre-driven, fantasy and multimedia specific scripts for animation projects.

Teaching Methodology:

- Narrative theoretical sessions on script writing
- Practical sessions of idea generation, story writing and script making,
- Meeting industrial experts.

Assignments:

- Feature film review.
- Reading fiction and nonfiction for appreciation.
- Extracts from movies with special focus on shots and scenes.

Evaluation Methodology:

- Internal 50% - CA I & CA II = 80 Marks and Faculty Assessment = 20 Marks
- External 50% - End Semester Evaluation – Viva-voce 100 Marks

Essential Reading:

1. Field, Syd, *Screenwriting: The fundamentals of Screenplay*, Dell, 1984.
2. Gurskis, Dan, *The Short Screenplay*, Couse Technologies, 2006.

Recommended Reading:

1. Welles, Paul, *Basics: Animation Script Writing*, Aca, 2007.
 2. 4. Wright, Jean Ann, *Animation Writing and Development: Form Script Development to Pitch*, Focal Press, 2005.
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