

# **B.A ANIMATION AND GRAPHIC DESIGN**

(Detailed semesterised syllabus for the Programme in B.A Animation and Graphic Design under the Choice Based Credit System (CBCSS - Model III))



**Mahatma Gandhi University, Kottayam**

**2017**



Prepared by

**Board of Studies /Expert Committee (UG)  
in Animation and Graphic Design**



**Mahatma Gandhi University, Kottayam**

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## ACKNOWLEDGEMENTS

The B.A Programme in *Animation and Graphic Design* is branded for its creative approach and distinctive topics discussed. This curriculum is inspired by the stupendous world of art and new creative techniques. This syllabus tries to transmit most essential and updated information to students. The programme gives an opportunity for the students to develop the basic skills in Design, Animation, Multimedia and Publications along with Interactive Applications.

We are grateful to all of those with whom we have had the pleasure to work during the restructuring of the syllabus and curriculum of *B.A Animation And Graphic Design (CBCSS) Programme 2017* of Mahatma Gandhi University. There are many personalities whose support and guidance made this restructured syllabus a reality.

We express our profound gratitude to the Honorable Vice Chancellor, Pro-Vice Chancellor, Members of the Syndicate and the Academic Council for their leadership and guidance for making this endeavor a great success.

We thank the Registrar of the University, both Academic and Finance sections of the University, the members of BOS Core-Committee and all the staff members of Mahatma Gandhi University for offering their service for the flawless completion of the syllabus.

The successful completion of this syllabus is the end product of hard works done by academicians from various colleges and eminent personalities from the media industry. We would like to thank them all for their valuable service during the restructuring process.

For the Expert Committee in Animation and Graphic Design,

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May 2017

## 1. INTRODUCTION

**Mahatma Gandhi University** introduced choice based credit and semester and Grading System in colleges affiliated to the University from the Academic year 2009-2010, under **Direct Grading System**. Subsequently, the Kerala State Higher Education Council constituted a committee of experts headed by Prof. B. Hridayakumari, to study and make recommendations for the improvement of the working of the Choice Based Credit and Semester System (CBCSS) in Colleges affiliated to the Universities in the State. The State Government accepted the recommendations of the Committee and the Syndicate and the Academic Council of the Mahatma Gandhi University have resolved to reform the existing CBCSS regulations. Accordingly, **Regulations for Under Graduate Programmes Under Choice Based Course-Credit- Semester System and Grading, 2013** was introduced in the University from the Academic year 2013-14 onwards, under **Indirect Grading System**. The University Grants Commission, in order to facilitate student mobility across institutions within and across countries and also to enable potential employers to assess the performance of students, insisted to introduce uniform grading system in the Universities. The Academic Council of the Mahatma Gandhi University at its meeting held on 23rd May 2015 resolved to introduce the UGC Guidelines for Choice Based Credit Semester System from the Academic year 2016-17 onwards and the syndicate of the University at its meeting held on 1st August 2015 approved the resolution of the Academic Council. Meanwhile, the Hon'ble Supreme Court of India has issued orders to include core courses on Environmental Studies and Human Rights in the syllabi and curricula of all UG Programmes of universities all over India. In continuation to this the University Grants Commission has issued circulars regarding the implementation of the above said changes by accepting the directions of the Hon'ble Supreme Court as a National Policy. Hence, the Syndicate of Mahatma Gandhi University has decided to modify the syllabi and curricula of all UG programmes in accordance with the directions of the Hon'ble Supreme Court and the UGC. Further, the Syndicate has decided to implement the new regulations and syllabi with effect from the academic year 2017-2018. In view of this, the BOS / Expert Committee in Animation and Graphic Design of MG University have prepared the following syllabus for UG programmes in **Animation and Graphic Design**.

## 2. TITLE

**B.A ANIMATION AND GRAPHIC DESIGN- Graduate Programmes under Choice Based Credit System, 2017"** (UGCBCSS 2017).

## 3. SCOPE

- 3.1 Applicable to all regular Under Graduate Programmes conducted by the University with effect from 2017 admissions, except for Professional and B.Voc programmes. Also, applicable to Distance/Private Undergraduate Programmes with suitable modifications. Under Graduate Programmes in Management Studies are included as non-professional programmes. Provided that the existing CBCSS Regulations 2013 shall be applicable to students who were admitted prior to the commencement of these Regulations and who are continuing their studies.
- 3.2 Examinations of the courses being run under the Distance/Private registration scheme shall be conducted annually.
- 3.3 The provisions herein supersede all the existing regulations for the Regular/Distance/Private Undergraduate programmes to the extent herein prescribed.

#### 4. AIMS AND OBJECTIVES OF THE PROGRAMME

The Programme begins with design/animation history, theory and traditional hand skills, then progresses to current design/animation practices and technology. Students create animations, logos, multimedia/interactive applications, packaging, posters, publications, web pages and more. The program encourages innovation while stressing strong technical and presentation skills. Students gain a background in design/animation history and theory and then experiment and develop their own creative approaches. The candidates become eligible for a Degree after six-semester of study, spanning over a period of 3 years and successful completion of the examinations.

The Animation and Graphic Design Programme prepares graduates for a wide range of careers in the industry such as publication design, advertising design, broadcast design, interactive design, illustration, concept art, effects and animation etc. The skills taught in the programme encompass craft at a technical level; yet also include design, drawing, critical thinking, creativity, daring, collaboration, and a fundamental awareness of theory and history. Throughout the programme, students are engaged in all aspects of animation/graphic design production, from concept development and production design to the completion of finished segments.

#### 5. B.A PROGRAMME IN ANIMATION AND GRAPHIC DESIGN

##### 5.1. PROGRAMME STRUCTURE FOR MODEL III - B.A/ B.Sc /B.COM

a.	Programme Duration	6 Semesters
b.	Total Credits required for successful completion of the Programme	120
c.	Credits required from Common Course I	8
d.	Credits required from Core + Complementary + Vocational Courses including Project	109
e.	Open Course (Credits)	3
f.	Minimum attendance required	75%

#### 6. DURATION OF COURSE

- The duration of U.G. Programmes shall be **6 semesters**.
- A student may be permitted to complete the programme, on valid reasons, within a period of 12 continuous semesters from the date of commencement of the first semester of the programme.
- Attendance: Students having a minimum of 75% average attendance for all the courses only, can register for the examination.

#### 7. MARKS DISTRIBUTION FOR EXTERNAL EXAMINATION AND INTERNAL EVALUATION

The external theory examination of all semesters shall be conducted by the University at the end of each semester. Internal evaluation is to be done by continuous assessment. For all papers (theory and practical) total percentage of marks of external examination is 80 and total percentage of marks of internal evaluation is 20 (ie. In the ratio of 80:20).

Marks distribution for external and internal assessments and the components for internal evaluation with their marks are shown below:

### 7.1 FOR ALL PRACTICAL PAPERS:

(a) Marks of external Examination : 40

(b) Marks of internal evaluation : 10

Components of Practical internal evaluation	Marks
Attendance	3
Record*	5
Test Papers	2
<b>Total</b>	<b>10</b>

\*Marks awarded for Record should be related to number of experiments recorded.  
All the three components of the internal assessment are mandatory.

### 7.2 FOR PROJECTS, INDUSTRIAL VISIT AND COMPREHENSIVE VIVA VOCE\*:

(a) Marks of external Examination : 80

(b) Marks of internal evaluation : 20

Components of Project I.V. and Viva – Evaluation External	Marks
Dissertation and I.V. report (External)	50
Comprehensive Viva-voce Viva-Voce (External)	30
<b>Total</b>	<b>80</b>

\* Bonafide reports of the project work and Industrial Visit (I.V) conducted shall be submitted at the time of examination.

All the four components of the internal assessment are mandatory.

Components of Project & I.V. - Internal Evaluation	Marks
Punctuality	5
Experimentation / Data Collection	5
Knowledge	5
Report	5
<b>Total</b>	<b>20</b>

### 7.3 OJT EVALUATION

For On the Job Training (OJT) there is only internal evaluation.

### 7.4. ASSIGNMENTS

Assignments are to be done from 1st to 4th Semesters. At least one assignment should be done in each semester for all papers.

### 7.5 SEMINAR / VIVA

A student shall present a seminar in the 5<sup>th</sup> semester and appear for Viva- voce in the 6<sup>th</sup> semester for all papers.

## 8. CONSOLIDATED SCHEME FOR B.A ANIMATION AND GRAPHIC DESIGN

S e m.	Course Code	Course Title	Course Type	Course Category	Credit	Hrs / Wk
I		1-1 Model III English I	Theory	Common	4	5
	AG1CRT01	1-2 History of Art and Design *	Theory	Core	4	5
	AG1CRP02	1-3 Elements of Graphic Design	Practical	Core	4	5
	AG1CRP03	1-4 Rudiments of Animation Drawing *	Practical	Core	4	5
	AG1PRP01	1-5 Techniques of Photographic Composition *	Project	Complim.	4	5
					<b>20</b>	<b>25</b>
II		2-1 Model III English II	Theory	Common	4	5
	AG2CRT04	2-2 History of Animation And Visual Effects *	Theory	Core	4	5
	AG2PRP02	2-3 Planning for Animation *	Project	Complim.	4	5
	AG2CRP05	2-4 Raster Graphics	Practical	Core	4	5
	AG2CRP06	2-5 Vector Graphics	Practical	Core	4	5
					<b>20</b>	<b>25</b>
III	AG3CRP07	3-1 Character Designing for Animation	Practical	Core	4	5
	AG3CRP08	3-2 Basics of 3D Animation	Practical	Core	4	5
	AG3PRP03	3-3 Classical Animation *	Project	Core	4	5
	AG3CMP09	3-4 Basic Compositing and Visual Effects	Practical	Complim.	4	5
	AG3CRP10	3-5 Branding Design	Practical	Core	4	5
					<b>20</b>	<b>25</b>
IV	AG4CRP11	4-1 Design for Web	Practical	Core	4	5
	AG4PRP04	4-2 Stop Motion Animation	Project	Core	4	5
	AG4CMP12	4-3 Typography	Practical	Complim.	4	5
	AG4PRP05	4-4 Advanced Cel Animation	Project	Core	4	5
	AG4CRP13	4-5 Techniques of 3D Animation	Practical	Core	4	5
					<b>20</b>	<b>25</b>
V	AG5CRT14	5-1 Environmental Studies And Human Rights	Theory	Core	4	5
	AG5CMP15	5-2 Interaction Design	Practical	Complim.	4	5
	AG5CRP16	5-3 Digital Illustration	Practical	Core	4	5
	AG5CRP17	5-4 Advanced 3D Animation Techniques	Practical	Core	4	6
		5-5 Open Course		Open	3	4
	AG5OPP1.1	A. Video Editing	Practical			
	AG5OPP1.2	B. Architectural Design	Project			
AG5OPP1.3	C. Digital 2D Animation	Project				
					<b>19</b>	<b>25</b>
VI	AG6JP01	6-1 Internship	OJT		2	
	AG6PRP06	6-2 Animation Project *	Project	Core	4	5
	AG6CMP18	6-3 Publication Design	Practical	Complim.	4	5
	AG6PRP07	6-4 Design Project	Project	Core	4	5
		6-5 Choice Based Course		Core	3	5
	AG6CBP1.1	A. UI Design	Project			
	AG6CBP1.2	B. Animation Effects	Project			
	AG6CBP1.3	C. Painting with Pixels	Project			
	AG6PRP08	6-6 Advertising Design	Project	Complim.	4	5
					<b>21</b>	<b>25</b>
					<b>120</b>	

Subjects denoted with \* are common for Animation And Graphic Design as well as Animation And Visual Effects.

## **COURSE 1-2: HISTORY OF ART AND DESIGN (THEORY)**

### **OBJECTIVE**

The course will examine the role and development of the visual arts in past and present cultures throughout the world. This is designed to help students to develop art application, aesthetic judgment, and to increase visual perception and critical thinking skills.

### **MODULE1**

Prehistoric visual representations -Paleolithic to the Neolithic Period-Lascaux, Altamira, Indian evidences.The earliest writing-Mesopotamian visual identification,Egyptian hieroglyphs, Chinese calligraphy, Pictographs to Alphabets

### **MODULE2**

Development of art from the time of Civilizations upto the age of enlightenment – Mesopotamian, Egyptian, Indian, Chinese, Greek & Roman civilizations, Byzantine, Gothic, Renaissance era and Baroque.

### **MODULE3**

Development of the art of printing - theinvention of paper and discovery of printing, theinvention of movable type. Early European block printing, Copperplate engraving etc. Illuminated Manuscripts & German illustrated books. Graphic design of the Rococo Era

Development of art from imaginative to ideological – Romanticism, Impressionism, Expressionism and Cubism

### **MODULE4**

Twentieth Century graphic design- Industrial Revolution-Impact of technology upon visual communication - revolution in printing-development of photography as a communication tool- Victorian era graphic design- development of Lithography

### **MODULE5**

Art and Craft movements - Art Nouveau, Modernism, Art Deco, Bauhaus, Organic design, Minimalism, Pop art, Postmodernism, American Kitsch, Conceptual art.

### **Reference**

1. A Concise History of Art: G.Buzin
2. Encyclopedia of World Art (Vol.I&II): Mcgraw Hill Publication
3. Necessity of Art : Ernest Fisher
4. Meggs' History of Graphic Design : Philip B. Meggs, Alston W. Purvis
5. Graphic Design History: A Critical Guide :Johanna Drucker, Emily Mcvarish
6. The Dictionary of Visual Language: Philip Thompson, Peter Davenport

## COURSE 1-3: ELEMENTS OF GRAPHIC DESIGN (PRACTICAL)

### OBJECTIVE

Elements of graphic design provide the students with the initial information to help understand how to design what is seen in a frame and to understand basic elements and principles in design.

### MODULE1

Introduction to basic elements of graphic design: **Line**– line direction and meanings-quality of lines- implied lines and line of forces, **Shape**- organic shape and geometric shapes-nonrepresentational shape and representational shape, **Forms**-relationship with 2d shape and 3d forms, **Space** –negative space and positive space-figure/ground relation, **Colour**-subtractive and additive colour-primary, secondary in both modes- Colour wheel-what is hue, saturation and value- what is shade, tint and tones-colour schemes – monochromatic, analogous, complementary, split complementary, triadic colour, double complementary etc. - Colour meaning in various context such as culture, religion, gender and emotional factor, **texture** – visual texture and tactile texture, texture and light value, pattern etc. **Type**: typeface, typeface family etc.-Typeface as a graphical element- selection of a type family in design.

### MODULE2

**Basic principles of design**: balance, proportion, rhythm, emphasis, unity etc. Laws of perception -Gestalt theory: similarity, proximity, continuity, closure etc. Scale and proportion in design-Mathematical ratios and proportional systems: Fibonacci numbers, TheGoldenRatio.

### MODULE 3

**Concepts of visual design**: Design methodology, problem-solving -Visual structure and visual Interest, visual analysis and refinement of visual representations. Exercises on visual composition and layout: Hierarchy-Centre of visual Impact - How to read a page: active and Passive areas of design - How we view a screen: F Pattern - Inverted pyramid methods. The use of grids in graphics composition. Grid types – Symmetrical- Asymmetrical - Backwards movement - Formats - Margins –slug – Bleed - Columns –Gutters - The relationship of visual form to meaning - Type , Image, Shape relationships.

### MODULE 4

**Exercise based on nature study**: Patterns, colour schemes, shapes etc. from nature

### MODULE5

**Brainstorming**: How we can make a solution for creative problem-identifying needs and target - development of concept-Selection of elements- drafting ideas

**Tessellation of shapes** (geometric and organic) with various colour schemes

**Exercise on logo design**: size matters, selection of colours, typographic selections etc.

**Poster Design/ Advertisement design**: design various type of posters- Propaganda posters, Event posters, campaign posters etc.- application of grid system in layout

### Reference

1. The Elements of Graphic Design: Space, Unity, Page Architecture, and Type: Alexander W. White.
2. Exploring the Elements of Design : Mark A. Thomas, Poppy Evans

## **COURSE 1-4: RUDIMENTS OF ANIMATION DRAWING (PRACTICAL)**

### **OBJECTIVE**

Rudiments of Animation Drawing is intended to provide the student an understanding of basic drawing techniques for animation.

### **MODULE 1**

Introduction to Different Drawing Materials and Tools - Dry Media (Pencils, Charcoals, Chalks, Crayons, Pastels, Erasers, Smudging Tools) - Wet Media (Dip Pens, Disposable and Cartridge Pens – Brushes) – Inks (Water Based, Alcohol Based, Indian/Chinese Ink) – Paints (Water Based, Acrylic, Oil) - Drawing Surfaces – (Papers – Newsprint, Watercolor Paper, Charcoal Paper, Canvas) - Tools for Erasing and Sharpening – Palettes – Knives - Easels.

### **MODULE 2**

Doodling and Noodling (Drawing Straight Lines, Drawing Curved Lines, Free Hand Drawing) – Holding the Pencil – Angle and Direction of Lines (Drawing Lines, Circles, Ovals, Scribbles, Patterns Etc.) - Shapes and Forms – Memory and Imagination Drawing - Drawing with Grids

### **MODULE 3**

Drawing from Observation –Still-life Drawing – Use of Basic Shapes and Forms – Sketching Poses –Study of Live Models - Rapid Sketching from Live Models - Attitude - Gestures - Line Drawing - Quick Sketches - Thumbnails - Stick Figures - Line of Action – Balance – Rhythm – Positive and Negative Spaces - Silhouettes - Caricaturing Fundamentals – Exaggeration

### **MODULE 4**

Perspective Drawing – Vanishing Points – Orthogonal Lines – Horizon –Eye Level – One Point Perspective – Two Point Perspective - Three Point Perspective – Multi- Point Perspective - Overlapping and Intersection of Shapes in One Point, Two Point and Three Point Perspective Views - Foreshortening

### **MODULE 5**

Tones - Lighting and Shading – Basic 3Dimensional Light Set Up – Several Types of Shadows – Cast Shadow – Contact Shadow – Contour Shadow – Reflected Light – Overhang Shadow – Highlight – Core Shadow – Objects and Shapes in Perspective with Light and Shade.

### **Reference**

1. Exploring the Elements of Design : Mark A. Thomas, Poppy Evans
2. The Art of Composition : Michael Jacobs
3. The Art of Pictorial Composition : Wolehonok
4. Complete Books of Artist Techniques : Dr. Kurt Herbers
5. Drawing for The Absolute and Utter Beginner: Claire Watson Garcia
6. Perspective Made Easy: Ernest R Norling
7. Perspective Drawing Handbook: Joseph D'Amelio

## **COURSE 1-5: TECHNIQUES OF PHOTOGRAPHIC COMPOSITION (PROJECT)**

### **OBJECTIVE**

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

### **MODULE1**

The Psychology of Visual Perception – Visual Aesthetics – Art of Film Making – Stages in Brief.

### **MODULE2**

Photography as 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.

### **MODULE3**

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 the histogram.

### **MODULE4**

Grammar for motion picture: Camera Movements – Principle of continuity – action, look, movement, tonal, emotion etc. – Imaginary line concept-crossing the line – 30° rule – 180° rule etc. – meaning and aesthetic aspects of angle selection.

### **MODULE5**

**Exercise:** Project work based on the syllabus and parameters of the course under the guidance of supervising faculty.

### **Reference**

1. Basic Principles of Photography : Gerald Millerson
2. Grammar of Shot (Second edition) :Roy Thompson (Focal Press)
3. How to read a film : James Monaco
4. The T.V. Production :Hand Book- Zetti Herbert
5. Elements of film: Lee.R. Bobker
6. The Art of Pictorial Composition :Wolohomok

## **COURSE 2-2: HISTORY OF ANIMATION AND VISUAL EFFECTS (THEORY)**

### **OBJECTIVE**

This paper should enlighten the students on the advancement made in the field of animation and visual effects so as to appreciate and understand where the technology used today developed from. It also inspires students to experiment with different types of animation and visual effects techniques so as to think of process improvements ideas for animation and visual effects.

### **MODULE 1**

**Early attempts for Animation:-** Early attempts to imitate and reproduce motion – Cave Paintings - Persistence of Vision and Phi Phenomenon - Early Animation Devices – Initial Attempts to Make Animation – Photography – Motion Picture

### **MODULE 2**

**Birth of Animation:-** Experimental Animations (Drawn, Stopmotion) All Over the World – Pioneer Animators - Major Animation Studios

### **MODULE 3**

**Animation Techniques and Advancements:-** Animation Techniques (Timelapse, Stopmotion, Cut-out, Silhouette, Cel etc.) - Inventios and Technical Advancements (Layer, Cel, Pegbar, Combining Live Action with Cartoon Characters, Synchronized Sound, Technicolor Process, Multi-plane Camera, CGI etc.)

### **MODULE 4**

**Visual Effects:** -Use of Miniatures in Early Films - Use of Makeup, Rear Projections, Pyrotechnics and Matte Paintings Before the CGI Era – Stereoscopic 3D - Realistic Puppets and Stop Motion Photography – Split Screen Technology – Space Vision 3D – Stereovision 3D - Motion Controlled Camera – CGI Effects – Digital Compositing - Animatronics - Motion Capture – High Speed Cameras - The Fusion Camera System – Major Visual Effects Studios

### **MODULE 5**

**Animation & VFX Around the World:** - American, Canadian, European, Indian, Japanese Studios.

### **Reference**

1. Enchanted Drawings: The History of Animation: Charles Solomon
2. The World History of Animation: Stephen Cavalier
3. Cartoons: One Hundred Years of Cinema Animation: Giannalberto Bendazzi
4. Of Mice and Magic: Leonard Maltin
5. Before Mickey: The Animated Film, 1898-1928: Donald Crafton
6. The Anime Encyclopedia: A Guide to Japanese Animation Since 1917: Lowry
7. Special Effects: The History and Technique: Richard Rickitt
8. Special Effects: How They Are Done In Hollywood: Robert G Willard
9. Special Effects: An Oral History: Pascal Pinteau

## **COURSE 2-3: PLANNING FOR ANIMATION (PROJECT)**

### **OBJECTIVE**

Planning for animation is meant to guide the student through the various stages of pre-production before the production starts of an animation project. It starts from developing an idea through to selling of a story using storyboards and Animatics.

### **MODULE 1**

Techniques of Animation – Different Types of Animation - Workflows of Different Types of Animation - Preproduction, Production and Post-Production Stages - Types of Animation - Experimental Animations.

### **MODULE2**

Developing Idea/ Concept - Story - Basic Elements of a Story – Types of Stories - Creating Story Ideas - Sources of Story Line - Adaption - Character Roles - Characterization– Dialogues – Basic Structure Of A Story – Old and Modern Structures – Concept of Acts –Theme – Subplots – Tone – Genre - Writing for Different Types and Groups of Audience – Animation Script - Animation Script Vs. Live Action Movie Script – Shot – Scene – Sequence – Screenplay Format – Elements of Screenplay Format –Montage

### **MODULE 3**

Character Designing - Features of a Character – Types/Kinds of Characters – Designing Props and Assets of Character – Creating Turn Arounds / Character Model Sheets – Blueprints - Character Size Comparison Charts – Character Attitude Poses

### **MODULE 4**

Story Board - Definition - Importance of Story Boarding - Different Types of Story Boards - Story Board Formats - Elements of Storyboarding (Design, Color, Light and Shadow, Perspective, Staging, Composition Rules) - Concept of Panels and Its Usages- Floor Plans - Storyboarding Movements - Illustrating Camera Techniques in a Story Board - Visual Continuity – Transitions - Digital Storyboarding

### **MODULE 5**

Introduction to the creation of Animatic – Scanning Storyboard panels and Synchronizing it with the sound tracks.

### **Reference**

1. The Encyclopedia of Animation Techniques: A Comprehensive Step-By-Step Directory of Techniques, with an Inspirational Gallery of Finished Works: Richard Taylor
2. How to Write for Animation: Jeffrey Scott
3. Writing for Animation, Comics and Games: Christy Marx
4. Animation Writing and Development: From Script Development to Pitch: Jean Ann Wright
5. How to Draw Animation - Learn the Art of Animation from Character Design to Storyboards and Layouts: Christopher Hart
6. The Art of the Storyboard - Storyboarding for Film, TV, and Animation: John Hart
7. Exploring Storyboarding: Wendy Tumminello
8. Don Bluth's Art of Storyboard: Don Bluth

## COURSE 2-4: RASTER GRAPHICS (PRACTICAL)

### OBJECTIVE

Classes containing various projects enable students to develop a basic skill in Raster Graphics.

### MODULE 1

Digital Image- Pixels – Bit Depth – DPI – LPI - Resolution - File Formats (Print and screen media Formats - GIF, JPEG, TIFF, etc.) - Compression: Lossy - Lossless - Colour: Colour Coding - Process colour (CMYK) - RGB - Spot Colour - Colour systems. Duotones - Tritones – Quadrtones etc.

### MODULE 2

Selection Tools, Retouching Tools, Path Making Tools, Image Adjustment Options. Processing Camera RAW Layer, Channel, Mask, Path, Layer Comp, Paragraph & Character, Swatches, Adjustment Layers

### MODULE 3

Preference Settings, Colour Settings, Assign Profile Automate, Script. Proof Setup, Gamut Warning, Bit Preview, Screen Mode Show, Pixel Aspect Ratio

### MODULE 4

Saving with Clipping Path and alpha Channel, PSD, PDF, EPS, TIFF, JPEG. Camera RAW.

### MODULE 5

What is the use of blend modes? How to apply blend modes? Different types of blend modes - Normal modes - Darken modes, Lighten modes, Contrast modes, Comparative modes and Color modes. Application of blend modes - Creating custom textures for 3D models, Blending modes for compositing etc.

**Exercise A:** Project based on poster design (*exercises should be conducted from manual scribbles to digital approach*)

**Exercise B:** Project based on colour correction and photo restoration

### Reference

1. Adobe Photoshop Classroom in a Book: Adobe Creative Team
2. The Book of GIMP - A Complete Guide to Nearly Everything: Olivier Lecarme, KarineDelvare

## COURSE 2-5: VECTOR GRAPHICS (PRACTICAL)

### OBJECTIVE

This course covers the most popular illustration programs used by graphic designers. The potential applications for these programs are explored, from fine-tuned illustrations to successful typographic studies.

### MODULE 1

**Introduction** What is Vector? Technical Differences of Vector & Raster Imaging, Adobe Illustrator / Inkscape, Document Profile, Artboards, File Size, Page Orientation, Units, Bleed, Colour Mode, Raster Effects Resolution.

### MODULE 2

**Tools:** Stroke & Fills, Basic Shape Tools, Pen Tool, Transformation, Rotation, Perspective, Grid, Guides. Type Tool: Character & Paragraphs, Type Controls, Path & Area Typing, Paragraph Styles. Glyphs.

### MODULE 3

**Panels:** Work Space, Tools & Control, Align & Pathfinder, Appearance, Artboards, Brushes, Color, Color Guide, Radient, Layers, Links, Stoke Options, Symbols Transparency.

### MODULE 4

**Advanced Options & Settings:** Preference Settings, Color Settings, assign Profiles Expand, Envelop Distort, Colour Guide, Perspective Grid Smart Guide, Live Paint, Image Trace, Wrap, Clipping Mask, Path.

**Preview:** Outline, Over Print, Pixel Preview, Proof Setup

**Export:** AI, EPS, PDF, SVG, SVGZ & Other Raster Formats

### MODULE 5

**Design Exercises:** Logo or corporate identity design

Designs based on typography

Symbols or Icons Designs

(All design exercises should be conducted from manual scribbles to digital approach)

### Reference

1. Adobe Illustrator Classroom in a Book: Adobe Creative Team
2. The Book of Inkscape - The Definitive Guide to the Free Graphics Editor: Dmitry Kirsanov

## **COURSE 3-1: CHARACTER DESIGNING FOR ANIMATION (PRACTICAL)**

### **OBJECTIVE**

Character design for animation is intended to provide the student with an understanding of the anatomy of a human, a creature or a cartoon character.

### **MODULE 1**

Human Anatomy – Anatomy of Different Age Groups (Babies, Kids, Teens, Young Adults, Aged) - Basic Proportions – Basic Understanding of the Skeletal and Muscle System – Human Forms in Perspective.

### **MODULE 2**

Male and Female Anatomy - Body Structure, Proportion and Construction of Body Parts (Torso, Face, Eyes, Nose, Ears, Mouth, Hand, Feet Etc.) – Motion Analysis - Study of Poses

### **MODULE 3**

Anatomy of Animals, Birds, Reptiles: Body Structure - Basic Forms, Proportion and Construction of Body Parts, Head, Legs, Tails - Use of Perspectives While Drawing Animals, Birds, Reptiles and Insects. - Understanding Motion and Grace

### **MODULE 4**

Cartoon Characters -Understanding Cartoon Characters - Cartoon Constructions – Character Development - Drawing from Basic Shapes - Distortion of Proportions - Cartoon Faces, Eyes, Mouths, Hairs, Nose, Hands, Feet - Facial Expressions

### **MODULE 5**

Classic Cartoon Characters (Humans, Animals, Birds, Reptiles –Cute, Screwball, Goofy, Heavy, Pugnacious –Fairy Tale Characters, Gnomes, Elves, Dwarfs, Witches) - Manga Style

### **Reference**

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. Cartoon Animation: Preston Blair
11. Disney Animation - The Illusion of Life: Frank Thomas and Ollie Johnston
12. How to Draw Animation - Learn the Art of Animation from Character Design to Storyboards and Layouts: Christopher Hart

## **COURSE 3-2: BASICS OF 3D ANIMATION (PRACTICAL)**

### **OBJECTIVE**

This course is meant to introduce the student to the world of 3D. In this course, the student will learn about how to work in 3D space, model, texture, apply lights and finally take a render output of his/her creation.

### **MODULE 1**

Introduction to 3D animation, its uses and scope, 3D production pipeline, various 3D softwares-Different file types used in 3D animation and their applications- Basic skills for handling the selected software like transforming objects, object properties, hierarchies, pivots, etc.

### **MODULE 2**

Modeling techniques like Spline, NURBS, Polygon and SubD- Various tools and their applications, Detailed modeling of furniture, instruments, character props, etc.

### **MODULE 3**

Shaders and Materials, 2D and 3D textures, Texturing with HDR images, Different Types of Material Creation, Normal and Artificial Lighting – 1 Point, 2 Point, 3 Point Lighting In 3D Space, Common Light Attributes, Shadows and its attributes.

### **MODULE 4**

Introduction to Animation, Key frame creation, Animation curves - Animating through paths, Application of basic animation principles: Squash & Stretch – Timing & Spacing – Anticipation – Slow-In & Slow-Out. 3D Cameras, Creating Camera movements.

### **MODULE 5**

Exterior Modeling: - Environments- Buildings, Hills, City Etc. - Interior Modeling: - Architectural / Industrial Structures - Exterior Lighting – Interior Lighting, Rendering basics, Global illumination, Final gather.

### **Reference**

1. The Art of 3D Computer Animation and Effects: Isaac Kerlow
2. Autodesk 3ds Max 2014 Essentials: Randi L. Derakhshani, Dariush Derakhshani
3. Autodesk Maya 2014 Essentials: Paul Naas
4. Blender Master Class - A Hands-On Guide to Modeling, Sculpting, Materials, and Rendering: Ben Simonds
5. Blender Studio Projects: Digital Movie Making: Tony Mullen, Claudio Andaur
6. Digital Animation Bible - Creating Professional Animation With 3ds Max, Lightwave, And Maya: George Avgerakis
7. 3D Automotive Modeling: An Insider's Guide to 3D Car Modeling and Design: Andrew Gahan

## **COURSE 3-3: CLASSICAL ANIMATION (PROJECT)**

### **OBJECTIVE**

To provide a solid foundation of the principles animation, together with observational studies essential for the student of animation. Observational drawing from life includes drawing from the model or animal, to better understand gesture, poses and particularly movement. By the end of this course participants will be able to: 1. Appropriately plan out their animated scenes visually; 2. Demonstrate an understanding of composition and visual storytelling; 3. Demonstrate a basic understanding of character, and scene design.

### **MODULE1**

Animation Equipments– Cels - Light Box– Peg Holes and Peg Bars – Line/Pencil Tests - Field Charts - Rostrum Camera - The Exposure Sheet (X Sheet) – Concepts Of: -Soundtrack, Track Breakdown, Key Frames, In-Betweens, Clean-Up etc.

### **MODULE 2**

Line of Action - Path of Action – Maintaining Volume - Key Drawings – Extremes and Breakdowns - In-Betweens – Timing Ladder and Numbering of Animation Drawings – Flipping Key Drawings - Animation Methods: - Straight Ahead, Pose to Pose, Combination of Both.

### **MODULE 3**

Acting for Animators – Character Acting - Difference between Acting for Drama and Acting for Animation - Studies from movies - Motion Analysis - Basics of Animation Acting - Posing, Timing, Staging - Voice Acting –Facial Expressions - Body Language.

### **MODULE4**

Experiments with Basic Principles of Animation (Squash and Stretch, Anticipation, Staging, Straight Ahead and Pose to Pose Animation, Follow Through and Overlapping Action, Slow Out and Slow In, Arcs, Secondary Action, Timing, Exaggeration, Solid Drawing, Appeal).

### **MODULE5**

Animating Walks – Normal and Stylized Walks – Walks of Different Types of Human Characters - Runs - Different Types of Runs – Runs of Different Types of Human Characters - Jumps – Skips – Leaps - Takes and Double Takes – Anticipation – Overlapping Actions – Mass and Weight.

### **Reference**

1. The Illusion of Life: Disney Animation: Ollie Johnston, Frank Thomas
2. The Animator's Survival Kit: Richard Williams
3. Cartoon Animation: Preston Blair
4. Timing for Animation: Harold Whitaker and John Halas
5. How to Make Animated Films: Tony White
6. Animation from Pencils to Pixels: Classical Techniques for the Digital Animator: Tony White
7. The Animator's Workbook: Step-By-Step Techniques of Drawn Animation: Tony White
8. The Male and Female Figure in Motion: Eadweard Muybridge

## **COURSE 3-4: BASIC COMPOSITING AND VISUAL EFFECTS (PRACTICAL)**

### **OBJECTIVE**

The objective of this subject is to introduce the student to compositing software. This course is meant to shine light to the possibilities of compositing in today's media world.

### **MODULE 1**

What is Compositing? Introduction to After Effects Interface Create a new composition, Timeline panels, Adding footage, Resolution, Quality.

### **MODULE 2**

Adjustment layers, Solid layers, Pre-Composition, Layers, Basic Animation Rotation, Scale, Transform, Anchor point, Key frames, Text animation, Easy Ease

### **MODULE3**

Layer Management Selecting - Moving layers, Trim in and out points, Motion blur, Masking Create Masks - Transforming masks, Mask points, Feather - Animating masks, Blending modes, Track mattes luma, Alpha matte, Animated mattes

### **MODULE 4**

Effects and Presets Applying effects, Effects and preset panel, Garbage mattes to support keying, Chroma Keying, Colour correction

### **MODULE 5**

Tracking Motion tracking, Motion stabilization, Time warp, Creating a VFX Demo Reel.

### **Reference**

1. Compositing Visual effects: Steve Wright
2. The art and science of Digital Compositing : Ron Brinkmaan
3. Digital Compositing in Depth: Doug Kelley.
4. Motion Graphics: Graphic Design For Broad cast and Film: Steve Curran
5. How did they do that: Motion Graphics: David Green
6. Creating Motion Graphics with AE: Trish Meyel.

## COURSE 3-5: BRANDING DESIGN (PRACTICAL)

### OBJECTIVE

In this course, students develop creative strategies for problem solving and investigate design issues. The focus is on establishing effective design methods. To get thorough knowledge in branding and style guide preparation

### MODULE1

**Common terms in design:** Measurements-Absolute and Relative. Standard Sizes: Paper Sizes-Book and Poster Sizes-Screen Sizes Etc. Page Layout: Working of a Grid System- Column, Margin, Gutter Spaces, Bleed, Registration and Trim. Paper: Paper Qualities, Paper Types and Print Quality. Binding/Folding: Types of Binding, Type of Folds.

### MODULE2

**Corporate Identity:** Creation of corporate Logo, visual identity, Logo type: Style guide-importance of style guide, Selection of colours, typefaces, element placement etc. **stationary designs:** Letter head, business card, envelopes etc. –**Semiotic designs:** Symbols and Signage for various environments.

### MODULE3

**Posters and promotional designs:** Concept creation, application of various design principles such as emphasis, hierarchy etc. Campaign posters - event posters. Advertising technique - Advertisement- Objectives, Creative strategy, message appeals, target market, creative use of images or illustrations. Advertisement for newspaper- magazine - online promotion etc. Pamphlets and brochures: What is a Brochure? - Content management, Design Concepts, Selection of typefaces, Page Size, different methods of folding.

### MODULE4

**Package Design:** 3D Forms and Surface Graphics, Create Cartons, Containers and Wrappers for Verity of products.

### MODULE5

**Reproduction Techniques:** History of Printing, Different Printing and Printmaking Techniques.

**Exercise:** - Visualize a comprehensive style guide, stationeries, campaign posters, advertisements and package for a particular brand.

### Reference

1. Layout: Design of the Printed Page: Allen Hurlburt
2. Layout Workbook: A Real-World Guide to Building Pages in Graphic Design: Kristin Cullen
3. The Big Book of Layouts: David E. Carter
4. The Definitive Book of Branding: KartikeyaKompella
5. Brands and Branding: Rita Clifton Et Al
6. Graphics: A Century of Poster and Advertising Design: Alain Weill
7. Poster Design: Big Size Visuals: Marc Gimenez
8. Package Design Workbook: The Art and Science of Successful Packaging: Steven DuPuis

## **COURSE 4-1: DESIGNING FOR WEB (PRACTICAL)**

### **OBJECTIVE**

Students are introduced to a new media, web authoring techniques and technologies as they learn how to create and develop basic projects in which interactivity is the focus. Also, students will learn the idea about Responsive Web Design (RWD) with its features on the Internet.

### **MODULE 1**

Study of how an interactive system to be used to form an effective User interface and user Experience Design. Interaction Design Principle.

### **MODULE 2**

Utilization of Design concepts, Colors, Typography, Layout & Digital Imaging to form an affective interface system for Internet Media. Using Photoshop make it possible to form an aesthetic Layout.

### **MODULE 3**

Introduction to HTML, a language which is used to display & information from the World Wide Web through a browser. Introduction to Notepad++ (An application professionally used to code or script web based content widely)

### **MODULE 4**

Advanced web coding using HTML5 & CSS3 in Dreamweaver. Intro to animation, transition, font & -webkit- techniques in the advanced version of HTML.

### **MODULE 5**

Introduction to Responsive Webpage Design (RWD) Layout in connection with 960GS (Grid System) which is used to access the information from web through different devices. Explore the unique layouts in accordance with content, purpose, device, user etc.

### **Reference**

1. Interactive Design for New Media and the Web:Nicholas V. Iuppa
2. Principles of Interactive Design: Lisa Graham
3. The Design of Everyday Things: Donald A. Norman

## **COURSE 4-2: STOP MOTION ANIMATION (PROJECT)**

### **OBJECTIVE**

Stop motion animation is a powerful animation technique that makes static objects appear to be moving. Stop motion animation draws attention to placement, framing, direction and speed of movement and is an excellent platform to study composition and experiment with the art of storytelling.

### **MODULE 1**

Difference Between Time-Lapse and Stop Motion Animation Techniques – Time Lapse Animation Set Ups – Creation of Time-Lapse Animations.

### **MODULE 2**

Brief History of Stop Motion Photography - General Workflow of Stop Motion Animations - Procedures and Techniques: – Choosing Camera, Tripods, Lights, Software Etc. – Preparation Of: - Script, Storyboard, Character Designs Etc. - Character and Props Creation for Stop Motion Animation – Set Designing for Stop Motion Animation – Lighting - Post Production

### **MODULE 3**

Cutout Animation Project - Preparation of Characters/ Models – Finding Suitable Materials for Making Characters – Different Medium for Adding Details on a Model - Set Designing - Lighting

### **MODULE 4**

Puppet Animation /Clay Animation Project – Types of Puppets: –Simple Clay Models, Toys, Maquette, Armature, Simple Wire and Plasticine Puppets, Clothed Puppets - Preparation of Models – Colouring – Costumes - (Clay Modeling) – Set design for animation

### **MODULE 5**

Pixilation Project - Preparation Of: - Script, Storyboard, Models Etc. - Set Designing - Lighting - Animation - Post Production.

Sand Animation

### **Reference**

1. The Animation Book: Kit Laybourne
2. The Encyclopedia of Animation Techniques: A Comprehensive Step-By-Step Directory of Techniques, with an Inspirational Gallery of Finished Works: Richard Taylor
3. Stop Motion - Craft skills for model animation: Susannah Shaw
4. Stop Motion Passion, Process and Performance: Barry J C Purves
5. The Animator's Survival Kit: Richard Williams

## **COURSE 4-3: TYPOGRAPHY (PRACTICAL)**

### **OBJECTIVE**

This course enables students to create professional level typographic designs.

### **MODULE 1**

Art of Writing: Calligraphy: basic tools and instruments: dip pens, brushes, nibs etc. Application of calligraphy in designs: Logo designs, announcements, thematic posters etc. Understanding difference between Calligraphy and Typography

### **MODULE 2**

Understanding typeface: Typefaces and fonts, Anatomy: Apex, Beak, Arm, tail, serif, X height etc. Measurements: relative and absolute, point, pica etc. Em space and En space. Majuscule and minuscule – display type and text types

### **MODULE 3**

Classification of type - old style, transitional period, modern, slab serif, sans serif, script, decorative etc.

### **MODULE 4**

Selection of a type face in design: point size, line length, leading, tracking, and kerning. Readability and legibility, integration with visuals, concept, theme etc. 3D type – application of perceptives etc.

### **MODULE 5**

Express the meaning or idea of a word by use of size, spacing or placement of letters. Pattern poems or Concrete poetry, Typograms, Calligramme etc.

### **Reference**

1. Thinking with Type, 2nd revised and expanded edition: Ellen Lupton
2. Hand-Lettering Ledger: Mary Kate McDevitt Publisher: Chronicle Books
3. The Typographic Universe: Letterforms Found in Nature, the Built World and Human Imagination: Steven Heller & Gail Anderson
4. Shadow Type: Classic Three-Dimensional Lettering: Steven Heller & Louise Fili
5. Drawing Type: An Introduction to Illustrating Letter forms: Alex Fowkes.

## **COURSE 4-4: ADVANCED CEL ANIMATION (PROJECT)**

### **OBJECTIVE**

This course is meant for analyzing animal locomotion and motion in real world.

### **MODULE 1**

Animation of Four Legged and Two Legged Animals - Normal and Stylized Movements of animals

### **MODULE 2**

Bird Flight / Movements in Different Stages - Movements of Reptiles - Animating Insects and Fishes

### **MODULE 3**

Phonetics – Standard Mouth Shapes - Dialogue Animation – The Sound Track - Phrasing – Accents – Attitudes – Recoding of Dialogues and Voice-Over –Marking in X Sheets – Synchronizing Sound. - Dialogue Animation of Humanoid Characters

### **MODULE 4**

Animating Special Effects: - Cloth, Sky, Lightening, Rainfall, Snow, Water Drops, Water Ripples, Waves, Smokes, Fire, Explosions Etc.

### **MODULE 5**

**Project:** Creation of a digital 2D animation short film with proper use of (digital) ink and paint, sound synchronization etc.

### **Reference**

1. The Animator's Survival Kit: Richard Williams
2. Cartoon Animation: Preston Blair
3. Timing for Animation: Harold Whitaker and John Halas
4. How to Make Animated Films: Tony White
5. Character Animation-2D Skills for Better 3D: Steve Roberts
6. Horses and Other Animals in Motion: Eadweard Muybridge
7. The Illusion of Life: Disney Animation: Ollie Johnston, Frank Thomas
8. Animation from Pencils to Pixels: Classical Techniques for the Digital Animator: Tony White
9. The Animator's Workbook: Step-By-Step Techniques of Drawn Animation: Tony White

## **COURSE 4-5: TECHNIQUES OF 3D ANIMATION (PRACTICAL)**

### **OBJECTIVE**

Techniques of 3D Animation is a specialty course for the 3D Animation curriculum. This course provides students technical skills needed to model, texture, rig, alter and support character animations effectively.

### **MODULE1**

Modeling Automobiles - Modeling of Human Body Parts (Head, Ear, Mouth, Limbs, Torso, Etc.), Creation of Blend Shapes, Creating good mesh topology, Mesh Clean-Up.

### **MODULE2**

Materials Through Nodes – Material Utilities – Applying UV Coordinates for Texturing, various techniques of Editing UV Layouts, Importing 3D Objects Directly into Texture Painting Softwares – Painting UV Map – Application of the Texture - Procedural Texturing.

### **MODULE 3**

Study of skeleton Setups – Skeleton Creation – IK and FK –Attribute Controls – Expressions and basic Scripting for Rig –Rig Controls. Constraints – Locking and Hiding Animation Channels – Custom Attributes – Driven Keys, Creating Rigs for Props and two legged characters.

### **MODULE4**

Deformers, Skinning, Controlling Skin Weights – Painting skin Weights, Use of Blend Shapes.

### **MODULE5**

Editing Curves, Animation Layering, Animation constrains – Pose creation – linear and Non-linear animation techniques –Modifiers and Controllers. Planning and Blocking Animations, Break downs. Cyclic animation: Walk, Run, Jump.

### **Reference**

1. Character Development in Blender 2.5: Jonathan Williamson
2. Autodesk 3ds Max 2014 Essentials: Randi L. Derakhshani, DariushDerakhshani
3. Autodesk Maya 2014 Essentials: Paul Naas
4. Blender Master Class - A Hands-On Guide to Modeling, Sculpting, Materials, and Rendering: Ben Simonds
5. 3D Human Modeling and Animation: Peter Ratner
6. Digital Animation Bible - Creating Professional Animation With 3ds Max, Lightwave, And Maya: George Avgerakis
7. Animation Methods - Rigging Made Easy: Rig Your First 3D Character in Maya: David Rodriguez
8. Blender Studio Projects: Digital Movie Making: Tony Mullen, Claudio Andaur

## COURSE 5-1: ENVIRONMENTAL STUDIES AND HUMAN RIGHTS (THEORY)

### OBJECTIVE

Environmental Education helps students to understand how their decisions and actions affect the environment, builds knowledge and skills necessary to address complex environmental issues, as well as ways we can take action to keep our environment healthy and sustainable for the future. It encourages character building, and develop positive attitudes and values.

### MODULE1

**Multidisciplinary nature of environmental studies:** Definition, scope and importance - Need for public awareness.

**Natural Resources:** Renewable and non-renewable resources: Natural resources and associated problems. **a)Forest resources:** Use and over-exploitation, deforestation, case studies, Timber extraction, mining, dams and their effects on forest and tribal people. **b)Water resources:** Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems. **c)Mineral resources:** Use and exploitation, environmental effects of extracting and using mineral resources, case studies. **d)Food resources:** World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies. **e)Energy resources:** Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources, Case studies. **f)Land resources:** Land as a resource, land degradation, man induced landslides, soil erosion and desertification - Role of individual in conservation of natural resources - Equitable use of resources for sustainable life styles.

**Ecosystems: Concept of an ecosystem** - Structure and function of an ecosystem - Producers, consumers and decomposers - Energy flow in the ecosystem - Ecological succession - Food chains, food webs and ecological pyramids - **Introduction, types, characteristic features, structure and function of the given ecosystem:** - Forest ecosystem

### MODULE2

**Biodiversity and its conservation:** Introduction - Biogeographical classification of India - Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values -India as a mega-diversity nation - Hot-spots of biodiversity - Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts - Endangered and endemic species of India

**Environmental Pollution:** Definition - Causes, effects and control measures of: - (Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution) - Nuclear hazards - Solid Waste Management: (Causes, effects and control measures of urban and industrial wastes) - Role of an individual in prevention of pollution - Pollution case studies - Disaster management: floods, earthquake, cyclone and landslides.

**Social Issues and the Environment :** Urban problems related to energy - Water conservation, rain water harvesting, watershed management - Resettlement and rehabilitation of people: its problems and concerns, Case studies - Environmental ethics: Issues and possible solutions - Climate change, global warming, acid rain, ozone layer depletion , nuclear accidents and holocaust, Case studies - Consumerism and waste products - Environment Protection Act -Air ( Prevention and Control of Pollution) Act - Water (Prevention and control of Pollution) Act - Wildlife Protection Act -Forest Conservation Act -Issues involved in enforcement of environmental legislation - Public awareness

### MODULE3

**Sound pollution: Dynamic range of hearing**– Amplitude, frequency, Threshold of hearing, threshold of pain. **Causes of Sound pollution** – Industrialization, poor urban planning, social events, Transportation, Construction activities, Household chores, **Effect of Sound pollution** - Hearing problem, Health issue, Sleeping disorder, Cardiovascular issues, Trouble communicating, Effect on wild life. Prevention of Sound pollution

### MODULE4

**Media and environment:** Media coverage of environmental issues; Agenda setting of environmental risks and its presentation, Role of various media in establishing and maintaining perspectives on environment; tendencies and limitations of green journalism; Media as bridge between science and public.

### MODULE5

**Human Rights**– An Introduction to Human Rights, Meaning, concept and development, Three Generations of Human Rights (Civil and Political Rights; Economic, Social and Cultural Rights).

**Human Rights and United Nations** – contributions, main human rights related organs UNESCO, UNICEF, WHO, ILO, Declarations for women and children, Universal Declaration of Human Rights.

**Human Rights in India** – Fundamental rights and Indian Constitution, Rights for children and women, Scheduled Castes, Scheduled Tribes, Other Backward Castes and Minorities

**Environment and Human Rights** - Right to Clean Environment and Public Safety: Issues of Industrial Pollution, Prevention, Rehabilitation and Safety Aspect of New Technologies such as Chemical and Nuclear Technologies, Issues of Waste Disposal, Protection of Environment

**Conservation of natural resources and human rights:** Reports, Case studies and policy formulation. Conservation issues of Western Ghats- mention Gadgil committee report, Kasthuriengan Report. Over exploitation of ground water resources, marine fisheries, sand mining etc.

#### Internal: Field study

- Visit to a local area to document environmental grassland/ hill /mountain
- Visit a local polluted site – Urban/Rural/Industrial/Agricultural Study of common plants, insects, birds etc
- Study of simple ecosystem-pond, river, hill slopes, etc

#### Reference

1. Bharucha Erach, Text Book of Environmental Studies for undergraduate Courses. University Press, II<sup>nd</sup> Edition 2013 (TB)
2. Clark.R.S., Marine Pollution, Clarendon Press Oxford (Ref)
3. Cunningham, W.P.Cooper, T.H.Gorhani, E & Hepworth, M.T.2001 Environmental Encyclopedia, Jaico Publ. House. Mumbai. 1196p .(Ref)
4. Dc A.K.Environmental Chemistry, Wiley Eastern Ltd.(Ref)

5. Down to Earth, Centre for Science and Environment (Ref)
6. Heywood, V.H & Watson, R.T. 1995. Global Biodiversity Assessment, Cambridge University Press 1140pb (Ref)
7. Jadhav.H & Bhosale.V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284p (Ref)
8. Mekinney, M.L & Schock.R.M. 1996 Environmental Science Systems & Solutions. Web enhanced edition 639p (Ref)
9. Miller T.G. Jr., Environmental Science, Wadsworth Publishing Co. (TB)
10. Odum.E.P 1971. Fundamentals of Ecology. W.B. Saunders Co. USA 574p (Ref)
11. Rao.M.N & Datta.A.K. 1987 Waste Water treatment Oxford & IBII Publication Co.Pvt.Ltd.345p (Ref)
12. Rajagopalan. R, Environmental Studies from crisis and cure, Oxford University Press, Published: 2016 (TB)
13. Sharma B.K., 2001. Environmental Chemistry. Geol Publ. House, Meerut (Ref)
14. Townsend C., Harper J, and Michael Begon, Essentials of Ecology, Blackwell
15. Science (Ref)
16. Trivedi R.K., Handbook of Environmental Laws, Rules Guidelines, Compliances and Stadards, Vol I and II, Enviro Media (Ref)
17. Trivedi R. K. and P.K. Goel, Introduction to air pollution, Techno-Science Publication (Ref)
18. Wanger K.D., 1998 Environmental Management. W.B. Saunders Co. Philadelphia, USA 499p (Ref)
19. (M) Magazine (R) Reference (TB) Textbook

### *Human Rights*

1. Amartya Sen, The Idea Justice, New Delhi: Penguin Books, 2009.
2. Chatrath, K. J.S., (ed.), Education for Human Rights and Democracy (Shimla: Indian Institute of Advanced Studies, 1998)
3. Law Relating to Human Rights, Asia Law House,2001.
4. Shireesh Pal Singh, Human Rights Education in 21<sup>st</sup> Century, Discovery Publishing House Pvt.Ltd, New Delhi,
5. S.K.Khanna, Children And The Human Rights, Common Wealth Publishers,1998. 2011.
6. Sudhir Kapoor, Human Rights in 21<sup>st</sup> Century,Mangal Deep Publications, Jaipur,2001.
7. United Nations Development Programme, Human Development Report 2004: Cultural Liberty in Today's Diverse World, New Delhi: Oxford University Press, 2004.

## **COURSE 5-2: INTERACTION DESIGN (PRACTICAL)**

### **OBJECTIVE**

This course introduces students to the basic programming concepts allowing them to explore and experiment with code to control visual and interactive elements. By the end of this module students must showcase their creative and innovative works to the world of multimedia for securing a high-profile job.

### **MODULE 1**

Explore the internet terms like web hosting, web server, client server, domain registration etc. Explain the difference between static and dynamic Web Sites.

### **MODULE 2**

Client Side Scripting Language - Java Script: Creating User Logins and Form validation using JScript. Introduction to DOM (Document Object Model) concept

### **MODULE 3**

Server Side Scripting Language - PHP: Explain how the form data are being sent to the server and retrieve it from the server to the browser window.

### **MODULE 4**

Database Management System (DBMS) - Intro to SQL or MySQL which is used to create, read, write, delete and update records / data to/from a database from a PHP file.

### **MODULE 5**

**Project:** Hosting of the student's Portfolio Site or Creating a Blog which showcase their skillset to the realm of multimedia for the job hunting purpose.

### **Reference**

1. Adobe Flash Professional CC Classroom in a Book: By Adobe Creative Team Publisher - Adobe Press.
2. Adobe Flash Professional CC: A Tutorial Approach: (Revised and Updated Version) Prof. Sham Tickoo
3. Learning ActionScript 3.0 (A Beginner's Guide): Rich Shupe, Zevan Rosser.
4. Fundamentals of ActionScript 3.0: Develop and Design: Doug Winnie

## **COURSE 5-3: DIGITAL ILLUSTRATION (PRACTICAL)**

### **OBJECTIVE**

Various tools and techniques in digital illustration and Information Design are explained in detail. Vector and raster applications are used to create different style of results.

### **MODULE 1**

Introduction Digital illustration applications - Creating brush presets - Creating patterns for colour mixing, Using pen stroke paths. Digital painting techniques – Using blending modes, Opacity.

### **MODULE 2**

Concept Art: Character, Costume, Product, Equipment, Background concepts, Speed painting, Creature Concepts, Flora and Fauna, Comic Book layout & Illustration.

### **MODULE 3**

Basics of Information Design visualization – translating data into visuals. Designing statistical information graphics, Semiotics: The representation of objects – the process of simplification.

### **MODULE 4**

Visualizing complex data – process of converting data into useful information using graphics, Recreating events in space and time.

### **MODULE 5**

### **Project**

### **Reference**

1. Digital painting techniques: Practical Techniques of Digital Art Masters
2. The Visual Display of Quantitative Information: Edward R. Tufte
3. The Skillfull Huntsman: Visual Development of a Grimm Tale (Concept Art)
4. Complete Digital Illustration: A Master Class in Image-Making - Lawrence Zeegen
5. The Complete Guide to Digital Illustration: Steve Caplin, Adam Banks, Nigel Holmes
6. Information Design: Robert Jacobson
7. Envisioning Information: Edward R. Tufte

## **COURSE 5-4: ADVANCED 3D ANIMATION TECHNIQUES (PRACTICAL)**

### **OBJECTIVE**

This course will cover the advanced areas of 3D modeling, character animation, rigging and rendering. Special emphasis will be given to techniques for imbuing computer-generated characters with the illusion of life.

### **MODULE 1**

Modeling Different Types of Human Characters (Real, Stylized, Comic, Characters of Different Age Group Etc.). Modeling Animals and Birds - Basic Proportions, Modeling of Body Parts (Head, Ear, Horns, Mouth, Limbs, Torso, Tail, Wings Etc.)

### **MODULE 2**

Animating Different Types of Characters - Applying Principles of Animation - Body Language – Posing – Action – Reaction – Push and Pull – Lift – Throw – Staging. Animation of Camera and Light – Animating to Music and Dialogues - Lip Sync – Facial Expressions – Graph Editor - Dope Sheet - Blend Shapes – Basics of Motion Capture. Linear and Non-linear Animation Techniques.

### **MODULE 3**

Creating rigs for four legged characters.

### **MODULE 4**

Lighting a Character - Lighting a Scene to Matching the Environment - Exterior Lighting – Interior Lighting. Camera matching techniques.

### **MODULE 5**

Ray Tracing - Final Gathering – Global Illumination and Caustic Effects - Render Setups (Single Frame Rendering, Batch Rendering, And Different Rendering Formats) – Motion Blur – Applying Render Passes for Compositing - Image Based Lighting and HDRI Rendering.

### **Reference**

1. Autodesk 3ds Max 2014 Essentials: Randi L. Derakhshani, DariushDerakhshani
2. Autodesk Maya 2014 Essentials: Paul Naas
3. Character Animation-2D Skills for Better 3D: Steve Roberts
4. The Animator's Survival Kit: Richard Williams
5. Timing for Animation: Harold Whitaker and John Halas
6. Digital Animation Bible - Creating Professional Animation With 3ds Max, Lightwave, And Maya: George Avgerakis
7. Digital Lighting and Rendering: Jeremy Birn
8. Mastering Mental Ray: Rendering Techniques For 3D And CAD Professionals: Jennifer O'Conner
9. Blender Studio Projects: Digital Movie Making: Tony Mullen, Claudio Andaur
10. Blender Master Class - A Hands-On Guide to Modeling, Sculpting, Materials, And Rendering: Ben Simonds

## **COURSE 5-5: OPEN COURSE**

### **A. VIDEO EDITING (PRACTICAL)**

#### **OBJECTIVE**

The objective of this paper is to provide the basic principles involved in editing visuals and develop a basic skill with the tools and techniques available in standard Nonlinear video editing Software.

#### **MODULE 1**

How films are made? Persistence of vision, Fragmentation of action, Image sizes LS, MS, Close Up, Shot, Scene, Sequence. Linear Editing, Nonlinear Editing, Selecting Good shots- stages of editing

#### **MODULE 2**

Different Types of cables and connectors- Fire wire, HDMI, SDI, AV, Thunderbolts.

Different Media formats- Film, VHS, DV, HD DVD, CD Blue Ray

#### **MODULE 3**

Introducing a Non-Linear Editing Software- Project setting- Introducing interface, different windows, monitors-timeline, tools – Working with Bins, importing footage, Drag and drop editing, three-point editing JKL, time line trimming, rearranging clips in time line

#### **MODULE 4**

Continuity Editing-Match cut, cross cut, jump cut, Dialogue overlapping, L-Cut, J-Cut, Slow motion Fast motion, Synchronizing and mixing Video and Audio

#### **MODULE 5**

Working with effects, Adding different transitions and effects to Video- Working with Key frames, Compositing, Colour Correction, Titling, Exporting to different Video formats

#### **Reference**

1. Nonlinear Editing: Bryce Button (Focal Press)
2. Notes on Digital Film Editing: Gerhard Schumm (Digital Publish)
3. Grammar of edit (Second edition): Roy Thompson (Focal Press)
4. Make the cut: Lori Jane Coleman A.C.E & Diana Friedberg. (Focal Press)
5. Grammar of Shot (Second edition): Roy Thompson (Focal Press)

## **COURSE 5-5: OPEN COURSE**

### **B. ARCHITECTURAL DESIGN (PROJECT)**

#### **OBJECTIVE**

This course enables the students to create finished architectural models from AutoCAD drawings.

#### **MODULE 1**

Why AutoCAD - Advantages, Importance in Engineering Drawings system requirements, command entry, setting up of page size, starting drawings from scratch. Creating and using templates, opening a drawing, saving the drawing & exit from AutoCAD.

#### **MODULE 2**

Using co-ordinate systems – The UCS. Draw tool bar with shortcuts, Functional Keys. Modify tools with Shortcuts. Basic commands dealing with drawing properties: Layer control, change properties, line weight control, etc., Layers, Dimensions: Dimension styles, Linear, etc. General Drawings in Orthographic,

#### **MODULE 3**

3D concepts, Advantages. Introduction to 3D related menu bars -3D co-ordinate systems, Isometric & orthographic views, 3DVisual styles, Preparing 2D drawings for converting into 3D, Changing views to and fro 2D & 3D. Modeling toolbar: General shapes, Extrude - 2D sketches making boundary & region, extruding, Solid Editing.

#### **MODULE 4**

Drawing 2D sketches, Modeling 3D

#### **MODULE 5**

Importing DWG drawings in to other 3D software's. Unit setting, 3D modeling from 2D sketches, Giving Materials & Lightings, Rendering.

#### **Reference**

1. Mastering AutoCAD 2011: George Omura
2. AutoCAD 2011: A Problem-Solving Approach:Sham Tickoo
3. AutoCAD 2011 and AutoCAD LT 2011 Bible: Ellen Finkelstein
4. Introduction to AutoCAD 2011-2D & 3D Design: Alf Yarwood
5. Illustrated AutoCAD 2011 Quick Reference: Ralph Grabowski
6. Discovering AutoCAD 2011: Mark Dix, Paul Riley

**COURSE 5-5: OPEN COURSE**  
**C. DIGITAL 2D ANIMATION (PROJECT)**

**OBJECTIVE**

This course enables the aspiring talents to cope with the requirements of current Cel Animation Industry.

Each student should create an animation short not less than 2 Minutes duration. Project should be worked out through various production stages after the final approval by the supervising faculty.

Emphasis must be in the conceptual, aesthetic and technical processes.

In this project students should do Layout Design, Back Ground Design, Sound Synchronization etc.

Use of layers should be encouraged.

Digital tablets can be used for drawing and painting.

## **COURSE6 -1: INTERNSHIP (OJT)**

### **OBJECTIVE**

To acquire practical industry based experience

Internship is on the job training to assimilate the professionalism in a career. Internships offer students a period of practical experience in the industry relating to their field of study. The students should have to undergo an Internship at an Animation Studio /Graphic Design Studio for one month at the beginning of the sixth semester. A faculty member should monitor the students during the internship.

The students would prepare individual reports after the Internship and the same should be attested by the organization under which the student did the internship. The students' comprehensive report should be submitted to the HOD/Guide for evaluation.

## COURSE 6-2: ANIMATION PROJECT

### OBJECTIVE

Students should create an animation not less than three minutes excluding titles using any of the following methods for their animation project,

- Full 2D Animation
- Full 3D Animation
- Full Stop-motion Animation
- 2D Animation + 3D Animation
- 3D Animation + Stop-motion Animation
- 2D Animation + Stop-motion Animation
- 2D Animation + Visual Effects
- 3D Animation + Visual Effects
- Stop-motion Animation + Visual Effects
- 2D Animation + 3D Animation + Visual Effects
- 3D Animation + Stop-motion Animation + Visual Effects
- 2D Animation + Stop-motion Animation + Visual Effects
- Live Action + Animation

Project should be worked out through various production stages after the final approval by the supervising faculty. Students have to complete the final project within the given time period. Student should keep all the important paper works (script, storyboard and character designs) along with them. Viva Voce is part of the examination.

## **COURSE 6-3: PUBLICATION DESIGN (PRACTICAL)**

### **OBJECTIVE**

This course examines the graphic designer's role in the layout and design of multi-page publications in print and digital media. Lectures and studio work cover historical and current practices and technologies used to produce multi-page publications. Students create visualization for several publications using the design elements and art skills.

### **MODULE 1**

Layout Design: Directing the Eye, Backwards Movement, Application of Design Principles in Lay Out, Free Style Lay Out, Grid Design etc. understanding of Formats, Margins, Columns and Gutters.

### **MODULE 2**

Visualization of various layouts- magazine, newspaper, books, screen media etc. Creating a Suitable Grid, Title and Cover Policies. Selecting and Using Type family, White Space, Colour, Headlines, The Masthead etc.

### **MODULE 3**

Introduction to Adobe InDesign / scribes: Various tools and panels-Character formatting options and paragraph formatting. Colour and swatches palette, understanding of swatches exporting. Objects and its treatments: Shapes, Path – corner options, pathfinder etc. Clipping path and image masking. Page Panel, Insert Page, Concept of master page- apply Master to Page, Override master Item. Number & Section Option, Table of Content, Bullets & Numbering etc. Proof setup: - Pre-flight options, separations preview etc. Exporting of documents, Print booklet options etc.

### **MODULE 4**

Multipage publication design exercises: Visualization for various Formats: Magazine, Newspaper, books etc.

### **MODULE 5**

Electronic Publishing: Interactive PDF and Other E-Pub Formats, Interaction Between Movies, Sound Clips URL's And Other E-Books, E-Publication for Various Platforms.

### **References**

1. The Big Book of Layouts: David E. Carter
2. Layout Essentials -100 Design Principles for Using Grids: Beth Tondreau
3. Best of Newspaper Design: Society of News Design
4. Designing for Newspapers and Magazines: Chris Frost
5. Layout Workbook: Kristin Cullen
6. Designing Books: Practice and Theory: JostHochuli and Robin Kinross
7. Building Your Book for Kindle: Kindle Direct Publishing
8. The Intellectual Foundation of Information Organization (Digital Libraries and Electronic Publishing: ElaineSvenonius

## **COURSE: 6-4 DESIGN PROJECT**

Design project has two parts.

Part A: **Graphic Design Project**

Part B: **Demo reel presentation**

### **PART A**

All students develop an original body of work, culminating in a final presentation accompanied by a written component. This module offers students the opportunity to develop their own design project focusing on each student's personal design vision.

Final design outcomes may range from small or large scale printed artefacts. The project work is carried out under close guidance of a faculty member.

### **PART B**

Demo reel presentation is intended to assist the student to prepare for a job interview. Student will have to present his/her demo reel which is a culmination of their original works or of their area of expertise. The faculty will share tips and strategies to create an engaging demo reel and to face a job interview successfully. The demo reel should be in Interactive format. The student is free to use his/her individual creative style to present the final demo reel.

#### ***Tips for Demo reel***

What is a demo reel? Tips to create a successful demo reel - Keep it short, Make it specific, Choose a style - Collage or samples, Put your best work first, Your work only, Slate it - Include contact details at the start or the end of the demo reel, Showcase your involvement, Highlight impressive clients, Emphasize technical ability - Before and after shots of their work, Be mindful of aspect ratios, Say "No" to copyrighted music, Cut to the beat, Don't repeat footage, Quality control, Online all the time, DVDs for delivery, Label with contact info, Active and accessible, Show your personality, Ask a critic

Discuss the importance of self-promotion - Getting visibility - YouTube, Vimeo, Facebook, Blogs, Web page, Business cards, Job portals etc.

## COURSE 6-5: CHOICE BASED COURSE

### A. UI DESIGN (PROJECT)

#### OBJECTIVES

User Interface designs explores the design of digital interfaces and how humans interact with various Interfaces, Visuals, Semiotics and other interactive elements. This course helps students to understand theories and principles of interface design for varied platforms. This subject introduces students to various phases in Interface Design process and expected deliverables

#### MODULE1

An overview of the human experience design process - UX design to UI design - human perception and behaviour in virtual and spatial environments: colour, texture, typography, Imagery etc-cultural, geographical, psychological relationship. Design Considerations: Development factors- platform constraints, prototyping, customizability etc. Visibility factors: human factors and express a strong visual identity, human aptitude, product identity, clear conceptual model and multiple representations. Acceptance factors: corporate politics, international markets, training factors etc.

#### MODULE2

Principles of User Interface Design: **Organize**: Consistency, screen layout, relationships and navigability. **Economize**: Simplicity, Clarity, and Distinctiveness etc. **Communicate**: balance, legibility, readability etc.

#### MODULE 3

Design of elements: graphical techniques used to communicate the message or context – Semiotics: from real to the abstract.Colour: colour, texture and lightconvey complex information and pictorial reality. Animation: a dynamic or kinetic display of elements. Layout: formats, proportions, and grids – how to read a screen.

#### MODULE4

User Research &Wireframing: Conducting user research, Site/Content Map, Wireframing basics, Technical considerations. **Introduction to UI mock up software.**

#### MODULE5

Building a Brand: Creating brand guidelines for interactive applications. Selecting & expanding a design for interactive applications. Wireframing workflows, translating brand guidelines to UX for interactive applications. Wireframing review, Sketch analysis, Pitch Guidelines, Final wireframe critique, User flow review - Final design.

Project Example: Design a GUI for an integrated transport system in a metro city.

Design a interface for agriculture information system for farmers.

#### Reference

1. The Design of Everyday Things: Norman, Donald A
2. Designing Visual Interfaces: Communication Oriented Techniques: Mullet, Kevin, and Darrell Sano.
3. Human-Computer Interaction: Dix, Alan J., Janet E. Finlay
4. Developing User Interfaces (Interactive Technologies): Olsen, Dan R.
5. The UX Book : Rex Hartson and PardhaPyla
6. Smashing UX Design: Jesmond Allen and James Chudley
7. Balsamiq Wireframes Quickstart Guide: Faranello Scott

## **COURSE 6-5: CHOICE BASED COURSE**

### **B. ANIMATION EFFECTS (PROJECT)**

#### **OBJECTIVES**

This course will prepare the learners to design and execute compositing in Visual Effects using digital electronic media. Aim of the Course is to develop the students in a core set of technical and creative skills related to digital filmmaking.

#### **MODULE 1**

Visual Effects- Description- Types- Particles – Analysis- Size- Sand Effects – Smoke Effects- Fire Effects – Cloud Effects – Snow Effects

#### **MODULE 2**

Fluid Effects-Colouring- designing Clouds Background – Designing Fog Effects – Explosion Effects– Fire Effects with flames - Space Effects and designs- Designing Thick Smoke

#### **MODULE 3**

Designing Paint Effects – Colouring paints- Designing Trees and green effects – Designing Weather and seasons –Effects on seasons- Designing Glass image – Designing Different glass reflection- Designing Glow Effects – Liquid Effects and Reflection design.

#### **MODULE 4**

Designing Special Effects – Designing effects of Hair and shape – Designing Fur Effects- Designing Clothes and effects

#### **MODULE 5**

Visual Effects Tool and advanced functions– Converting images from 2D to 3D Pictures - Creating 3D Effects- Differentiation 2D effects and 3D effects.

#### **Reference**

1. The Invisible Art: Mark Cotta Vaz
2. Visual Effects Cinematography: Zoran Perisic
3. Industrial Light & Magic: The Art of Special Effects: Thomas G. Smith
4. The Art and Science of Digital Compositing (The Morgan Kaufmann Series in Computer Graphics) : Ron Brinkmann
5. The Language of Visual Effects: Micheal J. McAlister
6. Special Effects: The History and Technique: Richard Rickitt

## **COURSE 6-5: CHOICE BASED COURSE**

### **C. PAINTING WITH PIXELS (PROJECT)**

#### **OBJECTIVE**

This course will introduce the students to the art and craft of painting techniques like matte painting, rotoscoping, digital paint effects etc. Students apply this technique to the recreation of both realistic and fantasy scenes and character texturing. Emphasis also given to visual effect techniques like wire removal, paint animation etc.

#### **MODULE 1**

Concept of digital painting, Basic tools for painting, Digital creation of charcoal drawings, pastel, water color and oil painting using Photoshop, Illustration techniques.

#### **MODULE 2**

Character design: issues and limitations - Creating character history, Designing the physical look -Drawing, Sketching and painting of the character, Value and color in character creation. Lighting for a character, Using and blending edges in painting - Creating textures and patterns - Painting an eye, face and hair, Painting real and fantasy characters.

#### **MODULE 3**

Matte painting: preparing the background plate, articulated mattes, plate restoration, plate extension, adding 3D elements, creating sky mattes, static matte and motion matte painting, color grading, final output.

#### **MODULE 4**

Wire removal technique using Van bus compositing softwares.

Rotoscopy: basics and examples, Tracing for animation, matting with green screen, Garbage matting, mid ground Roto, Compositing mid ground, colorizing, and animated wipe.

#### **MODULE 5**

Demo reel creation

#### **Reference**

1. Bold Vision: A Digital Painting Bible: Gary Tonge
2. Digital Fantasy Painting Workshop: Martin Mckenna
3. Digital Character Design and Painting: Don Seegmiller
4. Complete Digital Painting Techniques: David Cole
5. Digital Fantasy Painting: Michael Burns
6. The Complete Guide to Digital Illustration: Steve Caplin, Adam Banks and Nigel Holmes
7. 100 Ways to Create Fantasy Figures: Francis Tsan
8. Drawing and Painting Fantasy Landscapes and City Scapes :Rob Alexander and Martin Mckenne
9. The Invisible Art: The Legends of Movie Movie Matte Painting:Mark Cotta Vaz and Craig Barron
10. D'artiste Matte Painting: Alp Altiner, Dylan Cole and Chris Stoski.

## **COURSE 6-6:ADVERTISING DESIGN (PROJECT)**

### **OBJECTIVE**

This practical course provides to develop the artistic, theoretic and technical skills of students in advertising as an art director, copywriter, or creative strategist. Solve creative problems within their field of art and design, including research and synthesis of technical, aesthetic, and conceptual knowledge. Students will meet the following performance criteria: Design skills, Problem solving, Conceptual thinking.

### **MODULE1**

Evolution of Modern Advertising - Definitions – Scope and present status- - Industrial Revolution - Advertising in the 20<sup>th</sup>Century. Types of Advertising: Classified - Display -Campaign ads - public service ads etc. Advertisers and Advertising Agencies - organizational structure of advertising agency.

### **MODULE 2**

Persuasive forms of Communication – what is persuasive communication. Advertising Theories: Hierarchical Effects Theory-Audience Resistance, Resilience and Selectivity-Marketing Mix -Brand Management and Market Segmentation - Brand Positioning: Strategies for competitive advantages - product class – consumer segmentation. Advertising and Media- Media Planning: Research, Frequency and Continuity, media plan frame work-reach and frequency and GRP goals - creativity in media planning. Ethics in advertising and other commercial art forms.

### **MODULE3**

Copy writing: Headline, sub-headlines, body, logo, copy style. Slogans or taglines- Writing for print-creative strategy for print media-newspaper, magazine etc.

### **MODULE4**

Lay-out and Design, Lay-out stages – Thumb-nail sketches - rough sketch - comprehensive layout – application of principles of design - balance - contrast - unity - harmony -proportion - eye movement and emphasis - Art works – photographs, Illustration, typography etc.

### **MODULE5**

Practical training on advertising design:

### **Reference**

1. The Advertising Concept Book: Pete Barry
2. Brand Thinking and Other Noble Pursuits: Debbie Millman
3. The Art of Looking Sideways: Alan Fletcher
4. Tested Advertising Methods: John Caples, Fred Hahn
5. Scientific Advertising: Claude C. Hopkins