

## Animation Course Content

1<sup>st</sup> Semester

### DE 613 Visual Language Syntactics

**Course Content** (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

- Relationship between syntactic, semantics and pragmatics Viewpoints, point of reference and framing. Relationship of colour, form and meaning. Explorations in visual abstraction.
- Study of Visual Language – critical study of visual elements. Features and principles. Exploration and creation of complex and meta patterns.
- Analysis of Aesthetics - the structure of Appearance. Form in nature, Exploration of visual images with analogies from nature.

#### **Texts / References**

- Gail Greet Hannah, Elements of Design, Princeton Architectural Press, 1 July 2002
- Hoffman, Armin; Graphic design manual, Principles and Practice. Arthur Niggli Publisher, Multilingual edition. October 1, 2001
- Proctor, R.M.; The principles of pattern, Dover Publications Inc.; Revised edition edition (28 January 1991)
- Wong, Wucius; Principles of Form and Design, Wiley Publications, (1 September 1993)
- Frutiger, Adrian; Signs and Symbols: Their Design and Meaning by, Ebury Press; New edition edition (12 November 1998)
- Itten, Johannes; The Art of Color: The Subjective Experience and Objective Rationale of Color, Wiley Publications, December 1997.
- Kepes, Gyorgy; Language of Vision, Dover Publications Inc. (1 December 1995)
- Elam, Kimberly; Geometry of Design: Studies in Proportion and Composition, Princeton Architectural Press (1 August 2001)
- Hall, Edward Twitchell; The Hidden Dimension, Publisher: Anchor; Reissue edition (1 September 1990)
- Bachelard, Gaston; Jolas, Maria (Translator); The Poetics of Space, Publisher: Beacon Press; Reprint edition (April 1, 1994)
- Livio, Mario; The Golden Ratio: The Story of PHI, the World's Most Astonishing Number, Publisher: Broadway Books; Reprint edition (September 23, 2003)

## **DE 627 Indian thought and tradition**

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

This is an exposure course to Indian thought and traditions which will cover various domains like Indian visual art, oral traditions, music, dance, theatre, science, health and architecture and society that make India stand out uniquely as a nation because of its diversity of cultures, languages, religions and customs

**Visual Art** - Traditional and contemporary schools of Indian Art, folk art

**Oral Traditions** from the ancient to the present

**Music** - Classical (Hindustani & Carnatic), Semi-classical, Folk, Fusion

**Dance** - Classical, Folk, Contemporary

**Theatre** - Traditional (Natyashastra), Contemporary, Puppet Theatre

**Science** - An understanding of the scientific approach to everything and the holistic approach to it and how it influenced all aspects like health, architecture, management and even the arts.

Post independence understanding of India as a nation and bridging the wealth of the past with the potential of the future.

Reflection of this exposure to the question - What is or what can be called 'Indian' Design.

### **Texts / References**

- Iyer Bharatha K., Indian Art-a Short Introduction, Stosius Inc/Advent Books Division; Reprint edition (1 December 1983)
- Gandhi Indira, Eternal India, Allen & Unwin (1 August 1980)
- Boner, Sharma Baumer; Vastusutra Upanishad, Motilal Banarsidass Publishers; 3rd Revised edition edition (2000)

## **DE 629 Introduction to Photography**

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

Lens, Focal Length, Exposure (Shutterspeed, Aperture, ISO), Depth of Field, Histogram, Picture Styles, RAW image, Digital Imaging, Sensor, Crop, Factor, Light Metering (Incident, Reflected), Photographic Documentation.

### **Texts /References**

- Andrews, Philip & Langford, Michael, Langford's Starting Photography: The Guide to Creating Great Images, Focal Press, 2008.
- Hirsch, Robert, Light and Lens: Photography in the Digital Age, Taylor & Francis Group, 2012.
- Page, David A. & Zakia, Richard D., Photographic Composition: A Visual Guide, Focal Press, 2011
- Hunter, Fil&Biver, Steven & Fuqua, Paul, Light Science and Magic : An Introduction to photographic Lighting, Focus Press, 2012.
- Zakia, Richard D., Perception and Imaging: Photography—A Way of Seeing, Focal Press, March 2013.
- Berger, John, Ways of Seeing, Penguin, 25 Sep 2008.
- Arnheim, Rudolf, Visual Thinking, University of California Press, April 16, 2004.

### **DE 631 Introduction to Typography**

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practical's/assignments):*

History of Typography, Type Terminology, Font Classification, Anatomy of Typefaces, Introduction to Indic Script Typography, Typesetting, Web Typography.

### **Texts /References**

- Ruegg, Ruedi & Frohlich, Godi : Basic Typography, ABC edition, Zurich,1972.
- Naik, Bapurao; Typography of Devanagari. Directorate of Languages, Bombay, 1971.
- Ruder, Emil; Typography, a manual of Design March 1, 2001.
- Schmid, Helmut: The Road to Basel, 1997.
- Bringhurst, Robert; The elements of typographic Styl. Hartley and Marks 15 Jan 2013.
- Elam, Kimberly; Exrpressive Typography. The word as image, 1990.
- Bain, E.K; Display Typography, 1970.
- McLean, Ruari; Manual of typography. Thames and Hudson, 1980.
- Lupton, Ellen; Thinking with type : a critical guide for designers, writers, editors, and students, New York : Princeton Architectural Press 2004.
- Schmid, Helmut; The road to Basel, Helmut Schmid Design, 1997.
- Samara, Timothy; Making and breaking the grid: a graphic design layout workshop.  
Gloucester : Rockport Pub, 2005.
- Jute, Andre; Grids: the structure of graphic design. Crans-Pres-Celigny: Rotovision, 2002.
- Muller-Brockmann, Josef; Grid systems in graphic design. Arthur Niggli, Netherlands, 2010.

## **DE 643 Digital Animation 1**

**Course Content** (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

Digital Animation 1 is an overview of how to use digital tools effectively in the process of animation creation and the use of different technologies applied to animation.

### The Digital Image

- Analog v/s Digital and the Binary world
- Digital Colour, Channels, bit depth and resolutions
- Bitmap and Vector graphics
- Boolean operations and Blend modes

### Getting Real world into the Digital Realm

- Input tools like digital photography, video, digital intermediate (DI) for film, scanning and 3D digitizing

- Paint and Photo retouching tools

### Organising your data

- Data management tools
- Organization of Research with Mindmaps and Story Concept Creation
- Spreadsheets

### Animation and the Digital world

- Tradigital Animation
- 3D Animation
- Other methods of Animation

### Digital Filmmaking

- Compositing and Special Effects
- Editing
- Sound Engineering

### Other Digital Technologies

- Motion Control
  - Motion Capture
  - Motion Tracking
  - Image Processing, Matting and Keying
  - Use of various technological concepts like solid dynamics, fluid dynamic, fractals etc. in animation.
- Digital Implementation of Traditional Animation Principles – an introduction.

### **Texts / References**

- Dan Ablan, Digital Cinematography & Directing, New Riders; 1 edition (3 December 2002)
- Jeremy Birn, Digital Lighting & Rendering, New Riders Press, 2000
- Owen Demers, Digital Texturing & Painting, New Riders Press, 2001
- Glenn Kirkpatrick, Flash Cartoon Animation: Learn from the Pros, A-Press, 2003

### **DE 645 : Animation Theory 1**

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- To gain an understanding of the evolution of animation
- Delving into animation history – both of India and the World
- Precursors to animation: Cave paintings, animation toys
- Animation before Disney
- Studio animation
- Feature animation
- Personal films and expression
- Adult animation
- Animation Today

### **Texts / References**

- Dark Alchemy, The Films of Jan Svankmajer, Edited by Peter Hames, Greenwood Press  
(15 August 1995)
- Disney's Aladdin – The Making of an Animated Film, John Culhane, Hyperion, NY, 1992
- The Illusion of Life – Essays on Animation, Edited by Alan Cholodenko, Power Publication in association with Australian Film Commission, SYD, 1991
- Disney Discourse – Producing the Magic Kingdom, Edited by Eric Smoodin, Routledge, London, March 24, 1994.
- Eisenstein on Disney, Edited by Jay Leyda, Seagull Books, Calcutta, 1993
- Animation 101, Ernest Pintoff, Michael Wiese Productions, CA, 1999

## **DE 647 Animation Principles 1**

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Understanding principles that translate sequential images into action to make animation believable
- Understanding properties of matter
- Making use of the wave principle, delayed secondary action, slow and fast action impact, speed, weight, tendency of weight to move in a certain way, recoil effects, squash and stretch related to weight, overlapping action, follow through
- Animating force acting on objects, object weight, construction, flexibility, object behavior when force acts on them
- Principles of Timing
- Gaining an insight into the invisible concept of time in nature
- Understanding the basic unit of time in animation
- Emphasizing the difference between caricature, drama, humor
- Timing governing acting and movement
- The use of anticipation, action, reaction
- Methods of doping, writing exposure sheets, bar sheets
- Planning accents, beats, scene timing, spacing of drawings, holds, easing in and out
- Animating to music
- Principles of Movement
- Understanding the meaning of movement and movement in nature and what movement expresses
- Awareness of how mood and feeling can be conveyed through movement and animate and inanimate object behavior
- Examining the laws of motion in the context of animation; cause and effect, thrown objects, rotating, force, oscillating movement, friction, resistance
- Studying the tendency of weight to move in a particular manner
- Simplification and exaggeration of movement

## **Texts / References**

- Harold Whitaker and John Halas, *Timing for Animation*, Focal Press; 2 edition (2 September 2009)
- Preston Blair, *Cartoon Animation*, Walter Foster Publishing Inc., CA 1995
- Edited by Peter Hames, *Dark Alchemy, The Films of Jan Savankmajer*, Greenwood Press, 15 August 1995
- John Culhane, *Disney's Aladdin – The Making of an Animated Film* Hyperion, Disney Editions; Reprint edition (2 September 1993)

## **DE 649 Animation Design 1**

### **Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Covers the entire process from script to screen in process for an animation film (short or feature)
- Overview of the Process
- Preproduction, Production, Post Production
- A comparison between live action filmmaking & animation The primary difference being that an animation film tends to be pegged down pretty accurately by the end of the preproduction process itself whereas for a live action film it is close to completion only at the end of editing which is a post production process.

#### **Preproduction**

- Story to Script
- Whether adapted or original, taking the story from a verbal or spatial medium like a book or graphic novel to a form suitable for making a film. What makes a good story?
- Plot & Character: Action Plots & Mind Plots. Analysis of different types of plots
- Archetypes v/s Stereotypes - understanding of archetypes and a brief introduction to the monomyth (hero's journey).
- Why Animation? (instead of live action)
- Animation as a story telling (narrative) medium
- Animation as an artistic medium
- Visual Concepts, Character Exploration & Storyboards
- Animatics
- Character Design & Model Sheets, Layouts & Scene Planning Production
- Animation
- Acting - Animation is not about moving images but moving people
- Traditional 2D animation
- a. Linetests - Keyframes & Timing (breakdowns & inbetweens) also brief introduction to thumbnailing (for quick exploration of alternative methods of animating a scene)
- Study comparisons between different rhythms of animation
- Executing straight ahead and inbetweened planned animation, limited animation, full animation
- Drawing key frames, breakdowns, inbetweens, animation cycles
- Cleanups

### **Post Production**

- Voice, Music & Effects
- Understanding the dynamics of sound design and use of sound as a key component of animation
- Designing a sound track for animation including • music, dialogue, voice overs, lip synch and FX
- Recording and mixing multiple tracks
- Post processing sound
- Compositing & Editing
- Work in Progress. Development of a film from Animatic to Edit with different scenes at different stages.
- Coming together of the various elements of the scene.
- Final Mixing of Sound & Final Edit
- Understanding the dynamics of camera moves and magnifications
- Experimenting with camera techniques and working directly under camera
- Using registration fields, table moves and peg movements
- Screening & Feedback

### **Visual Form**

- Exploring the look and feel for animation through concept art
- Planning character design, layout design, illustration style, composition, staging, backgrounds
- A study of indigenous design and painting, both contemporary and traditional to understand and analyze a variety of styles and visual language
- Designing a sound track for animation including • music, dialogue, voice overs, lip synch and FX
- Recording and mixing multiple tracks
- Post processing sound
- Compositing & Editing
- Work in Progress. Development of a film from Animatic to Edit with different scenes at different stages.
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- Exploring the look and feel for animation through concept art
- Planning character design, layout design, illustration style, composition, staging, backgrounds
- A study of indigenous design and painting, both contemporary and traditional to understand and analyze a variety of styles and visual language



## Texts / References

- Shamus Culhane, Animation from script to screen, St. Martin's Griffin; Reprint edition (15 August 1990)
- Richard William, The Animators Survival Kit, Faber and Faber, Faber & Faber; Second Edition edition (January 7, 2002)
- Kit Laybourne, The Animation Book, Crown Trade Paperbacks, NY, 1998
- Tony White, The Animator's Workbook- Step by Step Technique of Drawn Animation, Watson-Guptill Publications, 1988
- Mascelli Joseph V, The Five C's of Cinematography: Motion Pictures Filming Techniques, Silman-James Press, 1<sup>st</sup> October, 1998
- Daniel Arijon, Film Technique, Silman-James Press, 1991
- David Sonnensch, Sound Design: The Expressive Power of Music, Voice and Sound Effects in Cinema, Michael Wiese Productions, 26<sup>th</sup>, October, 2001
- David Lewis Yewdall, Practical Art of Motion Picture Sound, Second Edition, Focal Press, 2003
- Tomlinson Holman, Sound for Film and Television, Second Edition, Focal Press, 2001  
References for Visual Form
- Mark Cotta Vaz, The Art of Finding Nemo, Cronicle Books, 2003
- Gary Russell, The Art of The Fellowship of the Rings, Houghton Mifflin, 2002
- Gary Russell, The Art of The Two Towers (The Lord of the Rings), Houghton Mifflin, 2003
- Gary Russell, The Art of The Return of the King (The Lord of the Rings), Houghton Mifflin, 2004
- Will Eisner, Graphic Storytelling, Poorhouse Press, 1996
- Will Eisner, Comics and Sequential Art, Poorhouse Press, 1985
- Scott McCloud, Understanding Comics, Perennial Currents, 1994
- Bradford W. Wright, Comic Book Nation, Johns Hopkins University Press, 2003
- Stephen Missal, Exploring Drawing for Animation (Design Exploration Series), Thomson Delmar Learning, 2003

## **DE 651 Sketching and Anatomy 1**

**Course Content** (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

- To become fluent with capturing the human and animal form
- Proportions, structure, volume and shading techniques

### **Texts / References**

- John.V.Vanderpoel, The Human Figure, Dover Publications; 2nd edition (24 April 2012)
- George.B.Bridgman, Bridgman's Life, Drawing Dover Publications Inc.; New edition edition (5 June 1972)
- Betty Edwards, The New, Drawing on the Right Side of the Brain, HarperCollins; New edition edition (5 November 2001)
- Betty Edwards, The New, Drawing on the Right Side of the Brain, Souvenir Press Ltd (30 April 2003)
- Stephen Missal, Exploring Drawing for Animation (Design Exploration Series), (Paperback) Delmar Cengage Learning (31 Oct. 2003)

2<sup>nd</sup> Semester

**DE 612 Design Issues**

**Course Content** (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

This course will contain two predominant approaches. The first is reflective which will help students to ponder on the very basic yet subjective questions like what makes a good designer.

- It will address understanding perceptions & paradigms which enable students to 'think outside the box' by identifying the boxes one creates inadvertently while designing.

- It will deal with the tangible and intangible relevance of broadening one's perspectives in

Arts Aesthetics, Science and Technology to design.

The second is an exposure to different thoughts and perspectives, concerns and issues in the context of design.

- The challenges in design, layers or user experience, design process
- Design for the real world
- It will also expose the students to emerging areas of design,
- Relevance of design in the context of India,
- Importance of sustainable design practices, preserving traditional practices & designing for the underserved communities.
- Lastly it will provide an exposure to the design process

### **Texts / References**

- Covey, S. The Seven Habits of Highly Effective People. Free Press; 1st edition (September 15, 1990)
- Athvankar, Uday, Mental Imagery as a Design Tool, Cybernetics and Systems, Vol 28, No 1, Jan-Feb, 1997, pp 25-42.
- Athvankar, Uday, Learning from the way Designers Model Shapes in their Mind, Cognitive Systems : from Intelligent Systems to Artificial life, ed. J.R. Issac and V. Jindal, Tata McGraw-Hill, New Delhi, 1997, pp 221-232.
- Poovaiah, Ravi and Sen, Ajanta. Design by People within Culturally-rooted Idioms – the new ‘cool’ in a globalised world: - paper at ICSID Educational Conference at Copenhagen, Sept. 2005
- Christopher Jones, Design Methods Seeds of Human Future, Wiley, Interscience (1970)
- Jesse James Garrett, The Elements of User Experience, New Riders (2003)
- Hugh Beyer and Karen Holtzblatt, Contextual Design, Morgan Kaufmann (1998)
- Victor Papanek, Design for the real world, 2nd edition, Academy Chicago Publishers; 2nd edition (15 July 1985)
- Donald Schön, The Reflective Practitioner: How Professionals Think In Action, Basic Books (2 September 1984)

### **DE 614 Design Workshop**

**Course Content** (*List of the topics/sub-topics to be covered in the lectures/practical's/assignments*):

- An independent on week workshop which involves working on actual design problems with practicing professionals. Study of various techniques used in Design execution like Calligraphy, Pottery and Ceramics, Printmaking, Theatre, Film and Video, Performing Arts Sculpture, Painting, Story Telling and Narrative, Toy Design, Book Design, Sound Design, Exhibition Design, Information Graphics and Way finding, Environment etc.

### **Texts / References**

- Robin Williams, John Tollett, Design Workshop, Peachpit Press; 2nd edition (August 20, 2006)
- Robin Williams, John Tollett, Pearson (2002)

## **DE 624 Introduction To Filmmaking**

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

Pre-production, Developing Story, Script Writing, Story Board, Production, Camera, Shooting Strategies, Camera Movements, Steadicam, Sound Recording, Post Production, Editing, Sound Design, Color Correction, Transcoding.

### **Texts / References**

- Ascher, Steven & Pincus, Edward, The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age, Plume; 4 Rev Upd edition (27 Nov. 2012)
- Ray, Satyajit, Our Films, Their Films, Sangam Books Ltd (1 Jan. 2001)
- Rodriguez , Robert, Rebel without a Crew, Plume Books Sep - 1996 (1709)
- Katz, Steve, Film Directing Shot by Shot: Visualizing from Concept to Screen, Michael Wiese Productions; 1 edition (6 April 2011)
- Murch, Walter, In the Blink of an Eye, Silman-James Press,U.S.; New edition edition (1 September 2001)
- Mascelli, Joseph V., The Five C's of Cinematography: Motion Picture Filming Techniques, Silman-James Press,U.S. (1 October 1998)
- Andersson, Barry, Geyen, Janie L., The DSLR Filmmaker's Handbook, John Wiley & Sons, Inc., 2012
- Kolker, Robert, Film, Form, and Culture, McGraw-Hill Inc.,US (1 September 2001)

## **DE 632 Acting and Staging**

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

Acting and Staging are absolute essentials for making the characters and story to come alive.

- Introduction to stagecraft for theatre, live action film and animation
- Understanding characters and their back stories
- Interpreting the importance of the scene through action & staging
- Acting workshop
- Using editing and understanding film language to enhance character development and storytelling.

### **Texts / References**

- Hooks, Ed, Acting for Animators, einemann Drama; Revised edition (September 2, 2003)
- Sito, Tom. Whitaker, Harold & Halas, John, Timing for Animation, Taylor & Francis, 2013.
- Webster, Chris and Hayes, Derek, Acting and Performance for Animation, CRC Press, 2013.

## **DE 634 Digital Animation 2**

**Course Content** (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

### Object Creation for Animation

- Creating and Modifying Objects
- The main animation parameters
- Grouping and Hierarchy
- Optimizing your projects and Interactivity for animation creation

### Creating Animation

- Project Planning, Execution to Completion
- Keyframes, Interpolation and Graph Editing

### Compositing and Special Effects

- Creating a Special Effects Film – Script to screen
- Influence of animation on Live action Films: previz, animation, compositing and effects.
- Advanced digital techniques in animation

### **Texts / References**

- Dan Ablan, Digital Cinematography & Directing, New Riders; 1 edition (3 December 2002)
- Jeremy Birn, Digital Lighting & Rendering, New Riders; 3 edition (November 21, 2013)
- Owen Demers, Digital Texturing & Painting, New Riders (August 19, 2001)
- Glenn Kirkpatrick, Flash Cartoon Animation: Learn from the Pros, Apress; 1st Corrected ed. 2002. Corr. 2nd printing 2004 edition (15 November 2004)

## **DE 636 : Animation Theory 2**

**Course Content** (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

- Understanding contemporary trends in animation making in terms of content, styling, techniques and applications
- Studying animation films through film viewing, appreciation, criticism, theoretical writings, essays , research studies
- Aesthetics: Introduction to Aesthetics (Indian and Western)
- Introduction to major art movements
- Narrative: Introduction to narrative structures (Indian and Western)
- Modes of Narrative
- Narrative Discourse
- Film Theory: Perception
- Representation
- Signification
- Genres
- Identification and Psychoanalysis
- Interpretation

### **Texts / References**

- Dark Alchemy, The Films of Jan Svankmajer, Edited by Peter Hames, Greenwood Press 15 August, 1995
- Disney's Aladdin – The Making of an Animated Film, John Culhane, Hyperion, NY, 1994-10-06
- The Illusion of Life- Essays on Animation, Edited by Alan Cholodenko, Power Publication in association with Australian Film Commission, SYD, 1991
- Disney Discourse – Producing the Magic Kingdom, Edited by Eric Smoodin, Routledge, London, 24 March, 1994
- Eisenstein on Disney, Edited by Jay Leyda, Seagull Books, Calcutta, 1993
- Animation 101, Ernest Pintoff, Michael Wiese Productions, CA, 1999

## DE 638 Animation Principles 2

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Study of Animation Techniques & styles developed and used over the years in animation.
- Appreciating the difference between the processes of the basic 3 methods of animation, namely
- frame by frame creation of animation (like traditional 2D)
- Modification of object or image to produce animation. (like paint on glass, sand on glass, simple claymation without armatures etc)
- Manipulation of objects to produce animation. (like 2D cutout animation, 3D claymation with armatures, simple object animation, Puppets, etc)
- Exploring & developing the animation world based on the technique you might choose for animation.
- The Digital World and the avenues opened by it in terms of animation design.
- Animation articulation and performance
- Understanding the role of drama and acting in creating convincing characterization and emotion
- Creating believability by taking off on the natural, making objects behave in character
- Expressing attitude, gesture, body language
- Role playing through actual and mental miming
- Character acting, reacting, take
- Expressing exaggeration through caricatured matter acted upon by caricatured forces

### **Character Animation**

- Reflecting on human movement
- Gaining an insight into creating believable action
- Practicing the mechanics of biped walks, runs, head turns, gestures
- Methods of lip-syncing to sound breakdowns
- Posing characters in scenes

### **Animal movement**

- Reflecting on animal movement
- Gaining an insight into creating believable action
- Practicing the mechanics of quadruped- walks, runs, gallops; bird movement and flight Sfx
- An awareness of and an ability to create convincing atmosphere
- Creating animated environments and atmosphere like flames, smoke, water, rain, snow etc. to offset principal animation
- Creating Special effects such as explosions, speed lines etc.



### **Texts /References**

- Ed Hooks, *Acting for Animators* Heinemann, Routledge; 3 edition (September 21, 2011)
- Eadweard Muybridg, *The Human Figure in Motion*, Dover Publication Inc., NY, June 1,1995
- Richard William, *The Animators Survival Kit*, Faber and Faber, New York, London, 2002
- David Choquet, *1000 Game Heroes*, Taschen. 27 September, 2002
- Eadweard Muybridg, *Animals in Motion*, Dover Publication Inc., NY, 1957
- Alan Cholodenko (edited by), *The Illusion of Life- Essays on Animation Power*, Publication in association with Australian Film Commission, SYD, 1991
- Eric Smoodin (edited by), *Disney Discourse – Producing the Magic Kingdom* Routledge, London, 24 March, 1994
- Jay Leyda (edited by), *Eisenstein on Disney* Seagull Books, Calcutta, 1986
- Ernest Pintoff, *Animation 101*, Michael Wiese Productions, CA, 1999

### **DE 640 : Animation Design 2**

#### **Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Experimenting with techniques for visual storytelling, structure, story building, writing for animation
- Examining indigenous narratives, both contemporary and traditional to gain an understanding of storytelling methods pertinent to our culture
- Creating dramatic flow, planning, pacing, sequencing, organizing visual flow and continuity in storyboards
- Co-ordinating character, scene length, pace of action
- Choreographing scene change and camera movement
- Planning, examining, analyzing and pacing character behaviour
- An exposure to various animation techniques
- Workshops using both 2D and 3D techniques on Computer, Film, Video etc.
- Production of professional stop-motion animation puppet and usable set props.
- Understanding how a stop-motion animation production works
- Sculpting, mould making, armature construction and casting techniques.
- Methods to fabricate a stop-motion animation puppet
- Techniques for set construction.
- Doping, animating, lighting and shooting
- Post production techniques

### **Texts /References**

- Robert Russett and Cecile Starr, *Experimental Animation, Origins of a New Art A Da Capo*  
Paperback, NY, 1998
- Peter Lord and Brian Sibley, *Cracking Animation –The Aardman book of 3D Animation*,  
Thames and Hudson Ltd; 2 edition (25 Oct. 2010)
- Richard Taylor, *Encyclopedia of Animation Techniques*, Book Sales, 2004
- Michael Frierson, *Clay Animation: American Highlights 1908 to Present*, Twayne Publishers, February, 1994
- Chris Patmore; *The Complete Animation Course: The Principles, Practice, and Techniques of Successful Animation*, Barron’s Educational Series, 1<sup>st</sup> August, 2003
- Frank Thompson, *The Making of The Nightmare Before Christmas*, Disney Editions, 2002
- Peter Lord and Brian Sibley, *Cracking Animation –The Aardman book of 3D Animation*, Thames & Hudson, 2000  
References for scripting
- Marilyn Webber, *Gardner’s Guide to Feature Animation Writing: The Writer’s Road Map*  
Garth Gardner Company, 2002
- Jeffrey Scott, *How to Write for Animation*, Overlook Press, 2002
- Marilyn Webber, *Gardner’s Guide to Animation Scriptwriting: The Writer’s Road Map*,  
Garth Gardner Company, 2002
- Jean Ann Wright, *Animation Writing and Development: From Script Development to Pitch*  
(Focal Press Visual Effects and Animation), Focal Press, 2005

### **DE 642 Sketching and Anatomy 2**

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- To become fluent with capturing the human and animal form
- Proportions, structure, volume and shading techniques.

### **Texts / References**

- John.V.Vanderpoel, The Human Figure, Dover Publications; 2nd edition (June 1, 1958)
- George.B.Bridgman, Bridgman's Life, Drawing Dover Publications Inc.; New edition edition (5 June 1972)
- Betty Edwards, The New, Drawing on the Right Side of the Brain, Harper Collins Publishers, 5<sup>th</sup> November, 2001
- Betty Edwards, The New, Drawing on the Right Side of the Brain, Workbook Souvenir Press Ltd., London, 2002
- Stephen Missal, Exploring Drawing for Animation (Design Exploration Series), (Paperback) Thomson Delmar Learning, 1<sup>st</sup> October, 2003

3<sup>rd</sup> Semester

### **DE 703 Arts Design and Society 1**

**Course Content** (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

- Analysis of history of Art. Traditional Arts. Modernity and Post – Modernity.
- Analysis of history of Design. Bauhaus, Ulm.
- Analysis of history of Design in India. Analysis of design in the context of India.
- Cultural Studies. Discourse analysis.
- An Introduction to Theatre.
- An Introduction to Documentary Films.
- Critical writing in Art, Design, Theatre and Film.
- An Introduction to Humanities and Social Sciences.
- Qualitative methods – ethnographic, historical, philosophical case study, and interview.

## Texts / References

- Mario, Bussagli; Sivaramamurti, C.; 5000 Years of Art in India, L.N.Abrams, NY, 1981.
- Ananda, Coomaraswamy; The Dance Of Siva, Kessinger Publishing, LLC (September 15, 2006)
- Eames, Charles and Ray; The India Report, NID, 1958
- Hylland, Eriksen Thomas; Small Places, Large Issues - Second Edition: An Introduction to Social and Cultural Anthropology (Anthropology, Culture and Society), Pluto Press; 2 edition (April 20, 2001)
- Neil, Gershenfield; When Things Start to Think, Published by Hodder & Stoughton Ltd  
07/01/1999
- Gropius, Walter (Author); Pick, Frank (Introduction); Shand, P. Morton; The New Architecture and The Bauhaus, The MIT Press; F First Edition Thus, Later Printing edition (March 15, 1965)
- Morris, William (Author); Kelvin, Norman (Editor); William Morris; on Art and Socialism, Dover Publications (August 9, 1999) ISBN-13: 978-0486409047
- Papanek, Victor; Design for the Real World, Chicago Review Press; 2 Revised edition (August 30, 2005)
- Meggs, Philip; A History of Graphic Design, John Wiley & Sons; 3rd ed. edition (1998)
- Trivedi, Kirti (ed.); Indian Symbology, IDC, 1987
- Raizman, David; History of Modern Design, Publisher: Pearson Prentice Hall; 2nd edition  
(July 9, 2010)
- Spitz, Rene; The Ulm School of Design: A View Behind the Foreground, Publisher: Edition Axel Menges (March 20, 2002)
- Lupton, Ellen; Miller, J. Abbott (Editor); The ABC's of Bauhaus, The Bauhaus and Design Theory, Publisher: Princeton Architectural Press (June 15, 2000)

## **DE 709 Sound and Camera**

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Understanding the dynamics of sound design and use of sound as a key
- Designing a sound track for animation including music, dialogue, voice overs, lip synch and FX
- Recording and mixing multiple tracks
- Post processing sound
- Understanding the dynamics of camera moves and magnification
- Experimenting with camera techniques and working directly under camera
- Using registration fields, table moves and peg movements.

### **Texts / References**

- Mascelli Joseph V, The Five C's of Cinematography: Motion Pictures Filming Techniques, Silman-James Press,U.S. (1 October 1998)
- Daniel Arijon, Film Technique, Silman-James Press, 1<sup>st</sup> November 1991
- David Sonnensch, Sound Design: The Expressive Power of Music, Voice and Sound Effects in Cinema, Michael Wiese Production, 26<sup>th</sup> October 2001
- David Lewis Yewdall, Practical Art of Motion Picture Sound, Second Edition Focal Press, 2003
- Tomlinson Holman, Sound for Film and Television, Second Edition Focal Press, 2001.

## **DEP 701 M.Des Project 1**

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

The summer internship provides an opportunity for you to work in rural or urban scenarios, based on your preferences and it hopes let you explore the impact design can have on our society, given the backdrop of socio-economic and cultural context of our country.

The duration of the project is four weeks.

All the students will have to make a presentation after they have completed their internships.

**Texts / References**

As per project choices.

**DEP 703 M.Des Project 2**

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

The communication design projects are chosen in areas that include film and video, typography, information design, graphic design, illustrated books and book design, animation and interaction design. This is the equivalent of the final dissertation project leading to the degree of M.Des in Communication Design.

- Duration: 4 months from July– Nov.
- This project will be an extension of the project III and should include development of the final design concept. The defence presentations will be held during the month of April and time given till the end of June to complete the jury feedback, final drawings and finer detailing of the project.
- The evaluation of the Stage 2 of Project III is done by a panel of examiners appointed by DPGC. The panel will consist of external jury member along with an internal examiner, the guide and the chairman (A Professor or an Associate Professor from another Department of IIT Bombay)

**Texts / References**

As per project choices.

**4<sup>th</sup> Semester****DE 702 Arts design and society 2**

**Course Content** *(List of the topics/sub-topics to be covered in the lectures/practicals/assignments):*

- Key issues in visual arts (painting and installation art, photography, films), performing Arts public art.
- Concepts and concerns, and discourse on contemporary arts practice.
- The course involves talks by visiting artists, writers, film-makers, theatre artists as well as site visits to organizations and institutions that support arts-based activities and education.

### **Texts / References**

- Huddleston, Edgerton Susan; *Translating the Curriculum: Multiculturalism into Cultural Studies*, Routledge (2 Jan. 1997), ISBN-13: 978-0415914017
- Norm, Fairclough; *Analysing Discourse: Textual Analysis for Social Research*, Routledge (July 20, 2003). ISBN-10: 0415258936
- Pal, Pratapaditya (ed. ); 2000: *Reflections on the Arts in India*, Marg Publication, 2000
- Subramanyan K. G.; *Moving Focus: Essays on Indian Art*, Seagull Books, Kolkata, 2006
- Subramanyan K.G.; *The Living Tradition*, Seagull Books Pvt.Ltd (April 1987) ISBN Number: 8170460220

Friedman, Thomas L.; *The World Is Flat: A Brief History of the Twenty-first Century*, Publisher: Farrar, Straus and Giroux (5 April 2005)

### **DEP 702 M.Des Project 3**

**Course Content** (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

The communication design projects are chosen in areas that include film and video, typography, information design, graphic design, illustrated books and book design, animation and interaction design. This is the equivalent of the final dissertation project leading to the degree of M.Des in Communication Design.

- Duration: 5 months from December – May.
- This project could be an extension of the previous project (if the scope of the project justifies the extension) or it could be an independent project with one of the following focus:
  - Design project of student interest and / or faculty interest and / or industry project
  - Re-design project that relooks at an existing problem or situation
  - Research project, delving into methodological or pedagogic issues
  - Exploration project, exploring application possibilities in a new technology or medium or variations
- The evaluation of the Stage 1 of Project III is done internally with a panel appointed by the DPGC in consultation with the guide. The panel will consist of the guide and two other faculty members.

### **Texts / References**

As per project choices.

## Elective

### **DE 674 Introduction to World Cinema: Filmmaker Perspectives**

**Course Content** (*List of the topics/sub-topics to be covered in the lectures/practicals/assignments*):

- An overview of film history
- Social context of filmmaking: relationships of filmmakers to their milieu
- Analysis of selected classics of cinema: common themes and individual styles, similarities and contrasts in styles.
- Asian Cinema: Film directors Akira Kurosawa, Mizoguchi and Kiarostami
- European Cinema: Film directors Godard, Truffaut, Bergman and Fellini
- Russian Cinema: Film director Andrei Tarkovsky
- American Cinema: Film directors Sidney Lumet and Stanley Kubrick
- Writing of a film diary of required film viewing
- A long form essay on any one filmmaker would be a final requirement for completion of the course.

#### **Texts / References**

1. Bazin, Andre. *What is Cinema?* Volumes 1 and 2. University of California Press, 2004.
2. Richie, Donald. *The Films of Akira Kurosawa*. Tranquebar Press, 2009.
3. Kurosawa, Akira. *Something Like and Autobiography*. Random House, 1983.
4. Wajda, Andrzej. *Double Vision*. Faber and Faber, 1989.
5. Bergman, Ingmar. *The Magic Lantern*. University of Chicago Press, 2008.
6. Lumet, Sidney. *Making Movies*. Random House. 1996.
7. Fellini, Federico. *Fellini on Fellini*. Da Capo Press. 1996