

St. Xavier's College (Autonomous)



M.Sc. Integrated Multimedia SYLLABUS

2023 - 2024

Department of Multimedia

30, Mother Teresa Sarani
Kolkata-700 016

M.Sc. in Multimedia with Specialisation in Animation

❖ Semester-VII

1. Drawing for Animation (AMM4701C)
2. Cultural Studies (MM4702C)
3. Acting and Choreography (AMM4703C)
4. Experimental Animation (AMM4704C)

❖ Semester-VIII

1. Story development & Screenwriting for Animation (AMM4801C)
2. Adv. Character construction: Portraiture, Caricature, Hybrid 2D/3D (AMM4802C)
3. Layout and Asset Design (AMM4803C)
4. Digital Character Animation 2D/3D (AMM4804C)
5. Research and choosing of the topic for thesis (AMM4904D)

❖ Semester-IX

1. Cultural Studies II (MM4901C)
2. Animation Studies: Contemporary Trends (AMM4902C)
3. Post Production Tools and Techniques (AMM4903C)
4. Final Thesis (AMM4904D)
5. 2D/3D Project Preproduction: Sound design, Animatics (AMM401PJ)

❖ Semester-X

1. Individual Project: Production / Postproduction (AMM401PJ)
2. Internship (AMM402IN)

Semester-VII

Subject: Drawing for Animation

Subject Code: AMM4701C

Semester-VII

Hours/Week- 6

Credit- 6

Learning Objective: An upgraded study of the development and practice of Drawing in deferent style, including the practical application of them. Here each student has to develop their own skill and style of drawing according to the practice and passion.

- ❖ History of drawing, alongside of history of Animation movies with respect to them (drawing).
- ❖ Advance understanding of anatomy, space, form and environment.
- ❖ A holistic understanding of the power of drawing in Animation
- ❖ Case studies of various animation filmmaker's drawings.

Learning Outcomes: Individual Portfolio of sequential drawing (Minimum 10 set of drawing)

Suggested Books:

- The Human Figure in Motion by Eadweard Muybridge Publisher: Dover Publications (June 1, 1955)
- Force the key capturing life through drawing by Michael D. Mattesi. Publisher: iUniverse Star (June 1, 2004)
- Vilppu Drawing Manual Spi Edition by Glenn Vilppu. Publisher: Vilppu Studio; Spi edition (February 28, 1997)
- The Artist's Complete Guide To Facial Expression by Gary Faigin. Publisher: Watson-Guption (1 Nov. 2008) (1600)
- Figure Drawing For All It's Worth by Andrew Loomis. Publisher: Titan Books; Facsimile edition edition (May 31, 2011)
- The Animator's Sketchbook: How to See, Interpret & Draw Like a Master Animator 1st Edition by Tony White. Publisher: CRC Press; 1 edition (August 12, 2016)
- Drawn to Life: 20 Golden Years of Disney Master Classes: Volume 1: 1st Edition by Walt Stanchfield. Publisher: Focal Press (April 6, 2009)
- Gesture Drawing: A Story-Based Approach 1st Edition by April Connors. Publisher: CRC Press; 1 edition (September 25, 2017)
- Quick Sketching with Ron Husband Paperback – October 9, 2013 by Ron Husband. Publisher: Routledge; 1 edition (October 9, 2013)

Subject: Cultural Studies
Subject Code: MM4702C

Semester-VII
Hours/Week- 6
Credit- 6

Learning Objective: This paper explains the theory and practice of cultural studies with the help of detailed cultural analyses.

1. Cultural Studies: An Introduction
2. Understanding Cultural Studies
3. Evolution and Culture
4. Structuralism
5. Marxism
6. Post structuralism

Learning Outcomes: Students will be introduced to the theory and practice of cultural studies that will help them to understand that there is no real difference between studying ‘culture’ and studying society.

Suggested Readings:

Cultural Studies: An Introduction:

- i) Raymond Williams, Culture and Society: 1780 – 1950, Columbia University Press, 1983.
- ii) Mathew Arnold, Culture and Anarchy, SMK Books, 2009.

Understanding Cultural Studies:

- i) Gavin Kendall, Gary Wickham, understanding culture: Cultural Studies, Order, Ordering, Sage, 2001.

Evolution and Culture:

- i) Alex Mesoudi, Cultural Evolution: How Darwinian Theory can Explain Human Culture and Synthesize the Social Sciences, University of Chicago Press, 2011.
- ii) Robert Boyd and Peter J. Richerson, Culture and Evolutionary process, University of Chicago Press, 1985.

Structuralism:

- i) Ferdinand de Saussure, Course in General Linguistics, Columbia University Press, 2011.
- ii) Terence Hawkes, Structuralism and Semiotics, University of California Press, 1977.

Marxism:

- i) Raymond Williams, Marxism and Literature, Oxford University Press, 2010.
- ii) Karl Marx, Capital (Das Capital), Fingerprint Publishing, 2016.
- iii) Shlomo Avineri, The Social and Political Thought of Karl Marx, Cambridge University Press, 1968.

Poststructuralism:

- i) James Williams, Understanding Poststructuralism, Routledge, 2014.
- ii) David R. Howarth, Poststructuralism and After: Structure, Subjectivity and Power, Palgrave Macmillan U.K, 2013.

Subject: Acting and Choreography
Subject Code: AMM4703C

Semester-VII
Hours/Week- 6
Credit- 6

Learning Objective: In an animated film, there needs to be clarity of communication in order to tell the story effectively and engage the audience. As animators creating the performance, it is our job to draw the audience in, and build a performance that the audience can empathize with and be entertained by.

In order for the audience to empathize, they need to believe in the characters – they have to appear to live and think on their own, be spontaneously reacting, appealing and communicate clearly.

Here each student has to develop their own skill on appeal in composition, posing, rhythm and phrasing, and contain acting choices that feel fresh

❖ **SIMPLIFY**

Animators trying to wedge too much information into a shot, and it ends up feeling as clear as mud, and the realism of the performance suffers. Avoid the impulse to always be making the character move! The thing that really makes the shot flow well are the moments of stillness in juxtaposition to the movement.

❖ **ACTING WITHIN THE POSE**

Identify the character's emotional state of mind in the shot. Does this state change, and if so, determine the timing of the change. These emotional/mental states can and should be your character's only MAIN POSE CHANGES. Don't change poses simply because there is a new emphasis in the dialogue! Dialogue doesn't drive action on the part of the character, THOUGHT DRIVES ACTION.

❖ **LAYERING RHYTHMS IN THE PERFORMANCE**

The physical movements and the audio beats also need to dance around each other, and occasionally hit close together when emphasis is needed. Moments of stillness create punctuation in the performance.

❖ **EMOTIONAL HANG TIME**

The obvious example to describe this concept is with the good old' bouncing ball, when one force (bounce energy) runs out and another force (gravity) starts to take over, there is a moment of 'hang time', where we can see this changeover of forces occur.

❖ **THE NEUTRAL POSE**

NEVER start animating from 'T' pose. it makes the character feel incredibly generic and static. Identify your character's main traits, and create a 'neutral pose' for how the character, as an individual with a distinct personality, might stand or sit while they're just doing nothing. Work the performance with the character's emotions for the scene from there. We can capture the character's personality much more quickly and easily that way

❖ **MOVEMENT STYLE**

We can use specific inspiration to formulate our character's 'neutral pose', as well as the style of movement that will show the audience a lot about our character's personality. For example,

animal postures and behaviors can apply very well to certain character types, or another good example is a style of dance.

❖ **DYNAMIC FACIAL POSING**

We all know that a key element to creating dynamic body poses is the LINE OF ACTION. Other important lines are the shoulder lines and the hip lines. This opposition helps to emphasize the line of action, and make the pose feel active, rather than static.

❖ **ENGAGING THE BODY**

A big issue that we see often is limited parts of the body being used to create expressions. Something that we learned while doing film and theater acting was a concept called ‘engaging the body’. This works fantastically well for animation also.

❖ **EXAGGERATION**

If you want to make your animation more cartoony and over the top, give the poses MORE CONTRAST (ie: reverse the curves in the spine, exaggerate the TY weight shift, squash and stretch), and speed up the transition of the pose changes, and exaggerate the ‘smear’ in the dynamic breakdowns to help draw the viewers’ eye through the very quick transitions.

❖ **ANIMATE A CHARACTER’S THOUGHTS RATHER THAN THEIR WORDS**

We will get a lot more out of a performance if we can get inside the character’s head, and open up the door to let the audience in there as well. Animating directly to what a character’s dialogue is saying will usually give you a pretty one-dimensional performance, without much subtext.

Learning Outcomes: small acting sequence (minimum 11 seconds), small action sequence (minimum 5 seconds)

Suggested Books:

- Simplified Drawing for Planning Animation Paperback – August 1, 2014 by Wayne Gilbert. Publisher: Anamie Entertainment Ltd.; 4th edition (August 1, 2014)
- The Illusion of Life: Disney Animation Hardcover – October 5, 1995 by Frank Thomas and Ollie Johnston. Publisher: Disney Editions; Revised, Subsequent edition (October 19, 1995)
- The Animator's Survival Kit: A Manual of Methods, Principles and Formulas for Classical, Computer, Games, Stop Motion and Internet Animators Paperback – September 25, 2012 by Richard Williams. Publisher: Farrar, Straus and Giroux; Fourth Edition, Revised edition (September 25, 2012)
- Timing for Animation, Second Edition 2nd Edition by John Halas OBE (Author), Harold Whitaker (Author), Tom Sito (Editor). Publisher: Focal Press; 2 edition (September 3, 2009)
- Producing Independent 2D Character Animation: Making & Selling A Short Film (Focal Press Visual Effects and Animation) by Mark A. Simon (Author). Publisher: Focal Press (February 26, 2003)
- Animation: The Mechanics of Motion 1st Edition by Chris Webster (Author). Publisher: Focal Press; 1 edition (July 26, 2005)
- Acting and Character Animation: The Art of Animated Films, Acting and Visualizing 1st Edition by Rolf Giesen, Anna Khan. Publisher: CRC Press; 1 edition (July 28, 2017)

Subject: Experimental Animation

Subject Code: AMM4704C

Semester-VII

Hours/Week- 6

Credit- 6

Learning Objective: This class will focus on the issues that have arisen with the advent of digital cinema. We will combine traditional and digital techniques to develop experimental animations. The animations — ones that we study and create — will be both figurative and abstract, but always experimental in that they will push the boundaries of representation and/or narrative structure. Students will also be encouraged to push the boundaries of their own creative expression in an attempt to explore non-discursive modes of articulation and communication.

In this class, participation will be considered almost as important as finished projects. This means active engagement in group projects and discussions, working to make critiques a helpful give and take of ideas on each other's' projects.

- ❖ Understanding the medium and the aesthetics of Experimental Animation.
- ❖ Apply techniques including animation of objects, cutout, silhouette, pixilation, clay, sand, water, rotoscoping etc. to produce animated films.
- ❖ Non-representative arts its application in animation film.
- ❖ Music with rhythm and tempo and discordant sounds in relationship to visual movement.
- ❖ Understanding of Drawn and Direct technique by Norman McLaren.

Learning Outcomes: The student is expected to come up with an Experimental Animation Film

Suggested Books:

- Norman McLaren: Between the Frames (Animation: Key Films/Filmmakers) by Nichola Dobson (Author), Chris Pallant (Series Editor) Publisher: Bloomsbury Academic (January 25, 2018)
- The Crafty Animator: Handmade, Craft-based Animation and Cultural Value (Palgrave Animation) 1st ed. 2019 Edition by Caroline Ruddell (Editor), Paul Ward (Editor) Publisher : Palgrave Macmillan; 1st ed. 2019 edition (June 8, 2019).
- Experimental and Expanded Animation: New Perspectives and Practices (Experimental Film and Artists' Moving Image) 1st ed. 2018 Edition by Vicky Smith (Editor), Nicky Hamlyn (Editor) Publisher: Palgrave Macmillan; 1st ed. 2018 edition (August 21, 2018)
- Experimental Animation: From Analogue to Digital 1st Edition by Miriam Harris (Editor), Lilly Husbands (Editor), Paul Taberham (Editor) Publisher: Routledge; 1 edition (February 14, 2019)

Semester-VIII

**Subject: Story development & Screenwriting
For animation
Subject Code: AMM4801C**

**Semester-VIII
Hours/Week- 6
Credit- 6**

Learning Objective: This course offers an advanced study of the development and practice of screenwriting and style in Animation filmmaking. The course centres on an analysis of the evolution of screenwriting aesthetics in the planning and visualization of moving pictures by the director in pre-production

- Introduction and history of evolution of the specialized stream called screenwriting, alongside of history of cinema. Basic theories that govern screenwriting. Understanding importance of screenwriting in the flow of a narrative. Pace and Rhythm in screenwriting.
- Screenwriting theory: the screenwriting of Walt Disney, Hayao Miyazaki, Henry Selick , Pixar, DreamWorks, Warner Bros etc.
- Theoretical analysis of case studies: Lion King, Water ship down,
- Screenwriting for TV series, news and documentaries, TV commercials.

Learning Outcomes:

Suggested Books:

- Animation Writing and Development, : From Script Development to Pitch (Focal Press Visual Effects And Animation) 1st Edition by Jean Ann Wright (Author). Publisher: Focal Press; 1 edition (February 7, 2005)
- Ideas for the Animated Short, Second Edition: Finding and Building Stories 2nd Edition by Karen Sullivan (Author), Gary Schumer (Author). Publisher: Focal Press; 2 edition (November 19, 2012)
- Write Your Way into Animation and Games: Create a Writing Career in Animation and Games 1st Edition by Christy Marx (Editor). Publisher: Focal Press; 1 edition (March 18, 2010)
- Blueprint for Screenwriting: A Complete Writer's Guide to Story Structure and Character Development 1st Edition, Kindle Edition by Rachel Ballon (Author). Publisher: Routledge; 1 edition (April 4, 2014)
- Exploring Visual Storytelling (Design Concepts) 1st Edition by Brian Arnold (Author), Brendan Eddy (Author). Publisher: Cengage Learning; 1 edition (June 5, 2007)

**Subject: Adv. Character construction: Portraiture,
Caricature, Hybrid 2D/3D**
Subject Code: AMM4802C

Semester-VIII
Hours/Week- 6
Credit- 6

Learning Objective: Character construction for Animation: Human and Animal Anatomy: from, structure and analysis, Advanced Character Construction: Portraiture and Caricature, Facial Expression.

An upgraded study of the development and practice of Drawing in deferent style, including the 3D/2D practical application of them. Here each student has to develop their own skill and style of drawing according to the practice and passion.

- ❖ History of drawing, alongside of history of Animation movies with respect to them (drawing).
- ❖ Advance understanding of anatomy, space, form and environment.
- ❖ Advanced study of 3D/2D character construction and expression chart.

Learning Outcomes: The student is expected to come up with a character design and expression 2D/3D.

Suggested Books:

- Force: Character Design from Life Drawing (Force Drawing Series) 1st Edition by Mike Mattesi (Author) Publisher: CRC Press; 1 edition (May 10, 2008)
- Bridgman's Complete Guide to Drawing From Life Fifth Edition by George B. Bridgman (Author) Publisher: Sterling; Fifth edition (November 7, 2017)
- The Art of Caricaturing Paperback – February 21, 2012 by Mitchell Smith (Author), Maggie Mack (Author) Publisher: CreateSpace Independent Publishing Platform (February 21, 2012)
- Anatomy for 3D Artists: The Essential Guide for CG Professionals by Chris Legaspi. Publisher: 3DTotal Publishing (December 15, 2015)
- Sculpting from the Imagination: ZBrush (Sketching from the Imagination) by 3D total publishing (May 24, 2016)
- ZBrush Character Sculpting by Rafael Grassetti. Publisher: 3dtotal Publishing; 1st edition (April 17, 2012)
- Character Design From the Ground Up by Kevin Crossley. Publisher: Ilex Press (October 6, 2014)
- Creating Characters with Personality: For Film, TV, Animation, Video Games, and Graphic Novels by Tom Bancroft. Publisher: Watson-Guptill; 1 edition (February 1, 2006)
- Creative Character Design 2e by Bryan Tillman. Publisher: CRC Press; 2 edition (February 12, 2019)
- Creating Stylized Characters by 3DTotal Publishing (July 10, 2018)
- The Silver Way: Techniques, Tips, and Tutorials for Effective Character Design by Stephen Silver. Publisher: Design Studio Press (April 7, 2017)
- The Art of Animal Character Design, Second Edition by David Colman. Publisher: David's Doodles (2014)
- Designing Creatures and Characters: How to Build an Artist's Portfolio for Video Games, Film, Animation and More by Marc Taro Holmes. Publisher: North Light Books (October 12, 2016)

Subject: Layout and Asset Design

Subject Code: AMM4803C

Semester-VIII

Hours/Week- 6

Credit- 6

Learning Objective: Layout is a breakdown of 2D storyboards into 2D or 3D shots. Students has to use production designs and models as reference to build locations and major props, to block in the position of characters, to select camera angles and to plot camera moves.

- ❖ Student has to ensure that everything that is going to be animated is set up properly, including not only characters, but also any props or parts of the background that need to move.
- ❖ Comprehensive study of different art style of animated movie.

Learning Outcomes: The student is expected to come up with a short layout walkthrough animation 2D or 3D. (Minimum 1 minute).

Suggested Books:

- Animation - The Art of Layout and Storyboarding Paperback – November 18, 1999 by Mark Byrne (Illustrator). Publisher: Imprint unknown; First Edition edition (November 18, 1999)
- Setting the Scene: The Art & Evolution of Animation Layout by Fraser Maclean. Publisher: Chronicle Books (November 16, 2011)
- The Noble Approach: Maurice Noble and the Zen of Animation Design Hardcover – October 1, 2013 by Tod Polson (Author), Chuck Jones (Preface), Maurice Noble (Foreword) Publisher: Chronicle Books (October 1, 2013)
- Modeling the Environment: Techniques and Tools for the 3D Illustration of Dynamic Landscapes 1st Edition by Bradley Cantrell (Author), Natalie Yates (Author). Publisher: Wiley; 1 edition (March 27, 2012)
- 2D Artwork and 3D modeling for game artist by David Franson & Andre Lamothe. Publisher: Premier Press; 1st edition (November 27, 2002)
- Construction drawing and details for interiors by W. Oti Kilmer and Rosemary Kilmer. Publisher: Wiley; 3 edition (February 15, 2016)
- Dream Worlds: Production Design for Animation by Hans Bacher and Don Hahn. Publisher: Routledge (November 23, 2007)
- 3D Game Environments: Create Professional 3D Game Worlds 1st and 2nd Edition by Luke Ahearn. Publisher: Routledge (November 23, 2007)
- Maya Studio Projects: Game Environments and Props by Michael McKinley, Publisher: Sybex, 2010

Subject: Digital Character Animation 2D/3D
Subject Code: AMM4804C

Semester-VIII
Hours/Week- 6
Credit- 6

Learning Objective: This course focuses on the different professional aspects of the computer graphics in Character Animation. In this course students will practice, present and discuss their own work with other students in a supportive environment. There will be Practical project based classes.

- ❖ Hybrid animals and its movements.
- ❖ Stylized and detail acting.
- ❖ Facial Expression and Dialogue.
- ❖ Using live shoot for animation.
- ❖ Make your own complex character and animate that.

Learning Outcomes: small animation sequence using 2D/3D digital platform (Minimum 15 second).

Suggested Books:

- Comedy for Animators by Jonathan Lyons (2016-01-18). Publisher: Focal Press (1788)
- Physics for Animators by Michele Bousquet (2015-12-20) Paperback – 1706. Publisher: Focal Press (1706)
- Digital Animation 1 &2 by Andrew Chong. Publisher: Bloomsbury Visual Arts; 1 edition (January 10, 2019)
- Hybrid Animation Integrating 2D and 3D Assets by Tina O’Hailey. Publisher: Focal Press (1708)
- Thinking-Animation Bridging the Gap Between 2D and CG by Angie Jones and Jamie Oliff. Publisher: Cengage Learning PTR; 1 edition (June 16, 2006)
- Animation from Pencils to Pixels: Classical Techniques for the Digital Animator 1st Edition by Tony White. Publisher: Cengage Learning PTR; 1 edition (June 16, 2006)

Subject: Research and choosing of the topic for thesis Semester-VIII
Subject Code: AMM4904D

Learning Objective: Students are to choose a topic for their dissertation

The student are expected to come up with a short dissertation accompanied with images and explorations pertaining to Individual dissertation Project.

Expected Output: A short dissertation of about 5000 words explaining:

- ❖ The identified problem area
- ❖ Reasons behind the chosen area of interest and how it might be relevant to the understanding of the broader discipline of visual communication
- ❖ Documentation of the research process
- ❖ The reasons behind the dissertation being relevant and beneficial to the MMM department and future students
- ❖ Research bibliography with citations
- ❖ Students are supposed to submit three copy of the completed project.

Semester-IX

Subject: Cultural Studies II

Subject Code: MM4901C

Semester-IX

Hours/Week- 6

Credit- 6

Learning Objective: This paper focuses on different subjects that help to get a better grasp in understanding culture.

1. Subjectivity
2. Identity
3. Ideology
4. Representation
5. Power
6. Discourse
7. Gender

Learning Outcomes: Students will realize that culture creates and transforms individual experiences, social relations and power.

Suggested Readings:

Subjectivity:

- i) Donald E. Hall, Subjectivity, Routledge, 2004
- ii) Jean-Paul Sartre, What is subjectivity?, Verso, 2016

Identity:

- i) Kath Woodward, Questioning Identity: Gender, Class, Nation, Routledge, 2004.
- ii) Francis Fukuyama, Identity: The demand for Dignity and the Politics of Resentment, Farrar, Straus and Giroux, 2018

Ideology:

- i) Louis Althusser, On the Reproduction of Capitalism: Ideology and Ideological State Apparatuses, Verso, 2014.
- ii) Terry Eagleton, Ideology: An Introduction, Verso, 2007.

Representation:

- i) Stuart Hall, Jessica Evans and Sean Nixon, Representation: Cultural Representations and Signifying Practices, Sage Publication, 2013.
- ii) Hanna F. Pitkin, The Concept of Representation, University of California Press, 1967.

Power:

- i) Michel Foucault, The Subject and Power, Critical Inquiry, (Volume-8, No. -iv, PP 777-795), 1982.
- ii) John Storey, Culture and Power in Cultural Studies, Edinburgh University Press, 2010.

Discourse:

- i) Alec McHoul and Wendy Grace, A Foucault Primer: Discourse, Power and The Subject, New York University Press, 1997.
- ii) James Paul Gee, An Introduction to Discourse Analyses: Theory and Method, Routledge, 2014

Gender:

- i) Annette Burfoot, *Visual Culture and Gender: Critical Concepts in Media and Cultural Studies*, (Volume – iv), Routledge, 2015.
- ii) Bonnie Kime Scott, Susan E. Cayleff, Anne Donadey, Irene Lara, *Women in Culture: An Intersectional Anthology for Gender and Women’s Studies*, John Wiley and Sons, 2016.

Subject: Animation Studies: Contemporary Trends **Semester-IX**
Subject Code: AMM4802C **Hours/Week-6**
Credit- 6

Learning Objective: This course focuses on the creativity of making animation along with the analytical study of the history of Animation in modern times.

- ❖ Present scenario of Indian 3D Animation with respect to the world. The problem and power of Indian animation industry, a thorough understanding of the out-sourcing procedure.
- ❖ Animation in Indian Advertisements.
- ❖ The works of Hayao Miyazaki. His contribution to the world of animation.
- ❖ Animation/ Animator to read: Koneko no Rakugaki, Blinkerty Blank, Works of Norman McLaren, Tim Burton, Brad Bird, John Lasseter, The Simpson etc.
- ❖ Reading of US and European contemporary 3D animation, the impact on visual culture. Animations/Movies to Read: Shrek, Toy Story, Finding Nemo, Life of Pi, Jungle Book (2016) etc.

Learning Outcomes: To understand the creative, artistic, social and technical aspects of animation making around the world.

Suggested Books:

- Animation Art (eBook): From Pencil to Pixel, the illustrated History of Cartoon, Anime & CGI (Illustrated Digital Editions) [Print Replica] Kindle Edition by Jerry Beck (Author, Editor) Publisher: Flame Tree Publishing (March 6, 2015)
- The Nine Old Men: Lessons, Techniques, and Inspiration from Disney's Great Animators by Andreas Deja. Publisher: Routledge; 1 edition (September 23, 2015)
- Animation: A World History: Volume III: Contemporary Times by Giannalberto Bendazzi. Publisher: Focal Press (2015-11-12) (1656)

Subject: Post Production Tools and Techniques
Subject Code: AMM4903C

Semester-IX
Hours/Week- 6
Credit- 6

Learning Objective: This course focuses on the different professional aspects of the postproduction tools and techniques of Animation. In this course, students will practice, present and discuss their own work with other students in a supportive environment. There will be Practical project based classes.

- ❖ Working with the developed ideas.
- ❖ Importance and Practice of Audio in Animation Design. Video editing.
- ❖ Complex Compositing. Understanding of frames with respect to create scenes and pace in-between.
- ❖ Understanding of different areas of post-production; the logical developments.
- ❖ Understanding the process of converting the pre-production elements to post-production to complete the film.
- ❖ Full rendering of a film. Different out puts.

Learning Outcomes: Understanding the postproduction pipeline through visual effects editing, audio mixing and rendering. Students have to submit a 2 minutes video using the above mentioned postproduction tools.

Suggested Books:

- The VES Handbook of Visual Effects: Industry Standard VFX Practices and Procedures, by Susan Zwerman (Editor), Jeffrey A. Okun (Editor), Publisher: Routledge; 2 edition (13th August 2014)
- The Visual Effects Producer: Understanding the Art and Business of VFX by Charles Finance, Susan Zwerman, Publisher: Routledge; 1 edition (28th September 2009)
- The Heart of Art: A Glimpse into the Wondrous World of Special Effects Makeup and Fine Art of Akhito by Akihito Ikeda, Publisher: Titan Books Ltd (29th October 2014)
- Filming the Fantastic: A Guide to Visual Effects Cinematography by Mark Sawicki, Publisher: Routledge; 2 edition (12 September 2011)
- Industrial Light & Magic: Into the Digital Realm by Patricia Rose Duignan , Publisher: Del Rey (1 October 1996)

Subject: Final thesis
Subject Code: AMM4904D

Semester-IX
Hours/Week- 12
Credit- 12

The student is expected to come up with a short dissertation accompanied with images and explorations pertaining to Individual Project.

Expected Output: A short dissertation of about 5000 words explaining:

- ❖ The identified problem area
- ❖ Reasons behind the chosen area of interest and how it might be relevant to the understanding of the broader discipline of visual communication
- ❖ Documentation of the research process
- ❖ The reasons behind the dissertation being relevant and beneficial to the MMM department and future students
- ❖ Research bibliography with citations

Students have to submit three copy of the completed project

**Subject: 2D/3D Project Preproduction:
Sound design, Animatics**
Subject Code: AMM401PJ

Semester-IX

Learning Objective: This course focuses on the different professional aspects of the 2D and 3D Animation. In this course students will practice, present and discuss their own work with other students in a supportive environment.

- ❖ Idea Developing (A scratch to movie).
- ❖ Advance storyboard with dynamic action sequences.
- ❖ Animation Design.
- ❖ Background designing with creative understanding of environment and the understanding the identity for a film.
- ❖ Advanced character designing with relationships with environments
- ❖ Understanding shapes
- ❖ Research methodology.
- ❖ Creating Maquette for Visual Development & Design.

Learning Outcomes: The student is expected to come up with a complete Preproduction book for a film and finally creating animatic for an error free production.

Suggested Books:

- The Animator's Eye: Adding Life to Animation with Timing, Layout, Design, Color and Sound 1st Edition by Francis Glebas. Publisher: Focal Press; 1 edition (September 24, 2012)
- The Art of Pixar: 25th Anniv.: The Complete Color Scripts and Select Art from 25 Years of Animation by Amid Amidi Publisher: Chronicle Books; 1st Edition edition (November 2, 2011)
- Designing Sound for Animation 2nd Edition by Robin Beauchamp. Publisher: Focal Press; 2 edition (1707)
- Dream Worlds: Production Design for Animation 1st Edition by Hans Bacher. Publisher: Focal Press; F 1st Used edition edition (1707)

Semester-X

Subject: Individual Project: Production / Postproduction Semester- X
Subject Code: AMM401PJ Hours/Week- 12
Credit- 12

Project Brief: The students have to identify a specific research area within visual communication chiefly animation. It might also involve research into works of pioneers in various fields of visual communication, artists, and filmmakers. The student, in consultation with their respective guide should arrive at a final idea that puts forth their research and learning as a creative output.

Expected Outcome: The final output may be in the form of Fiction or non-fiction Animation film.

Students have to submit a copy of the completed project with documentation of the entire process to the departmental library.

Subject: Internship
Subject Code: AMM402IN

Semester- X
Hours/Week- 6
Credit- 6

Learning Objective: Main objective of professional practice is to make student acquainted with professional work environment.

- In professional practice, student may work in any production house as part timer or they can work as freelancer.
- At the end of the Semester Student should submit their profession output/ Report.

Reference Books :

Reference for Story Designing

- **The everything Creative Writing Book-** Carol Whiteley
- **The Complete Idiot's Guide to Creative Writing, 2nd Edition-** Laurie E. Rozakis.
- **The Art of Creative Notification: Writing and Selling the Literature of Reality (Wiley Book for Writers Series) –** Lee Gutki
- **Writer's Digest Writing Kit: Everything You Need to Get Creative, Start Writing and Get Published –** Writers Digest Book.

Reference for Photography

- **The Complete Kodak Book of Photography –** Jonathan Vince and Jack Tresidder.
- **The Basic Book of Photography, Fifth Edition-** Tom Grimm and Michele Grimm.
- **Amphotos Complete Book of Photography: How to Improve Your Pictures with a Film or Digital Camera-** Jenni Binder and Russ Burden.

Reference for Scripting for Media

- **Visual Storytelling: The art and Technique-** Tony Caputo, Jim Steranko, and Harlan Ellison.
- **The visual Story, Second Edition: creative the Visual Structure of Film, TV and Digital Media-** Bruce Block.
- **Graphic storytelling and Visual Narrative (Will Eisner Instructional Books) –** Will Eisner.
- **Cinematic storytelling: The Most Powerful Film Conventions Every Filmmake Must Know –** Jennifer Van Sijll (Paperback Aug 1, 2005)

- **The Complete Book of Scriptwriting-** Michael Straczynski
Cartoon
- **The Writer's Guide to Writing Your Screenplay : How to Write Great Screenplay for Movies and Television-** Cynthia Whitcomb

- **Animation: From script to Screen-** Shamus Culhane.

- **Animation Writing and Development: From Script Development to Pitch (Focal Press Visual Effects and Animation) –** Jean Ann Wright.
- **Story: Robert McKee**

Reference for Animation Fundamentals- Classical Animation –Advanced 2D Animation

- **Gardner’s Computer Graphic & Animation Dictionary-** Garth Gardner
- **Animation (Walt Disney Animation Studios: The Archieve Series)-** Ins. Disney Enterprises.
- **Beginner’s Guide to Animation: Everything You need to Know to Get Started-** Mary Murphy.
- **The Animators Survival Kit- Revised Edition: A manual of Methods, Principles and Formulas .for Classical, Computer, Games, Stop Motion and Internet Animators-** Richard Williams.
- **The Illusion of Life: Disney Animation-** Ollie Johnston and Frank Thomas.
- **Cartoon Animation (the Collector’s Series)-** Preston Blair
- **The Animation Book: A Complete Guide Animated Filmmaking- From Flip- Books to sound Cartoons to 3D Animation-** Kit Laybourne and John Canemaker.
- **Animation 1: Learn to Animate Cartoons Step by Step (Cartooning Book 1)-** Preston j. Blair
- **Force: Dynamic Life Drawing for Animators, Second Edition-** Mike Mattesti.
- **Drawn to Life: 20 Golden Years of Disney Master Classes: Volume 1: The Walt Stanchfield Lectures-** Walt Stanchfield and Don Hahn.
- **How write for Animation-** Jeffery Scott.
- **Timing for Animation, Second Edition-** Tom Sito (Paperback- Sep 3, 2009).
- **Animation from Pencil to Pixel: Classical Techniques for the Digital Animation-** Tony White (Kindle Edition- Aug 4, 2006)- Kindle Book.
- **Basic animation: Drawing for Animation-** Paul Wells, Joanna Quinn.

Reference for Film Studies

- **Film Language: A semiotics of the Cinema-** Christain Metz and Michael Taylor.
- **Grammer of Film Language-** Daniel Arijon.
- **Film Communication Theory and Practice in Teaching English as A Foreign Language-** David John Wood.
- **Teaching Analysis of Film Language-** David Wharton, Jeremy Grant and Vivienne Clark.
- **Film as Art- Rudolf Arnheim (Paper Back- Mar 6, 2006)-** Deluxe Edition
- **Film Direction Shot by Shot: Visualizing from Concept to Screen (Michael Wiese Production)-** Steve Katz.
- **How to read a Film: James Monaco**
- **The Oxford History of World Cinema: Edited by Geoffrey Nowell-Smith**
- **Jump Cuts and Blind Spots: David Bordwell**

Reference for Storyboarding & Animatics

- **Exploring Storyboarding (design Exploration Series)**- Wendy Tumminello.
- **Storyboard Design Course: Principles, Practice, and Techniques**- Giuseppe Cristiono.
- **Prepare to Board! Creating story and Characters for animated Features and Shorts**- Nancy Beiman.
- **The Art of the storyboard, Second Edition: A filmmaker's introduction**- John Hart.
- **Storyboards: Motion in Art, Third Edition**- Mark A. Simon.

Reference for Character Design

- **Creating Characters with Personality: For Film, TV Animation, Video Games, and Graphic Novels**- Tom Bancroft and Glen Keane (Paperback- Feb 1, 2006).
- **Character Animation: 2D skills for Better 3D, Second Edition (Focal Press Visual Effects and Animation)**- Steve Roberts (Kindle Edition- May 4, 2007)- Kindle Book
- **Gardner's storyboard Sketchbook: story Planning and Character design Workbook (Gardner's Guide Series)**- Garth Gardner.
- **Character Costume Figure Drawing: Step-by-Step Drawing Methods for Theatre Costume Designers**- Tan Huaixiang (Paperback- May 4, 2004)

Reference for Layout Design

- **Animation Background Layout: From student to Professional**- Mike S. Fowler.
- **How to Make Animated Films: Tony White's Complete Masterclass on the Traditional Principles of Animation**- Tony White

Reference for Stop Motion Animation

- **A century of Stop-Motion Animation: From Melies to Aardman**- Ray Harryhausen and Tony Dalton.
- **The Art of Stop-Motion Animation**- Ken A. Priebe
- **Basic Animation: Stop Motion**- Barry Purves

Reference for Music and Sound Effect

- **Sound Design: The Expressive Power of Music, Voice and Sound Effects in Cinema**- David Sonnenschein
- **Sound and Music for the Theatre, Third Edition: The Art & Technique of Design**- Deena Kaye and James LeBrecht.

Reference for Visual and Sound Editing

- **Editing Digital Video: The Complete creative and Technical Guide-** Rober M. Goodman and Patrick McGrath.

Reference for 3D (Maya)

- **Stop Staring: Facial Modeling and Animation Done Right-** Jason Osipa.
- **Learning Autodesk Maya 2009, The modeling and Animation Handbook: Official Autodesk Training Guide-** Autodesk Maya Press.
- **Maya Professional Tips and Techniques-** Lee Lanier.
- **Advanced Maya Texturing and Lighting-** Lee Lanier.
- **Maya Visual Effects: The Innovator's Guide-** Eric Keller
- **Mastering Maya 2009-** Eric Keller, Eric Allen and Anthony Honn.

Reference for Digital Imagery

- **Adobe Photoshop CS4 classroom in a book-** Adobe Press.
- **The Photoshop Book for Digital Photographers-** Scott Kelby
- **Layers: The complete Guide to Photoshop's Most Powerful Feature-** Matt Kloskowski.

Reference for 2D Animation by Flash

- **Adobe Flash CS4 Professionals- Classroom in a Book-** Adobe Creative Team
- **Adobe Flash CS3 Professionals- Hundred Essential Techniques-** Mark Schaeffer.

Reference for Drawing the Key Tool/ Visual Literacy/ Graphic Design

- **Consize History of Art-** Harbart Reed
- **Pictorial Websters' "A Visual Dictionary of Curiosities"-** Jhon M.Carrera.
- **An illustrated Life: Drawing Inspirations from the Private Sketch Books of Artists, Illustrators and Designers –**Danny Gregory.
- **Art: A world History-** Elke Linda Buchholz, Susanne Kaeppele, Karoline Hille and Irina Stotland.
- **How to read a Film: Movies, Media, Multimedia-** James Monaco.
- **Our Films and Their Films-** Satyajit Ray.
- **The Animation Book: A Complete Guide to animated film making- From Flipbooks to sound Cartoons to 3D Animation-** Kit Laybourne, John Canemarker.

Human Anatomy study

- **Anatomy and Drawing: Victor Perard**
- **Constructive Anatomy: George B. Bridgman**

Art history and Practice

- **Ways of Seeing: John Berger**
- **History of Art: H.W.Janson & Anthony F. Janson**
- **Oxford History of Art, Indian Art: Partha Mitter**

1) Ways of Seeing – John Berger

- 2) Illumination – Walter Benjamin
- 3) Meaning of Art – Herbert Read
- 4) Concise history of Modern Painting - Herbert Read
- 5) Grammar of the Film Language – Daniel Arizon
- 6) Our Films Their Films – Satyajit Ray
- 7)The Creative Circuit – K.G. Subramanyan