

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034
BMM ANIMATION COURSE STRUCTURE - 2013-2014

| CODE | SUBJECT TITLE | T/P | CATE | H/W | CRE |
|-----------------|---|-----|------|-----|-----|
| SEM - I | (Credits - 09)(L6, GE6, MC9, AR6, FC3) | | | | |
| | Introduction to Animation | P | MC | 3 | 3 |
| MM 1501 | Visual and Interactive Design | T | MC | 3 | 3 |
| MM 1502 | Animation Drawing and Modeling | P | MC | 6 | 3 |
| MM 1500 | Introduction to Visual Communication | T | AR | 3 | 3 |
| | | | AR | 6 | 4 |
| SEM – II | (Credits - 09) (GE6, MC9, AOAR6, FC3) | | | | |
| MM 2500 | Principles of Animation | T | MC | 3 | 3 |
| MM 2502 | Concept Development | P | MC | 3 | 3 |
| MM 2501 | Dynamic Illustration | P | MC | 3 | 3 |
| MM 2100 | Photography | P | AR | 6 | 4 |
| | | | AR | 6 | 4 |
| | | | AR | 6 | 4 |
| SEM –III | (Credits - 09)(GE6, MC9, AO6, T/L3, EG3, FC3) | | | | |
| MM3500 | Animation History and Aesthetics | T | MC | 3 | 3 |
| MM3501 | Animation Basics and Applications | P | MC | 3 | 3 |
| MM3502 | Animation Design | P | MC | 3 | 3 |
| | Film Studies | | AO | 6 | 4 |
| | | | EG | 3 | 1 |
| SEM - IV | (Credits - 09)(GE6, MC9, AO6, T/L3, EG,FC6) | | | | |
| MM4500 | Writing for Media | T | MC | 3 | 3 |
| MM4501 | Modeling and Animation | P | MC | 6 | 6 |
| MM4502 | Sound Incorporation | T | MC | 3 | 3 |
| | Understanding Animation | T | EG | 3 | 6 |
| | | | AO | 6 | 4 |
| SEM – V | (Credits – 24+04) (MC24, ES6) | | | | |
| MM5500 | Design for Development | T | MC | 6 | 6 |
| MM5501 | Script Writing | T | MC | 6 | 6 |
| MM5502 | VFX Essentials | p | MC | 6 | 6 |
| MM5503 | Digital Design | T | MC | 6 | 6 |
| MM5402 | Character Modeling | P | ES | 6 | 4 |
| MM5401 | Game Design | P | ES | 6 | 4 |
| SEM – VI | (Credits – 35) (MS15, SK15) | | | | |
| MM6600 | Professional Practice | T | MS | 5 | 7 |
| MM6601 | New Media | T | MS | 5 | 6 |
| MM6602 | Media Laws and Ethics | T | MS | 5 | 6 |
| MM6650 | Internship | P | SK | 8 | 8 |
| MM6651 | Project | P | SK | 7 | 8 |

SEMESTER: I

CREDIT: 3

CATEGORY: MC

NO.OF HOURS/WEEK: 3

CORE – I: INTRODUCTION TO ANIMATION

Objective:

To provide an overview of animation history and to introduce the basics of important software packages for animation.

Content:

Unit – I: Introduction to the history of animation – technical, conceptual and aesthetic landmarks from the early 1900's to the present.

Unit – II: Introduction to the fundamentals of animation – traditional animation – computer animation – types of computer animation- challenges and the future of computer animation.

Unit – III: 2D animation techniques – sensitivity to timing.

Unit – IV: Three- dimensional computer – generated animation – basic processes for animating synthetic objects.

Unit – V: Creation of advanced motion – model building, color and lighting.

Methodology:

Extensive practical sessions with ample theoretical input. Structured exercises to enable students to understand and familiarize the technical nuances of animation softwares.

Evaluation:

Internal 50%: CA I & II = 35 marks and Assignments 15 marks.

External 50%: Semester examination written 100 marks.

References:

1. Parent Rick and Kauffman Morgan, (2004). Computer Animation: Algorithms and Techniques.
2. Robert Steve (2004). Character Animation in 3D. Focal Press

SEMESTER: I

CREDIT: 3

CATEGORY: MC

NO.OF HOURS/WEEK: 3

CORE – II: VISUAL AND INTERACTIVE DESIGN

Objective:

To understand the elements of thinking and image making.

Content:

Unit – I: Visuality and Multimodality: Concepts and models – divergent notions of conventional media narratives and digital media narratives.

Unit – II: Visual Design: Elements, Forms, Space, Time, Movements, Balance, Symmetry, Rhythm, Unity, Contrast and Scale.

Unit – III: Visual Design Principles: Functionality, aesthetic norms, media and audience specificities, emotional and cognitive appeals.

Unit – IV: Interactive Design: Characteristics of digital media interfaces, virtual environments and interactive design application and approaches.

Unit – V: Visual Design Process: Research, conceptualization and visualization – strategies, selection of ideas, themes, materials and tools – design execution and presentation.

Methodology:

Class room lectures coupled with interaction with experts from the field.

Evaluation:

Internal 50%: CA I & II = 35 marks and Assignments 15 marks.

External 50%: Semester examination written 100 marks.

References:

1. Rawson, Philip, “ Design, Prentice Hall, 1987.
2. Bryson, Norman, Ann Holly, Michael, Moxey, Keith, “Visual Theory: Painting and Interpretation,” Harper Collins, 1991.
3. Rose Gillian, “ Visual Methodologies, “ Sage, 2006.
4. Sturken, Marita, “The Practices of Looking ,” OUP, 2009.
5. Hall, Stuart, “ Representations: Cultural Representaion and Signifying Practices,” Sage and Open University Press, 1997.
6. Cancellaro, Joseph, “ Exploring Sound Design for Interactive Media”, Delmar Cengage, 2005.
7. O’Neill, Shaleph, “ Interactive Media: The Semiotics of Embedded Interaction.” Springer 2008.
8. Fried, Marcus, “ Online Game Interactivity Theory ,” Charles River Media, 2002.
9. Cooper, Alan et.al, “ About Face: The Essentials of Interaction Design,” Wiley, 2007.

SEMESTER: I

CREDIT: 3

CATEGORY: MC

NO.OF HOURS/WEEK: 6

CORE – III: ANIMATION DRAWING AND MODELING

Objective:

To study the form and structure of inanimate and animate objects with special emphasis on human figures.

Content:

Unit – I: Figure Drawing: 2D & 3D – geometrical shapes – basic shapes, patterns, textures, perspectives, overlapping objectives, light and shades, forms, human anatomy, proportion, body language and expressions. Portraits, Animals, birds, Landscape – flip book animation

Unit – II: Advanced figure drawing and clay modeling: Human anatomy – external forms – 3D forms, contour and blind contour drawing, different approaches to composition in figure drawing – materials, tools and strategies of clay modeling.

Unit – III: Animation Drawing: Digital sketching, animation concepts, character animation – human movements – walks, runs, head turns, gestures – animal movements – walks, runs, gallops and flights.

Methodology:

Extensive studio practice coupled with interaction with experts from the field

Evaluation:

Internal 50%: CA I & II = 35 marks and Assignments 15 marks.

External 50%: Semester examination written 100 marks

References:

1. Solomon, Charles, “*Enchanted Drawings: The History of Animation*”. Random House, 1994.
2. Beck, Jerry, “*Animation Art: From Pencil to Pixel, The world of Cartoon, Anime and CGI.*” Collins, 2004.
3. Lotman, Jeff and Smith, Jonathan, “*Animation Art: The Early Years 1911-1953*” Schiffer, 1995.
4. Lent, John, “*Animation in Asia and Pacific.*” Joan Libbey, 2010.
5. Clements, Jonathan and McCarthy, Helen, “*The Anime Encyclopedia,*” Stone Bridge Press. 2001.
6. Ryder, Anthony, “*The Artists Complete Guide to Figure Drawing,*” Watson – Guptill, 1999.
7. Goldfinger, Eliot, “*Human Anatomy for Artists: The Elements of Form,*” OUP, 1991.8. Rockman, Deborah, “*The Art of Teaching Art,*” OUP, 2000.

SEMESTER: I

CREDIT: 4

CATEGORY: AR

NO.OF HOURS/WEEK: 3

ALLIED REQUIRED – I: INTRODUCTION TO VISUAL COMMUNICATION

Objective:

To understand visual and visual communication fundamentals and the use of visual language in the Animation industry.

Content:

Unit – I: Introduction to visual communication: Historical Development – Conceptual development – Visualization process – Visualization environment – Tools for visualization – Sensual and perceptual theories.

Unit – II: Communication as a process: Message, Meaning, Connotation, Denotation, Culture / Codes etc. Levels of communication: Technical Semantic and Pragmatic. The Semiotic landscape: language and visual communication, narrative representation.

Unit – III: Fundamentals of Design: Definition, Approaches of design, Centrality of Design, Elements / Elements of Design: Line, Shape, Space, Color, Texture, Form etc. Principles of Design: Symmetry, Rhythm, Contrast, Balance Mass/ Scale etc. Design and Designers (Need, role, process, methodologies, etc.)

Unit – IV: Principles of Visual and other Sensory Perceptions: Color psychology and theory (some aspects) Definition, Optical / Visual illusions, etc. Various stages of design process – problem identification, search o solution, refinements, analysis, decision making, implementation.

Unit – V: Basics of Graphic Design: Definition, Elements of GD, Design process – research, a source of concept, the process of developing ideas – verbal, visual, combination & thematic, visual thinking, associative techniques, materials, tools (precision instrumentations etc.). design execution and presentation.

Methodology:

Extensive theoretical sessions couples with discussions from industrial experts

Evaluation:

Internal 50%: CA I & II = 35 marks and Assignments 15 marks.

External 50%: Semester examination written 100 marks

References:

1. Lester, E (2000) Visual Communications: Images with Messages. Thomson learning.
2. Schlindgen, T (1998), Pocket Guide to color with digital application, Thomson learning.
3. Picture this: Media Representation of visual Arts and artists, University of Luton Press.
4. Palmer, Fredric: Visual Elements of Art and design, 1989, Longman.
5. Porter, Tom and Goodman, Sue: Manual of Graphic.
6. Technique 2: For Architects, Graphic Designers and artists, 1982, Astragal Books, London.
7. Palmer.F: Visual awareness (Batsford 1972).
8. Paul Martin, Visual Communication (2008) Global Vision publishing house – New Delhi.

SEMESTER: II

CREDIT: 3

CATEGORY: MC

NO.OF HOURS/WEEK: 3

CORE – IV: PRINCIPLES OF ANIMATION

Objective:

To Understand basic principles in translating sequential images into believable action.

Content:

Unit – I: Understanding properties of matter – slow and fast action impact – weight and movement – recoil effects – squash and stretch related to weight – overlapping action – follow through.

Unit – II: Understanding force acting on objects – object weight, construction, flexibility – behavior of objects when force acts on them.

Unit – III: Understanding the concept of time – importance of timing in animation – anticipation, action and reaction – animating to music.

Unit – IV: Understanding the meaning of movements – conveying mood and the feeling through movement – simplification and exaggeration of movement.

Unit V: Understanding the concept of space – application of space in animation.

Methodology:

Extensive practical session with ample theoretical input to enable students to understand and apply the principles of animation.

Evaluation:

Internal 50%: CA I & II = 35 marks and Assignments 15 marks.

External 50%: Semester examination written 100 marks

References:

1. Roosendall Tony (2007). Introducing Character Animation with Blender. Indiana: Wiley publications Inc.
2. Gino Van den Bergen (2004). Collision Detection in Interactive 3D Environments.

SEMESTER: II

CREDIT: 3

CATEGORY: MC

NO.OF HOURS/WEEK: 3

CORE – V: CONCEPT DEVELOPMENT

Objective:

To enable students to come up with creative ideas and concepts which would serve as contents for their later animation projects.

Content:

The exercises encompass the following

1. Basic exercises in lateral/ creative /Visual thinking.
2. Exercises in individual and collective brainstorming.
3. Exercises in environmental / social exposure and observation as source of ideas.
4. Exercises in re-searching for ideas in library / archives.
5. Exercises in fantasy and imagination as potential sources of idea.
6. Exercises in organizing ideas into concepts.
7. Exercises in visual re-presentation of concepts.

Methodology:

The course is conducted as workshops with structured exercises. Students will maintain two workbooks, i.e., “exercises book” to do the exercises and “Ideas book” to list out and organize the ideas and concepts.

Evaluation:

Students will be assessed at the end of each workshop session based on their involvement and the output (50 marks), at the end of the semester workbook will be assessed (30 marks), and viva will complete the assessment (20 marks).

References:

1. Baker, Therese (1994). Doing Social Research. New York: McGraw – Hill Inc.
2. Hansen, Andres, et.al (1998). Mass communication Research Methods. London: Macmillan Press Ltd.
3. MaritaSturken, (2009) Practices of looking: An Introduction to Visual Culture Oxford University Press, USA.
4. Paul Martin Lester, (2002) Visual communication: Images with messages, Thomson, UK.

SEMESTER: II

CREDIT: 3

CATEGORY: MC

NO.OF HOURS/WEEK: 3

CORE – VI: DYNAMIC ILLUSTRATION

Objective:

To enable students to come up with creative ideas and concepts which would serve as contents for their later animation projects.

Content:

Unit – I: Principles of illustration – qualities of good illustration.

Unit – II: Types of Illustrations – drawing and painting, hand lettering, water colour, gouache, pastel, modern illumination, collage and others.

Unit – III: illustration and colour – pigment, Value, Chroma – optical aspects of colour – meaning of color – function of colour.

Unit – IV: Illustrating complex and dynamic concepts – sequential illustration – storyboarding techniques.

Unit – V: Application of illustration in different mass media genres – application in animation.

Methodology:

Intensive studio and lab work complemented with theoretical inputs. Students will simultaneously work with both conventional sketch-book and software of their preference.

Evaluation:

Internal 50%: CA I & II = 35 marks and Assignments 15 marks.

External 50%: Semester examination written 100 marks

References:

1. Simon Jennings (1980). The Complete Guide to Advanced Illustration and Design. NJ: Chartwell Books Inc.
2. Harvey R. Levenson (1981). Art and Copy Preparation. Graphic Art Technical Foundation, USA.

SEMESTER: II

CREDIT: 4

CATEGORY: AR

NO.OF HOURS/WEEK: 6

ALLIED REQUIRED - II: PHOTOGRAPHY

Objective:

To enable students to understand the concept and techniques behind photography.

To enable students to visualize creative photographic ideas and concepts which would serve as contents for their later Photographic projects

Content:

Unit-I: Photography History: Early pioneers and experiments – Joseph Nicéphore Niépce, Louis Daguerre and Eadweard Muybridge.

Unit-II: Photography Basics: Differences between analog and digital photography, parts of analog and digital cameras, types of analog and digital cameras, exposure, aperture, shutter and depth of field.

Unit-III: Lighting Techniques: Types of lighting, sources of studio lighting, filters, flash modes and colour temperature.

Unit-IV: Composition Techniques: Elements of composition, framing, rule of third, decisive movement, metering, white balance and exposure modes.

Unit-V: Image Processing: Stages in analog and digital processing, grains and pixels, silver halides and sensors, film and file formats, ASA/DIN and JPEG/Raw.

Methodology:

Extensive practical session with ample theoretical input to enable students to understand and apply the principles of animation.

Evaluation:

Internal 50%: CA I & II = 35 marks and Assignments 15 marks.

External 50%: Semester examination written 100 marks

References:

1. Newhall, Beaumont, "The History of Photography", The Museum of Modern Art, 2010.
2. Rosenblum, Mapmi, "A World History of Photography", Abbeville Press, 2008.
3. Wells, Liz, "Photography: A Critical Introduction", Routledge, 2000.
4. Barthes, Roland, "Camera Lucida: Reflections on Photography". Hill and Wang, 1982.

SEMESTER: III

CREDIT: 3

CATEGORY: MC

NO.OF HOURS/WEEK: 3

CORE – VII: ANIMATION HISTORY AND AESTHETICS

Objective:

To make students understand the History of animation and the animation aesthetics.

Content:

Unit – I: Early examples of animation in different parts of the world. Animation in ancient Asia and India. Traditions of Magic Lanterns, History of puppetry in India.

Unit – II: Birth of computer animation and 2D animation techniques, digital video effects, television and animation and video games.

Unit – III: Animation aesthetics – principles, contexts and examples. Human perception and visual processes, Elements of depth, form and movement.

Unit – IV: Light and shadow, inner and outer orientations of lighting functions, colour perception and compositing. Aspect ratio, image size, interplay of frame forces, 2D and 3D depth, volume and point of view.

Unit – V: Time and space in animation, principles of motion, different types of continuity, montage of visuals and sounds and functions of sound. Character animation, animating expressions, body expressions, facial , morphing, target poses, animating eye, lip sync and expression controls and modifiers.

Methodology:

Extensive Theory session with ample Visual input to enable students to understand and apply the principles of animation.

Evaluation:

Internal 50%: CA I & II = 35 marks and Assignments 15 marks.

External 50%: Semester examination written 100 marks

References:

1. Lent, John, *Animation in Asia and Pacific*, John Libbey, 2000.
2. Solomon, Charles, *Enchanted Drawings: The History of Animation*, Random House, 1994.
3. Zettl, Herbert, *Sight, Sound and Motion: Applied Media Aesthetics*, Wadsworth Thompson Learning, 1999.
4. Berger, John, *About Looking*, Vintage Books, 1992.
5. Furniss, Maureen, *Art in Motion: Animation Aesthetics*, John Libbey, 1998.
6. Goldberg, Eric, *Character Animation Crash Course*, Silman-James, 2008.

SEMESTER: III

CREDIT: 3

CATEGORY: MC

NO.OF HOURS/WEEK: 3

CORE – VIII: ANIMATION BASICS AND APPLICATIONS

Objective:

To make the students understand the basics of 2D animation in the field of media and web designing, To make the fully compatible with basic important 2D softwares available in the current market.

Content:

Unit – I: Types of animation, principles of animation and application of animation in various fields.

Unit – II: Fundamentals of graphics and animation, 2D and 3D images, Shapes, anatomy, light, shade color and perspectives.

Unit – III: Drawing tools, working with objects and text, frame-based animation, working with timeline and tween animation, layers, sound and video

Unit – IV: Introduction to flash animation, adding basic interactive features in flash movies – understanding action and event handling.

Unit – V: Animation applications on Internet and mobile phones, integrating animation application with different types of content on the internet and mobile phones.

Methodology:

Extensive practical session with ample theoretical input to enable students to understand and apply the principles of animation.

Evaluation:

Internal 50%: CA I & II = 35 marks and Assignments 15 marks.

External 50%: Semester examination written 100 marks.

References

1. Welles, Paul et al. *Drawing for Animation*, Ava Publishing, 2008.
2. Chong, Andrew, *Digital Animation*, Ava Academia, 2008.
3. Welles, Paul. *Fundamentals of Animation*, Ava Publishing, 2006.
4. Williams, Richard. *The Animator's Survival Hit*, Faber, 2001.
5. Welles, Paul. *Basics Animation: Scriptwriting*, Ava Publishing, 2007.
6. White, Tony, *How to Make Animated Films*, Focal Press,(recent edition)
7. Peaty, Kevin and Kirkpatrick, Glenn, *Flash Cartoon Animation*, Freindssoft,2002

SEMESTER: III

CREDIT: 3

CATEGORY: MC

NO.OF HOURS/WEEK: 3

CORE – IX: ANIMATION DESIGN

Objective:

To develop skills in designing web pages.

Content:

Unit 1: Planning and designing web page - HTML programming, Text, Table, Image and audio.

Unit 2: Drawing in Flash - choosing colors, choosing line style, designing and alignment elements, drawing panels - Time-line animation - applying layer type - adding sounds.

Unit 3: Working with text - typography, text field types in flash, text tool and property inspector, modifying text.

Unit 4: Creating websites and pages using Dream Weaver - editing cross-platform and cross-browser pages.

Unit 5: Interactive web pages using Java script - developing dynamic, cross-platform, web-based applications.

Methodology:

Extensive studio practice with tutorial assistance.

Evaluation:

Internal 50%: CA I & II = 35 marks and Assignments 15 marks.

External 50%: Semester examination written 100 marks.

References:

1. Duckett Jon, “Beginning Web Programming with HTML, XHTML, and CSS”, Wrox (2004).
2. Adobe Creative Team, “Adobe Photoshop CS6 Classroom in a Book”, Adobe (2014).
3. Kelly Bary, Jones Tim, Wolfe David, Rosson Allan, “ Foundation Flash Cartoon Animation”,Apress (2007)
4. Adobe Creative Team, “ Adobe Dreamweaver CS6 Classroom in a book”, Adobe (2012).

SEMESTER: IV

CREDIT: 3

CATEGORY: MC

NO.OF HOURS/WEEK: 3

CORE – X: WRITING FOR MEDIA:

Objective:

To make students understand the elements of writing for media

To train them in the present industrial media standards of work flow.

Content:

Unit I: Elements of writing, elements of style in writing and type of compositions.

Unit II: Types of writing-Frictional and Non-frictional, rules of grammar and usage.

Unit III: Types of media writing, Characteristics of print and broadcast media writing.

Unit IV: Principles of editing and techniques of rewriting.

Unit V: Writing for new media – internet and mobile media.

Methodology:

Extensive Theory session with ample Visual input to enable students to understand and apply the Writing for Media.

Evaluation:

Internal 50%: CA I & II = 35 marks and Assignments 15 marks.

External 50%: Semester examination written 100 marks

References:

1. Milnor Hyde, Grant, *Newspaper Editing – A manual for Editors, Copyreaders and students of Newspaper Desk Work*, Gebert Press,2008.
2. Rudin, Richard Ibbotson, Trevor, *Introduction to Journalism: Essential Techniques and Background Knowledge*, Focal Press, 2003.
3. Wilson Neal Robert, *Editorials and Editorial Writing*, Nabu Press, 2010.
4. Westley Bruce, *News Editing*, Houghton Mifflin,1980.
5. Strunk, William Jr. *Elements of Style*, W.P Humphrey,1918.
6. Swan, Michael, *Practical English usage*, Oxford University Press,2005.

SEMESTER: IV

CREDIT: 3

CATEGORY: MC

NO.OF HOURS/WEEK: 6

CORE – XI: MODELING AND ANIMATION

Objective:

To understand various aspects of 3D animation through various modeling and animation techniques in order to achieve the desired 3D output.

Content:

Unit – I: MODELLING Fundamentals of modeling, Different Primitives and usage, Transformation tools, modeling by basic geometrical primitives

Unit – II: TEXTURING Texture mapping, Wrapping of texture on a 2D surface, multi-layer texturing.

Unit – III: SHADING Definition of shading and its uses, different shading materials, no shadow shading, HDRI

Unit – IV: RIGGING Applying Bone, IK, joints, weights painting, skinning.

Unit – VI: LIGHTING Understand lighting, using various lights in a 3D environment to add artificial light, Understanding shadows, experimenting with shadows to provide art work with real time real life set models

Unit – VI: ANIMATION definition, explaining key poses and extremes, ball bounce, normal walk, quadruped walk and run, jump. Explaining the usage of graph sheet , dope sheet. Facial animation will be discussed in detail

Methodology:

Extensive practical session with ample Laboratory practice to enable students to understand Modeling and Animation.

Evaluation:

Internal 50%: CA I & II = 35 marks and Assignments 15 marks.

External 50%: Semester examination written 100 marks.

References:

1. Dariush Derakhshani, “Introducing Autodesk Maya 2015, Jon Wiley & Sons, (2014).
2. Maraffi, Chris (2004). Maya Character Creation: Modeling and Animation Controls. New Riders.
3. Oliverio, Gary (2006). Maya 8 Character Modeling. Jones & Bartlett Publishers
4. Allen, Eric & Murdock, Kelly L. (2008). Body Language: Advanced 3D Character Rigging. Sybex Publication.

SEMESTER: IV

CREDIT: 3

CATEGORY: MC

NO.OF HOURS/WEEK: 3

CORE – XII: SOUND INCORPORATION

Objective:

To train students to recognize the importance of sound and utilize sound effectively to communicate across the media spectrum with particular reference to animation.

Content:

Unit I: Definition and nature of sound - sound and its relevance - use and importance in communication.

Unit II: Aesthetics of sound - reader interaction with media sound - response and reaction, involvement and engagement - perception, retention and recall value of sound.

Unit III: Sources of sound - microphones and their types and uses - assessment of quality of sound.

Unit IV: Sound engineering techniques - dead air - sound and silence - integration of sound and visual.

Unit V: Sound in the era of multimedia – application in animation.

Methodology:

Extensive studio work coupled with theoretical inputs, and visits to professional sound recording studios.

Evaluation:

Internal Assessment: Assignments 25%, Tests 25%

External Examination: Project 25%, Exam 25%

References:

1. Alten Stanley(1891).Audio in Media.New jersey:Belmont.
2. Clifford Martin(1997).Microphones.Bluridge Summit, Tab Books.
3. Robin Beauchamp(2005).Designing Sound for Animation. Focal Press.
4. Robert Reinhardt and Shown Down(2002). Marcomedia Flash MX Bible. Wiley Publishing Inc.

SEMESTER: IV

CREDIT: 1

CATEGORY: EG

NO.OF HOURS/WEEK: 3

ELECTIVE GENERAL – I : UNDERSTANDING ANIMATION

Objective:

To make the students understand the impact of animation on modern filmmaking

To discuss various methods in the animation pipeline that are implemented in various films based on its genres and story.

Content:

Unit – I: Animation existence – Experiment’s on 2D animation in the early 1960’s – Implementing the 2D animation on screen

Unit- II: Animation Revolution – Impact of Animation industry on Photography, Film making – Story board Conceptualization

Unit – III: Various techniques used by the MGM and warner bros in animation area – Industrialization of Animation – Importance of Animation Globalized.

Unit – IV: Animation and its growth in mass media – Indirect catalyst in industrial development – New inventions based on animation

Unit – V: Future of Animation – Vast development in the field of internet, television and Films.- Augmented reality and Virtual Reality.

Methodology:

Immersive Theoretical session on animation and films coupled with entertaining practical sessions

On making and implementation of animation in mass media

References:

1. Cotta Vaz, M. “The Art of Finding Nemo.” (2003): 9. San Francisco: Chronicle Books, 2003.
2. Lasseter, J., "Principles of traditional animation applied to 3D computer animation." In Computer Graphics, Volume 21, Number 4. ACM, 1987.
3. Richard Fleischer,(2011) " Out of the Inkwell: Max Fleischer and the Animation Revolution
4. Kenta Yamamoto, (2014) “The Agglomeration of the Animation Industry in East Asia”.

SEMESTER: V

CREDIT: 6

CATEGORY: MC

NO.OF HOURS/WEEK: 6

CORE – XIII: DESIGN FOR DEVELOPMENT

Objective:

To make the students understand the issues of development

To make them understand the dynamics of creating design and animation for social campaigns and IEC

Content:

Unit – I: Globalization - rich poor divide - digital Divide - understanding the concept Development – types of development. Theories of development – India and development

Unit – II: Role of development agencies – development work – communication need for development agencies. Development communication – basic concepts and theories – BCC

Unit - III: Development campaign – design requirements – gap analysis – need analysis – planning a campaign – social responsibility – gender and people sensitive.

Unit - IV: Campaign – pre plan – budgeting – media planning – message / content development – audience research pre testing.

Unit - V: Preparing the creative – launch of campaign – evaluating the outcome -Trends in social marketing - new media campaigns.

Methodology:

Classroom lectures and group presentations. Application of basic principles of development communication in a campaign on social issues.

Evaluation:

Internal 50%: CA I & II Tests 40 marks and Assignments 10 marks

External 50%: Semester Examination – Written 100 marks

References:

1. Manzoyo, Linje, Media, communication and Development – Three approaches , Sage Publications 2012
2. Thomas I McPhail, [2009] Development Communication: Reframing the role of the Media Wiley- Blackwell.
3. Emile GMcAnany, [2012] Saving the World: A Brief History of Communication for Development and Social Change, University of Illinois Press.
4. Melkote, Srinivas R., [2012] Development Communication in Directed Social Change: A Reappraisal of Theories & Approaches, Asian Media Information and Communication Center.

SEMESTER: V

CREDIT: 6

CATEGORY: MC

NO.OF HOURS/WEEK: 6

CORE – XIV: SCRIPT WRITING

Objective:

To make students understand the concept of script writing

To guide and direct them on making a scripts based on the stories or genres.

Content:

Unit I: Plot, Story, Narrative, Narration and three part Narrative structure.

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

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

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

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

Methodology:

Narrative theoretical sessions on script writing along with practical sessions coupled with meeting industrial experts.

Evaluation:

Internal Assessment: Assignments 25%, Tests 25%

External Examination: Project 25%, Exam 25%

References:

1. Field, Syd, *Screenwriting: The fundamentals of Screenplay*, Dell, 1984.
2. Gurskis,Dan, *The Short Screenplay*, Couse Technologies, 2006.
3. Welles, Paul, *Basics:Animation Script Writing*, Aca, 2007.
4. Wright, Jean Ann, *Animation Writing and Development: Form Script Development to Pitch*,Focal Press, 2005.

SEMESTER: V

CREDIT: 6

CATEGORY: MC

NO.OF HOURS/WEEK: 6

CORE – XV: VFX ESSENTIALS

Objective:

To make the students understand the use of Visual effects in media and animation in dusty also to make them fully understand with latest VFX techniques and softwares

Content:

Unit – I: Visualization techniques, visual scripting and modelling.

Unit – II: Mise-en-scene, auteur vs director, space and time, three part narrative structure, material properties of the medium, persistence of vision, 180 degree principle, framing, camera movements.

Unit – III: Voice acting , voice effects and digital effects, rendering and grain effects.

Unit – IV: Compositing, crowd replication, motion capture, rotoscope and wire removal.

Unit – V: Continuity editing and montage editing, rough cut, final cut and director's cut sound designing and mixing.

Methodology:

Intensive Practical sessions coupled with workshops and discussion with expert from the industry

Evaluation:

Internal Assessment: Assignments 25%, Tests 25%

External Examination: Project 25%, Exam 25%

References:

1. Beck, Jerry, "Animation Art: Form Pencil to Pixel, The World of Cartoon, Anime and CGI" Collins, 2004.
2. Clements, Jonathan and McCarthy, Helen, "The Anime Encyclopedia," Stone Bridge Press, 2001.
3. Ryder, Antony, "The Artists Complete Guide to Figure Drawing," Watson-Guptill, 1999.
4. Goldfinger, Eliot, "Human Anatomy for Artists :The Elements of Form," OUP, 1991.
5. Rawson, Philip, "Design," Prentice Hall, 1987.
6. Bryson, Norman, Ann Holly, Michael, Moxey, Keith, "Visual Theory: Painting and Interpretation," Harper Collins, 1991.
7. Cancellaro, Joseph, "Exploring Sound Design for Interactive Media," Delmar Cengage, 2005.
8. McAlister, Michael, "The Language of Visual Effects", Eagle, 1993.

SEMESTER: II
CATEGORY: MC

CREDIT:6
NO.OF HOURS/WEEK:6

CORE XVI – DIGITAL DESIGN

Objective:

- To introduce and help develop visual thinking for design graphics.
- To learn to produce effective and dynamic media content.

Content:

Unit I Visual thinking and Designing - techniques, concept development, composing, using objects, texture, colour and space.

Unit II Typographic concepts for print, interactive and web media.

Unit III Fundamentals of media elements, Internet and concepts of digital image editing.

Unit IV Graphics creation - brand and corporate identity manual, poster, brochure, label artwork presentation.

Unit V Interactive, navigation techniques and authoring skills.

Methodology:

Class room lectures coupled with lab works on design projects.

Evaluation:

Internal 50%: CA I & II = 35marks and Assignments 15marks.

External 50%: Semester examination Viva 30 and Project 20 marks.

References:

1. Rawson, Philip, “ Design, Prentice Hall, 1987.
2. Technique 2: For Architects, Graphic Designers and artists, 1982, Astragal Books, London

SEMESTER: VI

CREDIT: 4

CATEGORY:

NO.OF HOURS/WEEK: 6

ELECTIVE GENERAL - : CHARACTER MODELLING

Objective:

To make the students understand the idea and objective behind character modeling and also discuss various techniques used the industrial experts when learning character modeling.

To create the structure of the human form in 3D modeling.

Content:

Unit 1: Visualizing contours – procedure - facial features – eyes – nose – lips - combining parameters - body variations – caricatures.

Unit 2: Anatomy of a prototype digital human form - deformable face topology - maintaining human proportions in 3D - parameterizing the body sketch-based 3D modeling interfaces - freeform design from sketches - sketch-based mesh editing.

Unit 3: Art and the human form - 3D Computer Modeling - polygons - NURBS – surfaces - scanned models - animation pipeline.

Unit 4: Maya Architecture - the model-sketch plugins - landmarks and parametric models – translating anthropometric data - sketch-based modeling moving landmarks - curve fitting - landmark selection constraints.

Unit 5: Articulation: rigging and skinning - shading and lighting - special effects – rendering - compositing and post-production.

Methodology:

Extensive studio practice with tutorial assistance.

Evaluation:

Practice 25%, Tests 25%

3D Design 50%

References:

1. Maraffi, Chris (2004). *Maya Character Creation: Modeling and Animation Controls*. New Riders.
2. Oliverio, Gary (2006). *Maya 8 Character Modeling*. Jones & Bartlett Publishers.
3. Allen, Eric & Murdock, Kelly L. (2008). *Body Language: Advanced 3D Character Rigging*. Sybex Publication.

SEMESTER: VI

CREDIT: 4

CATEGORY:

NO.OF HOURS/WEEK: 6

ELECTIVE GENERAL - : GAME DESIGN

Objective:

To creatively and effectively apply design-knowledge to gaming environments.

Content:

Unit 1: Historical context of the evolution of game design and technology - influence of games on society - potential of games to educate and entertain.

Unit 2: Basics of game design – meaningful play, player interaction - creating and refining game content.

Unit 3: Multiple narrative, interactive narrative and character structures - single, multiple, and mass-user gaming environments.

Unit 4: Challenges and obstacles of creating geometry and lighting for gaming environments.

Unit 5: Turntable models with overlaid wireframes, UV texture layouts, and animated movement through virtual environments - preparing a demo-reel.

Methodology:

Extensive studio practice with tutorial assistance.

Evaluation:

Practice 25%, Tests 25%

Demo-Reel 50%

References:

1. Karl.M.Kapp (2013).The Gamification of Learning and Instruction Fieldbook: Ideas into Practice
2. Brenda Braithwaite, Ian Schreiber (2008). Challenges for Game Designers.
3. Tracy Fullerton,(2014). Game Design Workshop: A Playcentric Approach to Creating Innovative Games.
4. Jesse Schell, (2008). The Art of Game Design: A book of lenses.

SEMESTER: VI

CREDIT: 4

CATEGORY:

NO.OF HOURS/WEEK: 6

ELECTIVE GENERAL - : ADVANCED 3D DESIGN

Objective:

To learn advanced 3D design techniques.

Content:

Unit 1: Overview of graphic systems – display devices.

Unit 2: Windowing and clipping – windowing concepts – windows to viewpoints transformation interface picture construction techniques - Computer aided modeling and animations: object creation – Introduction to drawing technique – setting view port grid and other drawing aids – creating 2D drawing and editing it – preparing 2D section drawings for the creation of 3D geometry – setting a lofting path and steps – Creating a 3D geometry.

Unit 3: Three dimensional concepts – 3D display techniques – 3D transformations – basic and composite transformation – other transformations – creating 3D objects using tools and arranging them – Editing 3D objects – applying colors or textures map to the surface of 3D objects- Arranging lights – rendering still pictures.

Unit 4: 3D viewing – projections – viewing transformations – hidden surfaces – hidden line removal – back face removal – depth buffer methods - rendering and animation - setting number of frames.

Unit 5: Animation of 3D objects – cameras and light – creating preview – using special effects and techniques for animation – editing materials and creating mapping materials rendering animation.

Methodology:

Extensive studio practice with tutorial assistance.

Evaluation:

Practice 25%, Tests 25%

3D Design 50%

References:

1. Donald Hearn and Pauline Baker. *Computer Graphics*. PHI, 2nd Edition.
2. Roy, A.Plastock and Gardon Kalley. *Theory and Problems of Computer Graphics*. Schaum's Outline Series.
3. Harrington Steven (1983) *Computer Graphics – A Programming Approach*. McGraw Hill Inc., 2nd edition.

SEMESTER: VI

CREDIT: 7

CATEGORY: MS

NO.OF HOURS/WEEK: 5

CORE –: PROFESSIONAL PRACTICE

Objectives:

- To have an understanding of management in Animation Organizations.
- To acquire a managerial skills for effective execution of tasks in the industry.

Content:

Unit I: Principles of management, Organization theory, delegation, decentralization, motivation, control and co-ordinations. Ownership patterns of mass-media in India – sole proprietorship, partnership, private limited companies, public limited companies, Trusts, Co-operatives, Religious Institutions (Societies) and Franchises (Chains). Policy formations – planning and control: problems, process and prospects of launching media ventures.

Unit II: News Paper organizations today. Ownership pattern and economics of News Papers. News management and managing the news room. Collaborating with News service agencies.

Unit III: Animation films as industry – production, digitizing, distribution and exhibition systems, financing the Animation film – Film Development Corporation. Government and Animation film production. Contemporary issues – cross over cinema, collaborations and the emergence of multiplexes information services and other new technologies. Consequences of new technology on film.

Unit IV: The rise of satellite television. The cable industry, TRAI, Television channels and production houses – management. Concepts of Public service Broadcasting. Radio and music industry. Convergence of media. Internet media Managing portals and web casting.

Unit IV: Governmental regulatory mechanism and policy changes. Foreign equity and FDI in Indian Animation industry.

Methodology:

Classroom lectures coupled with practical sessions.

Evaluation:

Internal 50% CA I&II = 35 marks and Assignment 15 marks.

External 50% Semester examination written 100 marks.

References:

1. Peter K Pringle, Michael F Starr & William E McCavitt, [1991] Electronic Media Management, Focal Press, London.
2. John R Rossiter & Larry Percy, [1987] Advertising and Promotional Management, McGraw Hill, New York.
3. Berry G. Sherman, [1987] Telecommunications and Management – the Broadcast and Cable Industries, McGraw Hill.
4. Richard Gates, [1992] Production Management for Fil and Video, Focal Press, London.

SEMESTER: VI

CREDIT: 6

CATEGORY: MS

NO.OF HOURS/WEEK: 5

CORE –: NEW MEDIA

Objective:

To illustrate on how digital content created through different tools can be imported into new media environment and linked to be part of new media delivery.

Content:

Unit – I: Mobile Apps – development of apps on Android , IOS, Symbian operating systems – Windows Touch apps

Unit – II: Virtual Reality- Virtual sets – Application and uses of Virtual reality in day to day life

Unit – III: Augmented Reality – Immersive – Location based – Aided Learning.

Unit – IV: Flash to HTML 5 Conversion – Building information Management.

Unit – V: 3D Bio Printing – Conversion of 3D objects from digital to real life models.

Methodology:

Course will be supported with case studies and example to illustrate digital content migration to new media and its challenges and tips and tricks to make it effective and appealing.

References:

1. Bill phillips, (2013), " Android Programming: The Big Nerd Ranch Guide"
2. Ray wenderlich, Mike Berg, Tom Bradely, Mike Daley,(2014) " iOS games by tutorials:Second Edition: Beginning 2D iOS Game Development with Swift"
3. Jens Grubert, Raphael Grasser, (2013), " Augmented Reality for Android Application Development"
4. Tony Parisi,(2015)," Learning Virtual Reality: Developing Immersive Experiences and Applications for Desktop, Web and Mobile

SEMESTER: IV

CREDIT: 6

CATEGORY: MS

NO.OF HOURS/WEEK:5

CORE– MEDIA LAWS AND ETHICS

Objectives:

- To enable students to understand with the various laws governing the media in the Indian context.
- To understand the ethical principles and imbibe the spirit behind the media laws.

Unit I History of media law in India. Indian Constitution . Fundamental rights. Directive principles of state policy. Reasonable restrictions Emergency provisions. Amendments, Parliamentary privileges. Freedom of media in India.

Unit II Defamation. Libel and Slander. IPC and Criminal Procedure Code. Official Secrets Act. Contempt of Court Act . The press and registration of books Act Press Council Act Working journalists and other Newspaper Employees(condition and service) and Miscellaneous provisions Act. . Cases related to these Acts.

Unit III The monopolies And Restrictive Trade Practices Act. Drugs and Magic remedies (Objectionable Advertisements) Act. The Prasar Bharati (Broadcasting Corporation of India)Act. The cable Television networks Act. Broadcasting Services Regulation Bill. Cinematograph Act and board of Censors. . Cases related to these Acts.

Unit IV Intellectual Property Rights WTO. The designs ACT. Trade and Merchandise Marks Act. The Patents Act. The Copyright Act. Information Technology Act Indecent Representation of Women (Prohibition) Act and rules. The Children Act. The Young Persons (Harmful Publications) Act , other regulations and guidelines. Cases related to these Acts.

Unit V Media ethics. Ethics Vs Law. Code of ethics in print media . Code for commercial Advertising in AIR and Doordarshan. Advertisement Standard Council of India 's code of ethics. Broadcasting ethics. Principles of Self-Regulation. Issues related to privacy, national security, sex and nudity, neutrality, objectivity, depiction of women and children , depiction of violence etc. sting operations. Corrigendum.

Methodology:Class lecture coupled with group discussions and presentations.

Evaluation: Internal 50%: CA I & II = 35marks and Assignments 15marks.

External 50%: Semester examination written 100 marks

References:

1. Patrick L. (Lee) Pleasance [2008] Media Ethics: Key Principles for Responsible Practice, SAGE Publications, Inc.
2. Philip Wilkins Lee Paterson [2008] Media Ethics: Issues and Cases McGraw-Hill Higher Education.
3. Durga Doss Basu, [2000] Press Laws, Central Law Book Agency, Delhi.
4. Barua , Vidisha. [2002] Press and Media Law Manual, Universal Law Publishing Co , New Delhi.
5. Neelamalar, [2010] Media law and ethics, PHI Learning , new Delhi.
6. Kiran R.N., [2000] Philosophies of Communication and Media Ethics, B.R. Publishing Corp., New Delhi.

7. BaskarRao N., G.N.S. Ragavan, [1996] Social Effects of Mass Media in India, Gyan Publishing House, New Delhi
8. Ray Eldon, Hiebert Carol, [1988] Impact of Mass Media, Longman, New York.
9. Universal's Press[2010]Media & Telecommunication Law, Universal Law Publishing Company, New Delhi.
10. <http://india.gov/acts.php>

SEMESTER: VI

CREDIT: 8

CATEGORY:SK

NO.OF HOURS/WEEK: 8

INTERNSHIP

Objectives:

- To expose the student to actual situations and day-to-day functioning of the Animation Industry.
- To understand the expectation of the industry and acquire the skills for the job.

The student will be attached to the Animation industry for a period of eight weeks on an internship basis. The intern will be exposed to a particular area of specialization. The department in coordination with the industry will closely monitor the progress of the intern. A Report and a Viva-voce will complete the process of evaluation.

Evaluation - Internal: Diary &Reporting-30, Industry work guide-20, Final Report 20, Presentation &Viva 30.

SEMESTER: VI

CREDIT: 8

CATEGORY: SK

NO.OF HOURS/WEEK: 7

PROJECT

Objectives:

- To demonstrate student's competence in a chosen area of specialization.
- To develop the skills to gain placement in the Animation industry.

Students are expected to do a project of a professional nature within the stipulated time. Criteria for selecting the topic will be based on the area of specialization of the student. Emphasis will be given to producing works that are of professional and broadcasting quality that will help students enter the Animation industry with an evaluated portfolio.

Evaluation 100%: Paperwork-20, Production process-20, Viva- 30, Project- 30.