

# **St. Xavier's College (Autonomous), Kolkata**



## **M.Sc. 5 years Integrated in Multimedia with Specialisation in Animation / Design / Film Studies & Production**

### **SYLLABUS (Common: Year 1 to 3) 2023 - 2024**

**Department of Multimedia**

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# **SEMESTER - I**

<b>Sem.</b>	<b>Introduction to Principles of Photography</b>		<b>C1MM23011C</b>
<b>I</b>	Major (Core)	Composite	<b>Credits 4</b>

### Course Objective:

The main purpose of this course is to familiarize students with the basic principles of photography and help them explore the world of pictorial realism keeping in mind both form and aesthetics. The course is also a launchpad for a larger training in creating a visual language which would enable students to create a base for future courses and specializations.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

- Basic Principles of Photography
- Visual Language of Photography
- Language of the Lens
- Exposure Theory
- Fundamentals of lighting
- Physical Basis of Optics, Focus and Depth of Field
- Language of Digital Imaging
- Advancement in Camera Technologies
- Foundations for Art and Design
- Pictorial Photography

### Learning Outcomes:

The entire course is designed to provide detailed theoretical knowledge as well as practical training to be a 'visual storyteller' such as a photographer.

### Evaluation:

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA: Written 20 marks	CA: Individual 5 photo submissions 20 marks	=> 25+5 =30
Semester Exam: Written 20 marks	Semester Exam: Group of 5 students' photo story project and Viva 50 marks	70

### Paper Structure for Theory Semester Exam:

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

### **Reading/Reference Lists:**

- The Step by Step Guide to Photography by Michael Langford, Ebury Press/Mermaid, London (1985)
- Langford's Basic Photography, Focal Press (2015)
- The Digital Photography Handbook by Doug Harman, Smith-Davis Publishing Ltd., London (2005)
- Digital Photographer's Handbook by Tom Ang, Dorling Kindersley Ltd. London (2008)

<b>Sem.</b>	<b>Graphic Design 1: Typography</b>		<b>C1MM23012C</b>
<b>I</b>	Major (Core)	Composite	<b>Credits 4</b>

### Course Objective:

In this module, we will explore the basic understanding and some of the fundamental principles of Graphic Design and Typography. Through theoretical discussion regarding the history and evolution of design as well practical training in design basics we will try and arrive at a preliminary understanding of the vast world of design. We will simultaneously try to understand how we can arrive at a position of visualizing our everyday life with the eye of a designer.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

Students will finish the course with knowledge in the following:

- The basic historical outline of Graphic Design till Modernism.
- Understanding typography; Anatomy of typography, Understanding scripture, sign language, origin of Icons, Symbols, and Alphabets.
- Understanding the Space and Form in Graphic Design.
- Understanding the elements of Graphic Design, Design as Art.

### Learning Outcomes:

Students will understand the presence of Graphic Design in everyday life, how to read the regular world through a language and lens of design. They will be given assignments on design in life and on typography. Students will make a physical copy of the Artbook/ Book/ Designer's Book, etc. as an expression of their learning outcome at the end of the course.

### Evaluation:

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA: Written 20 marks	CA: 3 to 4 submissions 20 marks	=> 25+5 =30
Semester Exam: Written 20 marks	Semester Exam: Create fonts, Artbook, Book - 50 marks	70

### Paper Structure for Theory Semester Exam:

- |   |             |
|---|-------------|
| A. Short Answer any two questions out of three  | [2 x 2 = 4] |
| B. Medium Answer any two questions out of three | [2 x 4 = 8] |
| C. Long Answer any one question out of two      | [1 x 8 = 8] |



**Reading/Reference Lists:**

- Sahaj Path, Rabindranath Tagore, Visva Bharati
- The King and The Little Man, K.G. Subramaniyan, Seagull Books
- Why Fonts Matter, Sarah Hyndman, Virgin Books

<b>Sem.</b>	<b>Understanding Drawing 1</b>		<b>B1MM23011C</b>
<b>I</b>	Minor (Gen. Elective)	Composite	<b>Credits 4</b>

### Course Objective:

The course will provide a basic overview of the visual world that exists beyond the classroom with training in reading and understanding visuals, from both the perspective of popular and fine arts. The course will also give training in the essentials of illustrations and drawing, including basic objects and gestures.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

#### Unit-1

- Visual Reading; Basic study of world Visual Language (Sign, symbols, allegory etc.)
- Picture Reading: The potential of picture in daily life and to understand not only the surface, but also the Inner Power.
- Preliminary elements of Art history and aesthetics.
- Understanding Colour; Basic idea and understanding of colour and its language.
- The relationship between Art and Society

#### Unit-2

- Basic Object Drawing: Study of basic shapes and forms to understand the primary form and structure.
- Extensive still life study of different shapes, including organic and inorganic objects.
- Gesture/Action drawing for animation and perspective study – people of different body types walking or working.
- Clinical study of animation art books prepared by famous artists to study different drawing styles.

### Learning Outcomes:

The student will emerge with a theoretical as well as practical knowledge of basic drawing principles and the domain of the visual. The end semester submission will require them to produce their individual diaries of art historical data, drawing styles, studies, sketches and basic drawings to illustrate their own takeaways from the course and their initial ideas regarding visual language.

### Evaluation:

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA: Written 20 marks	CA: 2 submissions 20 marks	=> 25+5 =30
Semester Exam: Written 20 marks	Semester Exam: Still life study drawing 50 marks	70

**Paper Structure for Theory Semester Exam:**

- |   |             |
|---|-------------|
| A. Short Answer any two questions out of three  | [2 x 2 = 4] |
| B. Medium Answer any two questions out of three | [2 x 4 = 8] |
| C. Long Answer any one question out of two      | [1 x 8 = 8] |

**Reading/Reference Lists:**

- Elements of Art, Richard Pumphrey, Prentice Hall.
- Indian Art: A Concise History, Roy. C. Craven, Thames and Hudson.
- A History of Modern Art, Arnason and Prather, Thames and Hudson.
- Ways of Seeing, John Berger, BBC
- Cartooning: Concepts and Methods, Part I: Figure Drawing Basics, Don Simpson

<b>Sem.</b>	<b>Digital Methods 1: Raster &amp; Vector Graphics</b>		<b>M1MM23011P</b>
<b>I</b>	Multi-Disciplinary	Practical	<b>Credits 3</b>

**Course Objective:** Photoshop, Illustrator helps to execute imagination digitally and enhance the technical skill of learners, especially to prepare them for professional engagements. The course seeks to provide essential foundational knowledge regarding software which is essential in every professional sphere irrespective of stream or specialization.

Students must devote at least 3 preparatory hours per week.

### Syllabus:

- Basic knowledge about vector and raster graphics, pixels, resolution, different colour modes, units and how to implement research methods before starting digital projects.
- Opening, viewing, and saving files on various software
- How to control the canvas or art board (working area) and changing the different screen modes
- Working with layers, different type of masking, blending modes, styles, and essential functions of layers.
- Using images, guides, grids, rulers and transform tools.
- Working with text, brushes, and pen tools
- Vector drawing techniques
- Advanced compositing, retouching and correction of images with different retouching tools. Use of different image adjustment options.
- Use of effects & filters.
- Use of different file formats for the different purposes; how to export the file in different formats according to requirements.
- How to interact with Photoshop, Illustrator with other Adobe applications.

### Learning Outcomes:

- Students will develop technical skills in both these applications for designing in different platforms.
- Students will develop photo retouching skills which is an essential component of their course on photography as well.
- Students will learn to create different types of digital and commercial designs as well as file and data management to enhance skill and productivity.

### Evaluation:

Theory	Practical	Marks
CIA:	CA: Every month on given date class tests is taken for 50 marks	=> 48+2=50
Semester Exam:		

### Paper Structure for Theory Semester Exam:

### Reading/Reference Lists:

<b>Sem. I</b>	<b>MIL: Bengali / Hindi / English</b>		<b>A1EN230111T A1BN230111T A1HN230111T</b>
	Ability Enhancement	Theory	<b>Credits 4</b>

### **Course Objective:**

The courses aim at enabling the students to acquire and demonstrate the core linguistic skills, including critical reading and expository and academic writing skills, that help students articulate their arguments and present their thinking clearly and coherently and recognize the importance of language as a mediator of knowledge and identity.

They would also enable students to acquaint themselves with the cultural and intellectual heritage of the chosen MIL and English language, as well as to provide a reflective understanding of the structure and complexity of the language/literature related to both the MIL and English language.

### **Syllabus:**

### **Learning Outcomes:**

The courses will also emphasize the development and enhancement of skills such as communication, and the ability to participate/conduct discussion and debate.

### **Evaluation:**

<b>Theory</b>	<b>Practical</b>	
CIA:	CA:	
Semester Exam:	Semester Exam:	

### **Paper Structure for Theory Semester Exam:**

### **Reading/Reference Lists:**

<b>Sem.</b>	<b>Spirituality and Inter-Religious Harmony</b>		<b>V1FD23011C</b>
<b>I</b>	Value-Added	Theory	<b>Credits 2</b>

### Course Objective:

This course on “Spirituality and Inter-religious Harmony” is to introduce students to major religious traditions of the world with a brief exposition of basic tenets of Hinduism, Christianity Islam, Buddhism, Jainism and Sikhism. One of the main goals is to understand how these religious movements orient themselves in the world with respect to history, belief and practice. An attempt will be made to explore the traditions on their own terms as much as possible. However, this should not prevent anyone asking healthy critical questions on them, as it also aims to inculcate in students a sense of respect and appreciation for followers of other religions and traditions and to enhance social harmony and inter-religious dialogue in the country. To achieve these goals, topics like God-Man-World concepts, sacred texts, human destiny, rituals, holy places community, spirituality besides others, will be dealt with.

**Learning Objectives:** The course aims to help learners to acquire conceptual knowledge of:

**LO1.** how these religious movements orient themselves in the world with respect to history, belief, and practice.

**LO2.** spirituality and its interconnectedness with the world at large

### Syllabus:

1. Religion – The origin of religion, the religious and social role of religion.
2. Hinduism: Introduction-God-Man-World concept, Human destiny, Evil-Suffering, life after death, rites, rituals and worship, sacred texts, a popular prayer - Gayatri mantra, principal sects, Hinduism, caste system, samsara, festivals and holy places, comparative elements in other religions.
3. Christianity: Introduction-God-Man-World concept, Jesus Christ, Human destiny, Evil-Suffering, life after death, rites, rituals (Sacraments) and worship, sacred texts. A popular prayer – ‘Our Father’, principal sects, festivals and holy places, comparative elements in other religions.
4. Islam: Introduction-God-Man-World concept, Muhammad, Human destiny, Evil-Suffering, life after death, rites, rituals and worship, sacred texts, a popular prayer – ‘The Call to Prayer’, principal sects, Sufism, festivals and holy places and comparative elements in other religions.
5. Spiritual Quotient: Prayer and spirituality in Personal and Public life (Social)
6. Faith Vs. Fanaticism: Communal and fanatic aspects of religion

- Inter-Religious Dialogue: steps to foster unity among different followers of faith traditions.

**Learning Outcomes:** On successful completion of the course, students will be able to:

**CO1.** Understand one's personal spiritual quotient and spirituality in everyday life.

**CO2.** Understand the importance of social harmony and inter-religious dialogue.

**Practical Exercises/Skill Development Activities:** watching documentaries on such areas, project report /assignment. Taking the occasion of one festival of one religion and organising Inter-Faith prayer service. Before the service, explanation of the festivals to be given with Power Point. Visit to religious places.

<b>Theory</b>	<b>Practical</b>	
CIA:	CA:	=>13+2=15
Semester Exam:	Semester Exam:	35

**Paper Structure for Theory Semester Exam:**

**Reading/Reference Lists:**

- Tiwari, Kedar Nath. Comparative Religion (Chapter 1)
- Smith, Huston. The World's Religions (Chapter 1)
- Stanford, Peter. Religion: 50 ideas you really need to know (Chapter 1)
- Dr. Muhammad Muhsin Khan (1985) Interpretation of the Meanings of the Noble Qur'an in the English Language, Al Madina Al Munawwarah: Islamic University of Al Madina Al Munawwarah.
- What is Islam? (2010) Compiled by Research Division Darussalam, Riyadh: Maktaba Darussalam.
- Muhammad al-Jibaly (2004) Knowing the Last Day, Madina: Al Kitab and As Sunnah Publishing.
- Hammudah Abdalati (2001) Islam in Focus, New Delhi: New Crescent Publishing.
- Dr. Zakir Naik (2000) Qur'an and Modern Science Compatible or Incompatible? Mumbai: Islamic Research Foundation.
- The world of religions – samarpan
- The complete works of Swami Vivekananda
- selections from the complete works of Swami Vivekananda
- What's Buddhism – Plain and Simple, The Practice of Being Aware, Right Now, Every Day, 2013, Steve Hagen, Broadway Books
- SIKH SPIRITUAL PRACTICE – THE SOUND WAY TO GOD by Siri Kirpal Kaur
- Jainism: An Introduction, 2009, Jeffery D. Long, I.B.Tauris
- The Power of Now: A Guide to Spiritual Enlightenment, by Eckhart Tolle, by New World Library, 2004
- Religious Hinduism by DeSmet and Neumer

# **SEMESTER - II**



<b>Sem.</b>	<b>Animation Fundamentals</b>		<b>C1MM23021C</b>
<b>II</b>	Major (Core)	Composite	<b>Credits 4</b>

### Course Objective:

This course will provide students with a complete overview of the history of animation as well as the numerous pre-existing art-forms from which it has emerged. They will also get an overview of puppetry, ancient Greek art, Egyptian art, and Cave art in order to examine the potential and prehistory of animation in some of the oldest existing visual arts of the world. This module will demonstrate to students how technology and art come together to produce animation and to help them create their own animation films, taking inspiration from masters past and present.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

#### Unit-1

##### Type of Animation

Understanding of different types of animation AKA production pipeline – Animation Process and style – 2D classical animation – 3D animation – Stop Motion Animation.

#### Unit-2

History of Animation (Theory) – American, Japanese, Indian, and European

#### Unit-3

**Applying Animation Principles (12 principles)** - Coin rolling – Ball bouncing (Rubber and Iron Ball) – Pendulum with thread – Bird flying – Blob jump

Introduction to exposure sheet, field guide and ladder system.

### Learning Outcomes:

Students will emerge from the course with knowledge regarding both the theoretical as well as the basic practical aspects of animation. They will utilise their ideas and learning to produce a small animation, combining traditional art and basic animation principles, as their end semester submission.

### Evaluation:

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA: Written 20 marks	CA: 5 submissions 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 25 drawings to animate with Light Box 50 marks	70

**Paper Structure for Theory Semester Exam:**

- |   |             |
|---|-------------|
| A. Short Answer any two questions out of three  | [2 x 2 = 4] |
| B. Medium Answer any two questions out of three | [2 x 4 = 8] |
| C. Long Answer any one question out of two      | [1 x 8 = 8] |

**Suggested Reading:**

- The Animator's Survival Kit expanded edition by Richard E. Williams, Faber; Main – Revised edition (5 November 2009)
- The ILLUSION OF LIFE: DISNEY ANIMATION (Disney Editions Deluxe) by Frank Thomas, Disney Editions; Revised, Subsequent edition (5 October 1995).
- Cartoon Animation (Collector's Series) by Preston Blair, Walter Foster Publishing; used edition (1 January 1994).

<b>Sem.</b>	<b>Graphic Design 2: Visual Aesthetics</b>		<b>C1MM23022C</b>
<b>II</b>	Major (Core)	Composite	<b>Credits 4</b>

### Course Objective:

In this module, we will try to explore the basic principles and techniques of drawing for illustration. The course is designed to showcase to students how we perceive the vast world around us with the language of drawing and illustration in continuation of their training in developing a visual language of their own. One aspect of the course will specifically deal with how to see our everyday life with the eye of an artist or illustrator.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

- The basic historical outline of drawing for Illustration and Design
- How to read and understand works of art and illustrations
- Understanding black-n-white images and visuals
- Illustration for Printing, Publishing and E-Industry.
- Introduction to Semiotics

### Learning Outcomes:

Students will understand how to convert the elements of everyday life into matter for their own illustrations and artworks. They will emerge with an advanced idea of how to read the world through the language of the visual through projects and assignments on illustrations. Students will make a physical copy of an illustrated book/ designer's book etc. as an expression of their learning outcome as their end semester submission.

### Evaluation:

<b>Theory</b>	<b>Practical</b>	
CIA: Written 20 marks	CA: Practical 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: Illustrated book/ designer's book 50 marks	70

### Paper Structure for Theory Semester Exam:

- |   |             |
|---|-------------|
| A. Short Answer any two questions out of three  | [2 x 2 = 4] |
| B. Medium Answer any two questions out of three | [2 x 4 = 8] |
| C. Long Answer any one question out of two      | [1 x 8 = 8] |

### Suggested Reading:

- Design As Art, Bruno Munari, Penguin UK
- The Design of Everyday Things, Revised and Expanded by Don Norman, Basic Books
- The Tale of the Talking Face, K. G. Subramanyan, Seagull Books
- How Hanu Became Hanuman, K. G. Subramanyan, Seagull Books
- Ways of Seeing, John Berger, Penguin UK

<b>Sem.</b>	<b>Understanding Drawing 2: Human and Animal Anatomy</b>		<b>B1MM23021C</b>
<b>II</b>	Minor (Gen. Elective)	Composite	<b>Credits 4</b>

### Course Objective:

This module will firstly give an overview of the course of visual art in India and the west, teaching students the visual vocabulary that have been at the core of design since its very beginning. Besides, in the practical aspects of the course, through the study of composition, structure, form and space, the course will help them in producing creative works of their own for their respective projects etc.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

#### Unit-1

- Major Art Movements – From Renaissance to Modernism
- Indian Art and Beginning of Modernism in India (theoretical and practical understanding of figure styles in Indian Classical Art as well as Modern Indian Art)
- Practical Understanding of Composition and Structure – Indian and Western concepts of composition.
- Drawing figures, forms and spaces – Indian and Western ways of seeing.
- Introduction to Art Historiography and terminologies

#### Unit-2

- Introduction to model studies.
- Study of anatomy – human and animal
- Study of human anatomy (dynamic figure drawing).
- Study of portraits.
- Industrial scale drawing – cityscape

### Learning Outcomes:

End Semester Submission: Individual Portfolio (Minimum 20 drawings) to reflect their takeaways from these Basic Drawing courses and demonstrate what skill and knowledge of visual language they have acquired.

### Evaluation:

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA: Written 20 marks	CA: Practical 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: Project Paper and Figure drawing 50 marks	70

**Paper Structure for Theory Semester Exam:**

- |   |             |
|---|-------------|
| A. Short Answer any two questions out of three  | [2 x 2 = 4] |
| B. Medium Answer any two questions out of three | [2 x 4 = 8] |
| C. Long Answer any one question out of two      | [1 x 8 = 8] |

**Suggested Reading:**

- Indian Art, A Concise History, Roy. C. Craven, Thames and Hudson.
- A Chronology of Art, Iain Zaczek, Thames and Hudson, 2018.
- The Art of Animal Drawing: Construction, Action Analysis, Caricature, Ken Hultgren, Greenpoint Books (31 May 2016).
- Art of Drawing the Human Body, Sterling, (November 1, 2004).
- Bridgman's Life Drawing (Dover Anatomy for Artists)
- Rupabali, Nandalal Bose, Visva Bharati
- Anatomy & Drawing, Victor Perard, Grace Prakashan

<b>Sem.</b>	<b>Digital Methods 2: Digital 2D</b>		<b>M1MM23021P</b>
<b>II</b>	Multi-Disciplinary	Practical	<b>Credits 3</b>

**Course Objective:** Animate CC as software helps students to build on and improve their knowledge of the key techniques for working in animation as well as demonstrating to them how to export the work for different platforms.

Students must devote at least 3 preparatory hours per week.

### Syllabus:

- Introduction to the software and the basic tools
- Opening, viewing and saving files
- How to control the stage (working area).
- How to use the timeline and key frames. Details about the different key frames.
- Implementations of different tween animations like shape, classic and motion tween, etc.
- Applying mask and motion path method in different tween animations.
- Creating text and gradient animations.
- Implementation of frame-by-frame animations with different objects.
- Creating banner animations.
- Working with symbols and effects.
- How to trace, rig and animate a 2D Character.
- How to export the file in graphics and video format according to requirement.
- How to interact with other applications.

### Learning Outcomes:

With this course future animators will be able to produce animations for 2D animation film, educational contents and motion graphics content for different platforms while also honing their technical knowhow further.

### Evaluation:

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA:	CA: Every month on given date class tests is taken for 50 marks	=> 48+2=50
Semester Exam:		

### Paper Structure for Theory Semester Exam:

### Reading/Reference Lists:

<b>Sem.</b>	<b>Audiography/ Sound Design 1</b>		<b>M1MM23022P</b>
<b>II</b>	Multi-Disciplinary	Practical	<b>Credits 3</b>

**Course Objective:** This module will give the students a basic idea of sound recording and the aesthetic use of sound in developing narratives with visuals. The course is geared towards sparking in the students an interest in sound design as well as demonstrating to them the incredibly powerful effects of sound as they creatively develop a soundscape with visuals.

Students must devote at least 4 preparatory hours per week.

### **Syllabus:**

#### **I. Sound in Nature:**

Nature of sound waves, Propagation process, Frequency, Amplitude, Wavelength, Pitch, Velocity of travel in different media, Loudness, Pitch, Reverberation, Reflection, Absorption, Diffraction, Refraction, Interference, Delay and Echo.

#### **II. Sound in Recording:**

- Historical aspects of sound recording and reproduction.
- Analogous and digital audio technologies.
- Signal chains and their different components: Microphones, interconnects, mixing consoles, monitoring systems.
- Microphones: basic designs, limitations and advantages of different types; Polar Responses and their connotations, Special types, Accessories.

#### **III. Use Of Sound in Audio-Visual Media:**

- An introduction to the creative use of audio in different fiction and non-fiction scenarios.
- Identifying and understanding the specifications of different audio equipment and learning their uses.
- Recording and using recording devices and Digital Audio Workstation.
- Making a short audio production.
- Radio Play

### **Learning Outcomes:**

After completion of this module the students will be able to:

- Understand the nature of sound
- Familiarise themselves with the sound equipment



- Able to record sound
- Able to record a radio play and give sound effects

**Evaluation:**

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA:	CA: 3-4 Audio-Visual projects are given during this semester for submission for 50 marks	=> 48+2=50
Semester Exam:		

**Suggested Reading:**

- Tom Kenny, Sound for Picture: The Art of Sound Design for Film and TV (Mix Pro Audio Series). Artistpro. 2000.
- Francis Rumsey and Tim McCormick, Sound and Recording, Focal Press, Sixth Edition. 2009.
- F. Alton Everest and Ken C Pohlmann, Master Handbook of Acoustics, The McGraw-Hill Companies. 2009.

<b>Sem.</b>	<b>Panchkosha: Holistic Personality Development</b>		<b>V1FD23021C</b>
<b>II</b>	Value-Added	Theory	<b>Credits 2</b>

**Course Objective:** This course has three themes namely personal, inter-personal and social skills which are essential for today's youth to face the demand and challenges of everyday life efficiently and effectively. The aim of the course is to develop ability in students to maintain a state of wellbeing and adapt and demonstrate of positive behaviour while interacting with the others in everyday life situations.

**Syllabus:**

<b>Unit</b>	<b>Details</b>	<b>No. of classes</b>
Unit 1: The significance of human values, Elements of personality development	Introduction to human/personality development and its importance to enhance career success and happiness in life- mental and physical health, social growth, spiritual growth, emotional growth Panchkosha -introduction Annamaya kosha (physical body) Pranamaya kosha (life force energy) Manomaya kosha (Psychological wellness) Vijnanamaya kosha(intellect) Anandamaya kosha (happiness and blissfulness)	3
Unit 2: Shaping personal skills- Annamaya kosha - Pranamaya kosha	Lateral thinking and Problem solving Stress and emotions Time management Social etiquettes Development of life force Balanced diet and exercise	3
Unit 3: Sharpening inter-personal skills - Manomaya kosha- Vijnanamaya kosha	Conflict management and resolution Assertiveness Active listening and empathy Non-verbal communications Controlling the mind Critical thinking and decision making	3
Unit 4: Strengthening social skills- Anandamaya kosha	Integrity in public and personal life Ethical relationships Digital dizziness and social networking Equity, equality and justice Experience of happiness and bliss Self-realization	3
Unit 5: Self Development	Physical Development, Cognitive Development Language Development, Social Development, Moral Development, Gender Development	3

## Learning Outcomes:

On successful completion of the course, students will be able to:

**CO1.**Develop personal and inter-personal skills to manage situations through a balanced and mature approach.

**CO2.**Develop a healthy attitude towards others and coping with stress

## Evaluation:

Theory	Practical	Marks
CIA:	CA: 2-3 writing assignments are given in class for submissions for 50 marks	=> 48+2=50
Semester Exam: Written 50 marks		

## Paper Structure for Theory Semester Exam:

### Reading/Reference Lists:

1. How to Win Friends and Influence People by Dale Carnegie, 1936
2. The 8th Habit: from Effectiveness to Greatness, by Stephen R. Covey 2007, Simon & Schuster Ltd
3. The Magic of Thinking Big by David J. Schwartz, 1959
4. Think and Grow Rich by Napoleon Hill, 1937
5. Failing Forward: Turning Mistakes into Stepping Stones for Success by John C. Maxwell
6. 2000
7. Psycho-Cybernetics by Maxwell Maltz, 1960
8. Awaken the Giant Within: How to Take Immediate Control of Your Mental, Emotional, Physical and Financial Destiny! By Tony Robbins, 1991
9. The Pentagon of Creation: As Expounded in the Upani
10. Panchkosha :The Five Sheaths of the human being , Swami Nishchalanand, Kindle edition.

# **SEMESTER - III**

<b>Sem.</b>	<b>Advanced 2D Animation 1: Biomechanics and Animation</b>		<b>C2MM23031C</b>
<b>III</b>	Major (Core)	Composite	<b>Credits 4</b>

### **Course Objective:**

The objective of this course is to provide a comprehensive understanding of biped movement in 2D animation. By studying human walk cycles, progressive walks, perspective walks, characteristic walks and run cycles students will gain the skills necessary to create realistic and dynamic animations for various types of characters and scenes.

Students must devote at least 4 preparatory hours per week.

### **Syllabus:**

#### **Biped Walk Cycles**

- Analysing human locomotion.
- Breakdown of walk cycle phases (contact, down, passing, up).
- Creating key poses for walk cycles.
- Adding secondary motion and personality to walks.

#### **Progressive Walk and Perspective Walk**

- Understanding progressive walk cycles (speed changes within a walk).
- Perspective walks cycles (animating characters walking towards or away from the camera).
- Implementing perspective shifts in walk animations.

#### **Run Cycles**

- Introduction to run cycle mechanics.
- Analysing different types of runs (jogging, sprinting, etc.)
- Creating dynamic run cycles with proper weight and momentum.
- Transitioning smoothly from walks to runs.

#### **Jump Animations**

- Mechanics of jumping and landing
- Key poses for jump animations
- Adding anticipation and follow-through to jumps
- Timing and spacing for realistic jumps.

### **Learning Outcomes:**

On the completion of this course the student should be able to:

- Develop skill in troubleshooting and refining animations to achieve desired visual effects and narrative impact.

- Grasp human anatomy and kinetics, enabling the creation of lifelike bipedal movement.
- Animate different types of walks, runs, jumps, and other locomotion patterns characteristic of humans.
- Understand weight distribution, balance, and timing to convey realism and expressiveness in biped characters.
- Master secondary motion techniques to add nuance and detail to biped animations, enhancing believability.
- Integrate biped characters seamlessly into various animation projects, from film and television to video games and advertisements.

### Evaluation:

Theory	Practical	Marks
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

### Paper Structure for Theory Semester Exam:

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

### Reading/Reference Lists:

- *The Animator's Survival Kit*, expanded edition, Richard E. Williams, Faber (2009)
- *Cartoon Animation (Collector's Series)*, Preston Blair, Walter Foster Publishing (1994)
- *Timing For Animation*, Harold Whitaker, Elsevier (2009)
- *Animation: The Mechanics of Motion (Visual Effects and Animation Series)*, Chris Webster, Focal Press (2005)

<b>Sem.</b>	<b>Preproduction</b>		<b>C2MM23032C</b>
<b>III</b>	Major (Core)	Composite	<b>Credits 4</b>

**Course Objective:** The course is designed to equip students with the principles and conventions of pre-production required to complete any media text, whether animation, design or live-action film production. Through lectures, screenings, presentations, classroom discussions and practical exercises students will explore the vital work of pre-production as the backbone of any media production while also focusing on the crucial aspects of planning, research and development as topics of central concern. The course aims to link critical knowledge with the material aspects of pre-production to help students strike the right balance between theoretical formations and practical applicability.

Students must devote at least 4 preparatory hours per week.

### **Syllabus:**

#### **Unit 1: Preproduction for Animation**

- Understanding the basics of the preproduction process in animation.
- Animation layout: layout from storyboards, correcting storyboards, Background layout concerning the narrative. Focus on lighting and composition.
- Emphasizing the look and appeal of a character, personality, psychology, and context within an environment.
- Understanding of basic Animatics – camera, magnification details etc., language of cinematic editing

#### **Unit 2: Preproduction for Design**

- Define the project scope: Clearly outline the objectives, target audience, deliverables, and timeline for the graphic design project.
- Research and gather inspiration: Explore relevant visual references, competitor designs, and industry trends to inform the creative direction and ensure originality.
- Develop a concept: Brainstorm ideas and conceptualize the design approach, considering factors such as branding guidelines, messaging, and aesthetic preferences.
- Sketch and iterate: Create rough sketches or wireframes to visualize layout, composition, and key elements. Iterate on these drafts based on feedback and creative exploration.

#### **Unit 3: Preproduction for Film Studies & Production**

- The importance of preproduction in A/V production
- Research & Development (R&D)
- Preproduction for a small video – R&D, budget, script, planning, scheduling, execution
- Preproduction for film – financing, scripting/storyboarding, casting, staffing, location, costume, props and sets, lights, rehearsals, workshops, production schedule, planning, etc.

- Video camera magnification, lensing
- Camera Distance, Movements, Eyelevel
- Explanation of different shorts

### Learning Outcomes:

On the completion of this course the student should be able to:

1. Recognise the crucial importance of preproduction and acknowledge its vast scope in the planning and execution of any media project
2. Identify the different approaches to preproduction required for specific cases
3. Implement the theoretical discussions from class in formulating preproduction plans of their own
4. Design and execute preproduction plans for a variety of media projects of differing scales
5. Develop core skills regarding, research, development, planning, scheduling and execution
6. Recognise and implement the link between theoretical knowledge and practical applicability regarding preproduction

### Evaluation:

Theory	Practical	Marks
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

### Paper Structure for Theory Semester Exam:

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

### Reading/Reference Lists:

- *Pre-Production Planning for Video, Film, and Multimedia*, Steve R. Cartwright, Focal Press (1996)
- *Animation from Pencils to Pixels: Classical Techniques for the Digital Animator*, Tony White, Routledge (2017)
- *Universal Principles of Design*, William Lidwell, Kritina Holden & Jill Butler, Rockport Publishers (2010)



<b>Sem.</b>	<b>Brand Identity 1</b>		<b>B2MM23031C</b>
<b>III</b>	Minor (Gen. Elective)	Composite	<b>Credits 4</b>

**Course Objective:** This course introduces students to the fundamental principles and techniques of creating effective brand identities through graphic design. Students will explore key elements such as logo design, colour theory, typography, and visual consistency through practical exercises and case studies.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

- Introduction to Brand Identity; Understanding the concept and importance of brand identity.
- Principles of Logo Design, types of logos.
- Colour Theory in Branding, cohesive colour palettes for branding
- Visual Consistency and Brand Guidelines
- Brand Application; Applying brand identity principles to various design mediums
- Design process – R&D, campaign, branding, execution, testing
- Case Studies

**Learning Outcomes:** On the completion of this course the student should be able to:

- Understand the importance of brand identity for creating a memorable brand presence.
- Identify logo design principles and different logo types.
- Apply colour theory to create cohesive brand colour palettes.
- Develop brand guidelines for maintaining visual consistency.
- Apply brand identity principles across various design media.

### Evaluation:

Theory	Practical	Marks
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

### Paper Structure for Theory Semester Exam:

- |   |             |
|---|-------------|
| A. Short Answer any two questions out of three  | [2 x 2 = 4] |
| B. Medium Answer any two questions out of three | [2 x 4 = 8] |
| C. Long Answer any one question out of two      | [1 x 8 = 8] |

### Reading/Reference Lists:

- *Logo Design Love: A Guide to Creating Iconic Brand Identities*, David Airey, Peachpit Press, 2014

- *Brand Thinking and Other Noble Pursuits*, Debbie Millman, Allworth (2013)
- *Designing Brand Identity: An Essential Guide for the Whole Branding Team*, Alina Wheeler, Wiley (2017)
- *Building Strong Brands*, David A. Aaker, Simon & Schuster Ltd. (2010)

<b>Sem.</b>	<b>Compulsory English</b>		<b>A2EN230311T</b>
<b>III</b>	Ability Enhancement	Theory	<b>Credits 4</b>

### Course Objective:

The courses aim at enabling the students to acquire and demonstrate the core linguistic skills, including critical reading and expository and academic writing skills, that help students articulate their arguments and present their thinking clearly and coherently and recognize the importance of language as a mediator of knowledge and identity.

They would also enable students to acquaint themselves with the cultural and intellectual heritage of the chosen MIL and English language, as well as to provide a reflective understanding of the structure and complexity of the language/literature related to both the MIL and English language.

### Syllabus:

### Learning Outcomes:

The courses will also emphasize the development and enhancement of skills such as communication, and the ability to participate/conduct discussion and debate.

### Evaluation:

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA: Written 20 marks	CA:	=> 25+5=30
Semester Exam: Written 70 marks	Semester Exam:	70

### Paper Structure for Theory Semester Exam:

### Reading/Reference Lists:

<b>Sem.</b>	<b>ENVS 1</b>	<b>V2EE23031T</b>
<b>III</b>	Value Added	Theory
		<b>Credits 2</b>

### Course Objective:

- To develop a basic knowledge of the environment.
- To understand the basic concepts that govern life and its sustenance.
- To develop the ability to comprehend and integrate a multidisciplinary and holistic approach to the subject in the treatment of issues and concerns hence contributing responsibly to seeking solutions to practical problems.
- To identify the various environmental issues at interplays at various levels.
- To understand the importance of forests and wildlife.
- To comprehend the extent of impacts on humans and the environment critical to a healthy life.

Students must devote at least 2 preparatory hours per week.

### Syllabus:

#### 1. Introduction to Environment

- Multidisciplinary nature of environmental studies; Scope and importance; the need for environmental education; environmental ethics.
- Ecology and environment, ecosystem, components of environment, food chains, food web and functions of ecosystem, energy flow in an ecosystem, ecological pyramid
- Concept and classification of biomes, biogeochemical cycles, ecosystem preservation.

#### 2. Global environmental issues and environmental pollution

- Environmental pollution: definition, sources, causes, impacts, remedial measures; air, water, soil, noise and radiation pollution
- Solid Waste Management- Control measures of urban and industrial waste, Waste segregation, E-waste, Biomedical waste
- Pollution Case Studies: Delhi Air Pollution and public health issues, Ganga Action Plan, Bhopal Gas Tragedy
- Stratospheric ozone depletion, El Nino, Acid rain.
- Disasters and disaster management; Special reference to floods, earthquakes, cyclones, landslides

#### 3. Biodiversity and Conservation

- Biodiversity: Definition, Levels of biodiversity, biogeographic zones of India, global biodiversity hotspots, Keystone species, Values of biodiversity. Endangered and endemic species of India, IUCN Red list criteria and categories
- Threats to biodiversity: Habitat loss, poaching of wildlife, Conservation of biodiversity: In-situ and Ex-situ methods

- Case Studies: Project Tiger, Deforestation in Amazon, Reintroduction of Asiatic Lions in Kuno National Park, India; reintroduction of Cheetah in India

#### 4. Climate Change, its impact and mitigation

- Greenhouse effect, Global warming; Definition, scope and facts of climate change, Impacts of global climate change, Climate change adaptation and mitigation
- National Action Plan on Climate Change (NAPCC), National Clean Air Programme (NCAP), The Net Zero Commitment
- UN Initiatives and International Agreements: Montreal Protocol; UNFCCC and Kyoto Protocol (COP3), Paris Climate Summit

#### Learning Outcomes:

1. Develop the basic knowledge of the environment
2. Understand the role of environment in sustaining life
3. Recognize the global environmental problems
4. Understand the importance of forest and wildlife
5. Develop the ability to apply multidisciplinary knowledge.

#### Evaluation:

Theory	Practical	Marks
CIA: Written 20 marks	CA:	=> 13+2=15
Semester Exam: Written 35 marks	Semester Exam:	35

#### Paper Structure for Theory Semester

**Exam: Time: 1hr.30mts**

Section-A: 20 **multiple choice** questions

**[20 x 0.5=10]**

Section-B: **Short answer** type questions:

10 out of 12 questions

**[10 x1 =10]**

Section-C: **Long answer** type questions

3 out of 6 questions

**[3 x5= 15]**

#### Reading/Reference Lists:

- Mitra, A. K and Chakraborty, R., Introduction to Environmental Studies, Book Syndicate, 2016.
- Basu, M. and Xavier, S., Fundamentals of Environmental Studies, Cambridge University Press, 2016.
- Enger, E. and Smith, B., Environmental Science: A Study of Interrelationships, Publisher: McGraw-Hill Higher Education; 12th edition, 2010.

#### Suggested readings:

1. Carson, R. 2002. Silent Spring. Houghton Mifflin Harcourt.
2. Gadgil, M., & Guha, R. 1993. This Fissured Land: An Ecological History of India Univ. of California Press.

3. Odum, E.P., Odum, H.T. & Andrews, J. 1971. Fundamentals of Ecology. Philadelphia: Saunders.
4. Pepper, I.L., Gerba, C.P. & Brusseau, M.L. 2011. Environmental and Pollution Science. Academic Press.
5. Agrawal, K M, Sikdar, PK and Deb, SC, A Text book of Environment, Macmillan Publication, 2002.
6. Richard T Wright, Environmental Science: Towards a Sustainable Future, Prentice-Hall Inc., 2008.

<b>Sem.</b>	<b>Digital Methods 3: Desk Top Publishing</b>		<b>S2MM23031P</b>
<b>III</b>	Skill Enhancement	Practical	<b>Credits 3</b>

### Course Objective:

The course will seek to equip students with knowledge of relevant software to help them acquire the skills and knowledge necessary for various tasks of typography, page layout, formatting and various aids of document construction in order to enable them to work with and produce a broad range of designs and layouts for print and digital media.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

The course comprises—

- Getting to know the tools, panels, and workspaces.
- Learning how to navigate and zoom in a document.
- Setting up master pages in a document.
- Building automatic page numbering and sections.
- Placing text and graphics on document pages.
- Working with typography, including tracking and kerning.
- Creating drop caps, rules, tabs, dot leaders and hanging indents.
- Developing paragraph, character and object styles.
- Placing text and graphics on document pages.
- Flowing, threading, and spell-checking text in text frames.
- Adding colour using swatches, gradients and tints.
- Frequently-used shortcuts and techniques.
- Placing, managing and editing linked graphics.
- Working with clipping paths and alpha channel masks.
- Exporting documents to PDF for commercial printing.

### Learning Outcomes:

At the end of the course students should be able to:

- Use and develop time-saving tips, keyboard shortcuts and workflow optimization techniques to improve productivity when working with software.
- Gain proficiency in typesetting techniques, including working with multiple columns, text wrap options and advanced text layout features.
- Apply acquired skills and knowledge to real-world projects, such as designing brochures, magazines, newsletters whether for print or digital publications.
- Work with a wide array of design formats and documents for print and digital media.

**Evaluation:**

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA:	Every month on given date class tests to be taken for 50 marks	=> 48+2=50
Semester Exam:		

**Reading/Reference Lists:**

- *D.T.P (Desktop Publishing)*, Anuja Shah, Computer World Publication
- *Digital Desktop Publishing: The Business of Technology*, Susan Lake & Karen Bean, South-Western (2009)



# **SEMESTER - IV**

<b>Sem.</b>	<b>Introduction to 3D: Modelling &amp; Texturing</b>		<b>C2MM23041C</b>
<b>IV</b>	Major (Core)	Composite	<b>Credits 4</b>

**Course Objective:** The course is designed to equip students to develop fundamental skills in 3D modelling using industry-standard software and understand the principles of creating 3D objects, including geometry manipulation and object transformation. The course seeks to cultivate problem-solving abilities through hands-on projects and exercises and prepare a foundation for further study and specialization in 3D modelling and related fields.

Students must devote at least 4 preparatory hours per week.

### **Syllabus:**

#### **Unit 1: Introduction to 3D Modelling Fundamentals**

- Understanding the principles of 3D modelling
- Overview of low poly modelling techniques
- Introduction to polygonal geometry and mesh topology
- Hands-on practice with basic shapes and forms

#### **Unit 2: Low Poly Props and Background Modelling**

- Techniques for creating low poly props and background elements.
- Understanding the importance of efficient geometry for optimization
- Practice creating objects such as furniture, plants, and architectural elements.
- Tips for maintaining visual appeal while keeping poly count low.

#### **Unit 3: Texturing, UV Mapping, and Material Creation**

- Introduction to texturing and UV mapping concepts
- Understanding the role of textures in enhancing 3D models
- Hands-on practice with unwrapping UVs for low poly models
- Creating and applying materials to enhance realism and visual appeal.

#### **Unit 4: Human Face Modelling**

- Introduction to character modelling techniques
- Understanding facial anatomy and proportions
- Techniques for creating stylized or realistic faces.
- Practice sculpting and refining facial features.

**Learning Outcomes:** On the completion of this course the student should be able to:

- Demonstrate a comprehensive understanding of the principles of 3D modelling, including polygonal geometry and mesh topology.
- Apply low poly modelling techniques effectively to create props, background elements, and architectural details with optimized geometry.
- Utilize texturing, UV mapping, and material creation concepts to enhance the realism and visual appeal of 3D models.

- Develop proficiency in human face modelling, including understanding facial anatomy, proportions, and sculpting techniques for stylized or realistic faces.

**Evaluation:**

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA: Written 20 marks	CA: 20 marks	=>25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

**Paper Structure for Theory Semester Exam:**

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

**Reading/Reference Lists:**

- *Digital Modelling*, William Vaughan, New Riders (2011)
- *3D Modelling for Beginners: Learn Everything You Need to Know About 3D Modelling!*, Danan Thilakanathan
- *3D Modelling & Animation: A Primer*, Magesh Chandramouli, Taylor & Francis Ltd. (2021)

<b>Sem.</b>	<b>Film Studies</b>	<b>C2MM23042C</b>
<b>IV</b>	Major (Core)	Composite
		<b>Credits 4</b>

**Course Objective:** This course is designed to introduce the basic methods and concepts of cinema studies to new majors. The course seeks to help students develop a range of analytical skills that will form the basis of their study of film and other moving-image media they will encounter. The aim is foster an interest in cinema as both a visual medium as well as an embedded cultural form. Classes will comprise lecture demonstrations, regular screenings, discussions, class presentations and a final end-semester short film project to showcase the knowledge and skills acquired through the course.

Students must devote at least 4 preparatory hours per week.

### **Syllabus:**

- Film as Art/Commerce/Technology/Entertainment/Culture
- Types of films: fiction, non-fiction, experimental, animated
- Film as a formal system
- Film Form: Narrative
- Film Style : Mise-en-scene, Cinematography, Acting, Editing, Sound
- Film History: Early Film, Edwin Porter, DW Griffiths, Charlie Chaplin, Buster Keaton, Indian silents
- Major Film Movements: Soviet Formalism, German Expressionism, French Impressionism, Italian Neorealism, Classic Hollywood, French New Wave
- Animation as cinema
- Making a Film

### **Learning Outcomes:**

On the completion of this course the student should be able to:

1. Exhibit a basic knowledge of film history and various film movements
2. Exhibit fluency in basic vocabulary of film form
3. Understand the nature of cinema as an embedded narrative form and evaluate the importance of film as both an object of commerce as well as culture
4. Analyse the formal and stylistic elements of a film and appreciate the relationship between formal analysis and questions of interpretation
5. Demonstrate basic knowledge of tools and techniques of film production
6. Create a short film of their own to showcase some of the things they have learnt in the course

**Evaluation:**

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

**Paper Structure for Theory Semester Exam:**

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

**Reading/Reference Lists:**

- *Film Art – An Introduction*, David Bordwell, Kristin Thompson, Jeff Smith, McGraw-Hill Education (2016)
- *A History of Narrative Film*, David A. Cook, W. W. Norton & Company (2016)
- *Film Theory and Criticism*, Leo Braudy, Marshall Cohen, Oxford University Press, USA (2009)

<b>Sem.</b>	<b>Stop Motion Animation</b>		<b>B2MM23041C</b>
<b>IV</b>	Minor (Gen. Elective)	Composite	<b>Credits 4</b>

**Course Objective:** This course provides an introduction to the art and technique of stop-motion animation. Students will learn the fundamental principles of stop-motion animation, including planning, shooting, and editing techniques. Through hands-on projects and exploration of various styles and methods, students will develop their skills in storytelling, character development, and visual communication.

Students must devote at least 4 preparatory hours per week.

### **Syllabus:**

#### **Unit 1: Introduction to Stop Motion Animation**

- Introduction to stop motion animation techniques and its history
- Discussion on different types of stop motion animation (Claymation, puppet animation, object animation, etc.)
- Understanding the basic principles of animation (e.g., timing, spacing, squash and stretch, etc.)
- Analysing examples of stop motion animations to identify these principles in action
- Introduction to storyboarding techniques for stop motion animation

#### **Unit 2: Background Design and Construction**

- Understanding the importance of backgrounds in stop-motion animation
- Techniques for designing and creating backgrounds using various materials (paper, cardboard, foam, etc.)

#### **Unit 3: Prop Design and Construction**

- Understanding the role of props in stop-motion animation
- Techniques for designing props that are suitable for animation
- Practical session on constructing props using various materials (clay, wire, foam, etc.)

#### **Unit 4: Puppet Design and Construction**

- Understanding the anatomy of puppets and their design considerations for animation
- Discussion on different types of puppets (armature puppets, clay puppets, fabric puppets, paper cut-out puppets etc.)
- Techniques for ensuring puppets are articulated and capable of expressive movement.

### Learning Outcomes:

On the completion of this course the student should be able to:

- Understand the history and basic principles of stop-motion animation.
- Develop proficiency in planning and executing stop-motion animation projects.
- Explore various stop-motion techniques, including Claymation, cut-out animation, and pixelation.
- Develop storytelling skills through animation.
- Gain proficiency in using animation software and equipment.
- Collaborate effectively in a team environment on animation projects.
- Develop a critical eye for analyzing and critiquing stop motion animation.

### Evaluation:

Theory	Practical	Marks
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

### Paper Structure for Theory Semester Exam:

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

### Reading/Reference Lists:

- *The Advance Art of Stop-Motion Animation*, Ken A. Priebe, Cengage Learning PTR (2010)
- *Stop Motion: Craft Skills for Model Animation*, Susannah Shaw, Routledge (2004)
- *Stop Motion: Passion, Process and Performance*, Barry Purves, Routledge (2008)

<b>Sem.</b>	<b>Book Art and Publishing Design</b>		<b>S2MM23041P</b>
<b>IV</b>	Skill Enhancement	Practical	<b>Credits 3</b>

**Course Objective:** This course explores the principles and practices of book art and publishing design. Students will learn about the elements of book design, including typography, layout, cover design, and illustration, while gaining practical skills in designing various types technology of publications.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

1. Introduction to Book Art and Publishing Design
2. Layout and Composition
3. Cover Design and Illustration for professionals
4. Print Production and Prepress
5. Professional Practices in Publishing
6. Web publishing

### Learning Outcomes:

On the completion of this course the student should be able to:

- Understand the fundamentals of book art and publishing design.
- Apply the techniques learnt for layout, design and composition in book production.
- Demonstrate skills in formatting content for print and digital publishing.
- Explore digital publishing platforms and understand their role in modern publishing.

### Evaluation:

Theory	Practical	Marks
CIA:	CA: Every month on given date class tests to be taken for 50 marks	=> 48+2=50
Semester Exam:		

### Reading/Reference Lists:

- Covers of books designed by Satyajit Ray and K.G. Subramanyan
- *Rang Tulir Satyajit*, Debashis Deb, Ananda Publishers (2015)
- *The King and the Little Man*, K.G. Subramanyan, Seagull Books (2020)



<b>Sem.</b>	<b>Story Design &amp; Scripting for Media</b>		<b>S2MM23042P</b>
<b>IV</b>	Skill Enhancement	Practical	<b>Credits 3</b>

**Course Objective:** The course is designed to guide students in learning the fundamentals for designing a story and writing a script for visual storytelling. Classes will be structured to ensure a supportive and creative environment where students can develop their storytelling skills as well as gain knowledge regarding various conventions and rules of scriptwriting for various media. Through lectures, screenings, readings, presentations, writing exercises and classroom discussions students will explore key aspects of writing for the screen such as designing the narrative, creating a structure, crafting characters and dialogues and developing a visual language.

Students must devote at least 4 preparatory hours per week.

### **Syllabus:**

#### STORY DESIGNING

- The Importance of Storytelling – Social/Cultural aspects, History of Storytelling
- Research and Development
- Story Structure – Plot, Theme, Style, Form vs Content
- Principles of Story Design – 3 Act structure (Hero’s Journey)
- Elements of structure – Characters & Setting
- Narrative styles and genres

#### SCRIPTING FOR MEDIA

- Scripting & Storyboarding
- Script-writing for fiction / non-fiction – different types of scripts, writing an AV script
- Scripting for Media – basic theories that govern screenwriting; pace and rhythm
- Shot division & Dialogue Writing

**Learning Outcomes:** On the completion of this course the student should be able to:

1. Recognise the importance of narrative construction for any kind of visual storytelling
2. Compose and design a story with proper structure for visual production of any format
3. Identify and implement various techniques and elements of developing scripts for various media
4. Engage critically with debates and scholarship regarding story designing and screenwriting
5. Link theoretical knowledge with practical applicability for a comprehensive overview

**Evaluation:**

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA:	CA: 2-3 projects are given during the semester for submission for 50 marks	=> 48+2=50
Semester Exam:		

**Reading/Reference Lists:**

- *Story - Substance, Structure, Style and the Principles of Screenwriting*, Robert McKee, Regan Books (1997)
- *Save The Cat! The Last Book on Screenwriting You'll Ever Need*, Blake Snyder, Michael Wiese Productions (2005)
- *The Hero with a Thousand Faces*, Joseph Campbell, Fontana Press, 1993
- *Making a Good Script Great*, Linda Seger, Silman-James Press, 1987
- *Writing for Animation, Comics, and Games*, Christy Marx, Routledge (2006)

<b>Sem.</b>	<b>ENVS 2</b>	<b>V2EE23041P</b>
<b>IV</b>	Value Added	Practical
		<b>Credits 2</b>

### Course Objective:

- Research the issues individually to facilitate in-depth study in the field of interest.
- Getting knowledge of how the problems are tackled at individual levels.
- To understand the efforts to achieve sustainable development, striking a balance between environment-society- economy.
- Practical exposure to situations and issues as students work on a project.

### Syllabus:

#### 1. Energy Resources

Renewable and non-renewable resources- solar, wind, geothermal, tidal, OTEC, hydro- and SHP, fossil fuels, and nuclear energy.

#### 2. Environmental Management

##### Policies-

- Concept and objectives, the evolution of Indian environmental policy.
- UN Conferences and commissions- UNCHE, WCED & sustainable development, UNCED, WSSD, Rio+20.
- International agreements: CLRTAP, Basel Convention, Convention on Biological Diversity (CBD), CITES, Cartagena Protocol, TRIPS, Vienna Convention, concept of carbon trading.
- International Organizations- FAO, UNEP, UNDP, IUCN.
- National organization- MoEFCC, PCBs.

##### Environment Laws-

- Wildlife Protection Act, 1972
- Water (Prevention and Control of Pollution) Act, 1974 & Water Cess Act 1977
- Forest Conservation Act, 1980.
- Air (Prevention & Control of Pollution) Act, 1981.
- Environment Protection Act, 1986 (with subordinate Acts and Rules).
- Biodiversity Act, 2002.
- Role of National Green Tribunal.
- Environmental movements: Chipko, Silent Valley, Bishnoi, Narmada Bachao Andolan, Nava Danya.

##### Practices-

- Developing Environmental standards- MINAS, NAAQS, BIS, WHO, AQI, and Emission standards.
- Practices- Environmental audit & ISO 14000 certification audit.
- Earth Hour; carbon sequestration, Green Buildings
- EIA (concept, objectives, principles, generic process, the concept of EIA in India).
- Environmental and health application of IT and AI.

### 3. Sustainable Development

- Sustainability: Definition and emergence of the concept of sustainable development
- Need and relevance in the contemporary society, principles of sustainable development, SDGs pertaining to environmental issues
- **Policy Initiatives for Sustainable Development in India** (Swachh Bharat mission, Beti Bacho Beti Padhao)

### 4. Sanitation and Health

- Water, Sanitation and Hygiene (WASH): Concept, Meaning, Principles, and Practices
- Sanitation: Meaning, Concept, and Applications. Institutional Sanitation.
- Health: Concept and Meaning. Determinants of Health and Well-being. Public Health and Community Health.
- Human population growth: impacts on environment, human health and welfare, Family Welfare Programme (FWP)
- Hygiene: Concept, Meaning, Principles, and Importance. Types of Hygiene: Personal, Food, and Community. Standard Hygiene Practices

#### Course Outcome:

On successful completion of the course, students will be able to:

- Use their field of expertise [multimedia (A-V)] in making a documentary film (project) for mass awareness generation in real life, thus opening the door to the professional world.
- Recognize environmental problems and their impact on humans and the environment
- Apply the gained knowledge for environmental protection
- Demonstrate a multidisciplinary approach to deal with environmental issues
- Develop critical thinking skills and the ability to integrate various disciplines related to environmental concerns.
- Formulate sustainable solutions towards local and global problems

#### Evaluation:

Theory	Practical	Marks
CIA:	CA: Script 20 marks	=> 13+2=15
Semester Exam:	Semester Exam: Group of 4 will do an AV project and will have Viva 35 marks	35

#### Reading/Reference Lists:

##### SUGGESTED TEXT BOOKS/ READING MATERIALS:

1. Mitra, A. K and Chakraborty, R., Introduction to Environmental Studies, Book Syndicate, 2016.
2. Basu, M. and Xavier, S., Fundamentals of Environmental Studies, Cambridge University Press, 2016.
3. Enger, E. and Smith, B., Environmental Science: A Study of Interrelationships, Publisher: McGraw-Hill Higher Education; 12th edition, 2010.

Suggested readings:

1. Harris, P. G. (Ed.). (2014). *Routledge Handbook of global environmental politics*. New York: Routledge.
2. Rosencranz, A., Divan, S., & Noble, M. L. (2001). *Environmental law and policy in India*.
3. Sengupta, R. 2003. *Ecology and Economics: An approach to sustainable development*.
4. Glasson, J., & Therivel, R. (2013). *Introduction to environmental impact assessment*. Routledge.
5. Twidell, J. (2021). *Renewable energy resources*. Routledge.
6. Kruger, P. (2006). *Alternative energy resources: the quest for sustainable energy*. Hoboken: Wiley.

# **SEMESTER - V**

<b>Sem.</b>	<b>Advanced 3D – 1: Rigging and Animation</b>		<b>C3MM23051C</b>
<b>V</b>	Major (Core)	Composite	<b>Credits 4</b>

**Course Objective:** This course comprises of two parts – Rigging and Animation. The first part of the course provides students with the knowledge of rigging a character for a 3D animated project where they will learn to create a skeleton structure with joints, add controllers to manipulate it and bind the skeletal structure with mesh by the process of Skinning to make the character ready for animation. The second part provides the students with the knowledge of animating objects and rigged characters for the purpose of a 3D animated narrative.

Students must devote at least 4 preparatory hours per week.

### **Unit-1**

#### **Introduction to Rigging**

- Building the skeleton – understanding joints.
- Forward and Inverse Kinematics.
- Constraints – how to make a character’s eyes follow an object, a hand picking up glass,
- Skinning – binding a character with the rig.
- Local Rotation, Axis Controllers, Set Driven Key, Blending Shapes.

### **Unit-2**

#### **Intermediate Rigging**

- Reverse Foot – Spline – IKFK Switch.
- Advanced Blend Shapes.

### **Unit-3**

#### **Animation**

- Setting key frames and adjusting them.
- Animating a bouncing ball with stretch and squash.
- Animating with rigged objects, animating constrains and groups (pendulum with a string).
- Understanding Graph Editor.
- Working with rigged characters – posing a character.
- Walk Cycle.

### **Unit – 4**

#### **Acting for 3D Animation**

- Character lifting a heavy object (with purpose).
- Hammering a nail.
- Character juggling (loop).
- Standing up (from the ground).
- Pressing an elevator button and waiting.

## Learning Outcome:

On the completion of this course the student should be able to:

- Demonstrate a thorough knowledge and skill of rigging a 3D character.
- Showcase a thorough knowledge of skinning a 3D character.
- Demonstrate skill in working with advanced Blend Shapes.
- Display skill in animating a 3D object or character, maintaining all the principles of animation.
- Showcase foundational knowledge of animation acting for 3D animation.
- Make a 3D film of one minute duration as a group project.

## Evaluation:

Theory	Practical	Marks
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

## Paper Structure for Theory Semester Exam:

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

## Reading/Reference Lists:

- An Essential Introduction to Maya Character Rigging by Cheryl Cabrera, Focal Press, USA, 2008
- The Animator's Survival Kit by Richard E. Williams, Publisher: Farrar, Straus & Giroux Inc, New York, United States, 2012.
- 3D Animation Essentials 1st Edition by Andy Beane, Publisher: Sybex; 1 edition (March 6, 2012), Indianapolis, Indiana.



<b>Sem.</b>	<b>Brand Identity 2</b>		<b>C3MM23052C</b>
<b>V</b>	Major (Core)	Composite	<b>Credits 4</b>

**Course Objective:** This course, in continuation of its previous module, aims to equip students with an in-depth understanding of strategic brand development, exploring advanced concepts in brand identity design and brand management. Through hands-on projects and case studies students will refine their skills in crafting brand narratives, designing visual identities and implementing cohesive brand experiences.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

1. Advanced Brand Identity Principles: Concepts of brand development and strategic positioning.
2. Cutting-Edge Packaging Design Techniques: Exploring advanced design methodologies for creating impactful packaging and brand identities.
3. Strategic Brand Architecture: Analysis of complex market dynamics and developing strategic brand architectures for diverse contexts.
4. Dynamic Brand Management Strategies: Implementing advanced strategies for maintaining brand relevance and coherence across platforms.
5. Brand Identity Prism – physique, relationship, reflection, personality etc.
6. Case Studies and Projects: Apply learned theories and techniques through hands-on projects and real-world case analyses.

**Learning Outcomes:** On the completion of this course the student should be able to:

1. Apply cutting-edge techniques to craft impactful brand identities.
2. Critically analyse and strategically position brands, cultivate brand loyalty and navigate complex challenges in contemporary brand management.
3. Devise dynamic strategies for brand maintenance and enhancement.
4. Implement learned theories through real-world case studies and projects.
5. Demonstrate knowledge of the technical and practical sides of packaging designing for the purpose of future professional engagements.

### Evaluation:

Theory	Practical	Marks
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

### Paper Structure for Theory Semester Exam:

- |   |             |
|---|-------------|
| A. Short Answer any two questions out of three  | [2 x 2 = 4] |
| B. Medium Answer any two questions out of three | [2 x 4 = 8] |
| C. Long Answer any one question out of two      | [1 x 8 = 8] |

**Reading/Reference Lists:**

- *Designing Brand Identity: An Essential Guide for the Whole Branding Team*, Alina Wheeler, Wiley (2017)
- *Brand Leadership: Building Assets In an Information Economy*, David A. Aaker and Erich Joachimsthaler, Free Press (2009)
- *Brand Sense: Sensory Secrets Behind the Stuff We Buy*, Martin Lindstrom, Free Press (2010)

<b>Sem.</b>	<b>Media Studies</b>		<b>C3MM23053C</b>
<b>V</b>	Major (Core)	Composite	<b>Credits 4</b>

**Course Objective:** The course emphasizes both a theoretical understanding of the media as well as inculcating media production skills. The aim of the course is to empower students to be critical users of the media, engaged citizens and creative practitioners, especially in a rapidly changing media landscape. The course is designed to encourage students to be mindful of an increasingly concentrated telecommunications and media environment and acquire media literacy necessary to examine, theorize and critique the media as a social, cultural, economic and political institution.

Students must devote at least 4 preparatory hours per week.

### **Syllabus:**

- Basics of Media Studies, kinds of media, media text, multimedia
- Media Literacy
- Media Effects – Traditional & Contemporary
- Media & Culture (Popular Culture)
- Approaches to studying media – Encoding/Decoding, Death of the Author
- Semiotics & Media
- Media & Representation
- Media & Globalisation
- Genre & Media
- Traditional Media & Contemporary Media – Television, Social Media, Transnational Media, Fandoms
- Media Ethics

### **Learning Outcomes:**

After completing this course, students will be able to:

- Recognize the importance of media literacy in social development and articulate their understanding of the role of media in contemporary life
- Demonstrate an increased knowledge of contemporary media theory as well as its potential and limitations
- Examine codes and conventions used in media and analyse how they produce meaning and knowledge
- Critically analyse modern media as a social, cultural, economic and political institution
- Development a range of ethical imperatives regarding the production, dissemination and consumption of media messages
- Showcase the skills required to construct media messages and apply media theory to their own audio-visual productions

## Evaluation:

Theory	Practical	Marks
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

## Paper Structure for Theory Semester Exam:

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

## Reading/Reference Lists:

- *Media Studies: A Reader*, edited by Sue Thornham, Caroline Basset & Paul Marris, Edinburgh University Press (2009)
- *Keywords: A Vocabulary of Culture and Society*, Oxford University Press (1985)
- *Media & Culture: Mass Communication in a Digital Age*, Richard Campbell, Christopher R. Martin & Bettina Fabos, Bedford/St. Martin's (2014)
- *Television Culture*, John Fiske, Routledge (2010)
- *Cultural Theory & Popular Culture*, John Storey, Longman (2008)
- *Film Theory and Criticism: Introductory Readings*, edited by Leo Braudy & Marshall Cohen, Oxford University Press (2016)

<b>Sem.</b>	<b>Applied Art &amp; Iconography</b>		<b>C3MM23054C</b>
<b>V</b>	Major (Core)	Composite	<b>Credits 4</b>

**Course Objective:** This course explores the principles and practices of applied art and graphic elements in design. Students will learn about elements of applied art and its practical applications as well as gain insight into the theoretical knowledge of iconography, signs and symbols. The course is designed to equip students with various practical skills regarding the technical side of 2D design.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

1. Defining Applied Art: Understanding its purpose and significance in various fields
2. Layout and designing of 2D expressions
3. Poster designing
4. Idea of iconography, signs and symbols
5. Image-word pairing

### Learning Outcomes:

At the end of the module students should be able to:

- Demonstrate knowledge of the most fundamental design principles in applied arts
- Exhibit the skill to utilise the theory and skills they have learned in the design of their own art projects
- Demonstrate skill in effectively formulating a visual language and communicating it in their designs
- Produce their own portfolios for presentation and future work.

### Evaluation:

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

### Paper Structure for Theory Semester Exam:

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

### Reading/Reference Lists:

- *The Craftsman*, Richard Sennett, Yale University Press (2009)
- *The Art of Decorative Design*, Christopher Dresser, Amer Life Foundation, Facsimile Reproduction edition (January 1, 1977)

<b>Sem.</b>	<b>Advanced 2D Animation 2: Facial Expression &amp; 2D EFX</b>		<b>B3MM23051C</b>
<b>V</b>	Minor (Gen. Elective)	Composite	<b>Credits 4</b>

### Course Objective:

This course designed to equip students with essential skills in Lip-Sync Animation for synchronizing character movements with speech, as well as Special Effects Animation for creating dynamic effects like waves, water, fire and explosions in classic 2D animation. Additionally, it covers Morphing Animation techniques for seamlessly transforming a character into a completely different form.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

#### Unit 1: Lip-Sync Animation

- Exploring various human lip gestures during speech.
- Analysing lip charts for reference.
- Incorporating expressions into lip movements.
- Deconstructing dialogue tracks for lip-sync and creating exposure sheets.
- Implementing lip animation techniques in classical and digital 2D animation.

#### Unit 2: Special Effect Animation

- Grasping the theoretical principles behind wave animation and its practical application in simulating sea waves and waving flags.
- Creating animations of water splashes and water jet effects using a hosepipe.
- Crafting animations of rain and snowfall.
- Mastering the techniques for animating fire, explosions and smoke.

#### Unit 3: Morphing

- Exploring the seamless transformation of one character into another through morphing animation techniques.
- Utilizing keyframes and interpolation to smoothly transition between different shapes and forms.
- Achieving captivating visual effects by morphing objects, characters, or environments into entirely new entities.

### Learning Outcomes:

On the completion of this course the student should be able to:

1. Demonstrate proficiency in lip-sync animation by accurately synchronizing character movements with speech, incorporating expressions and implementing those techniques in both classical and digital 2D animation.
2. Design various special effects animation, including creating dynamic effects such as waves, water splashes, rain, snowfall, fire, explosions and smoke.
3. Showcase expertise in morphing animation techniques, enabling them to seamlessly transform characters into different forms, thereby expanding their animation repertoire.

4. Showcase foundational knowledge of animation acting for both classical and digital 2D animation.
5. Determine an optimum balance between theoretical principles and practical applications in classical and digital 2D animation.

**Evaluation:**

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

**Paper Structure for Theory Semester Exam:**

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

**Reading/Reference Lists:**

- Timing For Animation by Whitaker, Elsevier (2009) • The Animator's Survival Kit expanded edition by Richard E. Williams, Faber; Main - Revised edition (5 November 2009)
- The Animator's Survival Kit expanded edition by Richard E. Williams, Faber; Main - Revised edition (5 November 2009)

# **SEMESTER - VI**



<b>Sem.</b>	<b>Art History</b>		<b>C3MM23061C</b>
<b>VI</b>	Major (Core)	Composite	<b>Credits 4</b>

**Course Objective:** The study of art history will equip students with knowledge of master artists who have created narratives and visuals that have made and changed the course of history from time to time. The course is designed to give students an overview of how the world of visual art is a close reflection of our society and how it contributes to its development through the use of signs, symbols and creation of connotative meanings that are local as well as global. The course will thus enable students to critically reflect on this relationship between art and society and its changing dynamics during different historical periods.

Students must devote at least 4 preparatory hours per week.

### **Syllabus:**

- Story of art and story in art (Indian, Western and Far-Eastern perspectives)
- Modern and Postmodern art movements - An Introduction
- Study of signs and symbols in art (Indian and Western perspectives)
- Art and Cinema
- How to read art?
- Writings on art

### **Learning Outcomes:**

At the end of the course students will be able to:

- Understand and examine the nature of visual narrative established in art around the globe
- Demonstrate theoretical knowledge about various art movements and periods in the history of art
- Identify and utilize various terminologies related to visual art and visual culture
- Read and analyze signs and symbols in art and utilize them in their own works
- Develop a sense of visual language of their own, as demonstrated in different media and the different art movements and periods being studied
- Understand the various professional aspects in which the discipline of art history can be put to use in the domain of contemporary art and media

**Evaluation:**

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

**Paper Structure for Theory Semester Exam:**

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

**Reading/Reference Lists:**

- *The Oxford Companion to Western Art*, Hugh Brigstocke, Oxford University Press (2001)
- *The Story of Art*, E.H. Gombrich, Phaidon Press (1995)
- *The Art of Art History: A Critical Anthology*, Donald Preziosi, Oxford University Press (2009)
- *History of Modern Art*, H. H. Arnason & Marla F. Prather, Prentice Hall (2002)
- *A World History of Art*, Hugh Honour and John Fleming, Lawrence King Publishing (2009)
- *Ways of Seeing*, John Berger, Penguin Classics (2008)
- *Moving Focus: Essays on Indian Art*, K.G. Subramanyan, Seagull Books (2006)
- *Art: the Whole Story*, Stephen Farthing, Thames and Hudson (2010)

<b>Sem.</b>	<b>Advanced 3D – 2: Lighting, Rendering &amp; Dynamics</b>		<b>C3MM23062C</b>
<b>VI</b>	Major (Core)	Composite	<b>Credits 4</b>

**Course Objective: Course Objective:** The course is designed to equip students to develop fundamental skills in 3D Lighting, Rendering and Dynamics using industry-standard software. They will be trained in the principles of creating 3D lighting as well as basic lighting techniques to enhance the realism and aesthetic appeal of 3D scenes and apply lights and dynamic properties to 3D surfaces. Students will be encouraged to cultivate problem-solving abilities through hands-on projects and exercises in order to prepare a foundation for further study and specialization in 3D lighting and dynamics related fields. Students will be encouraged to explore a broad range of styles, from photorealistic to painterly to cartoon-style, among others.

Students must devote at least 4 preparatory hours per week.

### **Syllabus:**

#### **Unit-1**

Lighting (Introduction to Lighting)

Introduction to basic 3 – Point Lighting – Directional Light – Ambient Light – Spot Light – Area Light – Volume Light – Depth Map Shadows – Ray traced shadow – Software rendering.

#### **Unit-2**

Various Lighting Assignments – Interior and Exterior Lighting – Arnold render engine and its properties.

#### **Unit-3**

Rendering – Hardware rendering – Wireframe rendering – Multi-pass rendering and compositing – Batch rendering.

#### **Unit-4**

(Introduction to Particle)

Particle tool – create emitter – emit from object – Make Collide – Particle Collision Event Editor – Goal-Instancer (Replacement) – Sprite Wizard.

#### **Unit-5**

(Advanced Dynamics)

Different type of fields (Air, Drag, Gravity, Newton, Radial, Turbulence, Uniform, Vertex) – Active Rigid Body – Passive Rigid Body – Constraints (Nail, Pin, Hinge, Spring, Barrier) – Create Soft Body – Create Springs – Paint Soft Body Weight tool.

## Unit-6

(MEL and Fluids)

Create 3D and 2D Container – Ocean and Pond – Make Collide – Initial State settings – Fluid Cache Settings – Intro to MEL (Maya Embedded Language) – Different types of Variables – Predefined and custom attributes.

## Unit-7

nParticles (Advanced Particles)

Create nParticle – Types of nParticle (Points, Ball, Cloud, Thick Cloud, Water) – Particle collision event editor – Goal – Instancer (Replacement) – Sprite Wizard – nParticle attributes.

## Unit-8

(nCloth)

Create nCloth – Create Passive Collider – nCloth caching – generate forces fields with nCloth.

**Learning Outcomes:** On the completion of this course the student should be able to:

- Demonstrate a comprehensive understanding of the principles of 3D lighting and rendering, including different light properties and light manipulation.
- Showcase essential knowledge of lighting and rendering to produce visually compelling 3D scenes.
- Create realistic motion beyond what is possible to achieve with traditional keyframe animation.
- Utilise the mathematics and physics behind the simulation of light, texture and form in computer graphics and apply that knowledge by writing their own shaders.
- Make use of suitable high quality render engines in order to achieve their desired render output.

### Evaluation:

Theory	Practical	Marks
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

### Paper Structure for Theory Semester Exam:

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

### **Reading/Reference Lists:**

- Maya Studio Projects Texturing and Lighting, Lee Lanier, John Wiley & Sons
- Mastering Autodesk Maya 2016 by Todd Palamar, Wiley & Sons, Inc., Indianapolis,
- Digital Lighting and Rendering by Jeremy Birn, New Riders; 3 edition (November 21, 2013)
- Aesthetic 3D Lighting: History, Theory, and Application 1st Edition by Lee Lanier  
Publisher: Routledge; 1 edition (March 18, 2018)
- Mastering Autodesk Maya 2016 by Todd Palamar, Wiley & Sons, Inc., Indianapolis,
- Maya Studio Projects: Game Environments and Props by Michael McKinley,  
Publisher: Sybex, 2010

<b>Sem.</b>	<b>Live Action Film: Production &amp; Editing</b>		<b>C3MM23063C</b>
<b>VI</b>	Major (Core)	Composite	<b>Credits 4</b>

**Course Objective:** This course introduces students to the principles and techniques of video editing. Through hands-on projects and practical exercises, students will learn to edit video footage, apply visual and audio effects and create compelling narratives. The course also provides an overview of the filmmaking process from script to screen.

Students must devote at least 4 preparatory hours per week.

### Syllabus:

1. Introduction to Film Editing
2. Basic theories that govern editing, time and space theory, continuity, look, angle, axis and elements that go in deciding an edit.
3. Understanding importance of editing in the flow of a narrative – pace and rhythm
4. Editing Theory – Basic principles of continuity editing – editing theory: the long take (“sequence shot”) via Bazin’s writings – montage and rapid editing via Eisenstein’s and Metz’s writings.
5. Analysis of notable films and their editing techniques – CITIZEN KANE (stop-motion analytic technique taught and used), the long take – BATTLESHIP POTEMKIN, rapid editing – PULP FICTION, combination of editing techniques.
6. Basic Editing Techniques – Understanding key frames and basic animation.
7. Advanced Editing Techniques – Colour correction and colour grading.
8. TV – Long form, MOWs, series, news and documentaries, tv commercials, music videos.

### Learning Outcomes:

At the end of the module students should be able to:

- Recognise editing as one of the most constitutive elements of moving image construction.
- Demonstrate knowledge of basic editing techniques and theories.
- Showcase skills in utilising the knowledge of the module in editing a variety of media projects, including live-action films, animation as well other media texts.
- Showcase skill in narrative construction through editing.
- Make a final short film of 10 minutes as part of a group project.

### Evaluation:

Theory	Practical	Marks
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

**Paper Structure for Theory Semester Exam:**

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

**Reading/Reference Lists:**

- Film Form: Essays in Film Theory by Sergei Eisenstein, Mariner Books (1977)
- The Technique of Film Editing by Karel Reisz and Gavin Millar, Focal Press, 2<sup>nd</sup> edition (2014)
- In the Blink of an Eye by Walter Murch, Silman-James Press, U.S., revised edition (2001)
- The Technique of Film and Video Editing: History, Theory and Practice by Ken Dancyger, Routledge; 6<sup>th</sup> edition (2018)

<b>Sem.</b>	<b>Understanding of Comics, Graphic Novels, and Sequential Art</b>		<b>C3MM23064C</b>
<b>VI</b>	Major (Core)	Composite	<b>Credits 4</b>

### Course Objective:

This course explores the rich history and cultural significance of comics and graphic novels, analysing their unique narrative techniques and visual storytelling strategies. Students will develop proficiency in sequential art, character design and panel composition, gaining insights into industry trends and practices. Through hands-on projects, they will create original comic works, honing their storytelling skills and preparing for potential opportunities in the vibrant world of comic book creation and publication.

### Syllabus:

1. History and Culture: Explore the evolution and cultural impact of comics and graphic novels.
2. Narrative Analysis: Analysis of storytelling techniques and visual strategies employed in comics.
3. Visual Storytelling Skills: Develop proficiency in sequential art, character design and panel composition.
4. Industry Insights: Gain knowledge of trends, practices, and opportunities in the comics industry.
5. Creative Projects: Apply learned concepts through hands-on creation of original comic work.
6. Public outreach of students in developing visual language and sense of special dynamics.

### Learning Outcome:

At the end of the module students should be able to:

- Showcase the ability to analyse and critique the narrative and visual elements of graphic storytelling.
- Exhibit knowledge of the theoretical and critical aspects of graphic storytelling and its evolution.
- Demonstrate proficiency in conveying ideas and emotions through sequential art and visual storytelling techniques.
- Cultivate creative storytelling abilities and create their own original comic projects.

### Evaluation:

Theory	Practical	Marks
CIA: Written 20 marks	CA: 20 marks	=> 25+5=30
Semester Exam: Written 20 marks	Semester Exam: 50 marks	70

### Paper Structure for Theory Semester Exam:

- |   |             |
|---|-------------|
| A. Short Answer any two questions out of three  | [2 x 2 = 4] |
| B. Medium Answer any two questions out of three | [2 x 4 = 8] |
| C. Long Answer any one question out of two      | [1 x 8 = 8] |



**Reading/Reference Lists:**

- *Understanding Comics: The Invisible Art*, Scott McCloud, William Morrow Paperbacks (1994)
- *Making Comics: Storytelling Secrets of Comics, Manga and Graphic Novels*, Scott McCloud, William Morrow Paperbacks (2006)

<b>Sem.</b>	<b>Audiography/ Sound Design 2</b>		<b>B3MM23061P</b>
<b>VI</b>	Minor (Gen. Elective)	Practical	<b>Credits 4</b>

**Course Objective:** The course is designed to impart an in-depth understanding of the audio post production of films. It intends to explain the aesthetics of sound designing for a film through practical interactive sessions. The main goal of the course is to encourage students to explore their creative impulses in developing soundscapes of moving images.

Students must devote at least 4 preparatory hours per week.

### **Syllabus:**

#### Theory:

- Different stages of audio postproduction for films
- Theory of digital audio
- Different formats of sound output for films
- Aesthetics of sound design
- Detailed analysis of sound design of a chosen documentary & fiction film

#### Practical:

- Dubbing
- Foley Recording
- Track Laying
- Mixing

### **Learning Outcomes:**

After completion of this module the students will be able to:

- Critically examine the role of sound in creating rhythm and pace of a film, its relation with the moving images and its role in creating psychological impact alongside the visuals.
- Utilize the skills developed in the module to design the sound of their own projects.
- Demonstrate skill in developing the soundscape at the scripting stage of their own projects
- Demonstrate technical knowledge of designing and mixing for a film as well as the different projection formats regarding audio.

**Evaluation:**

<b>Theory</b>	<b>Practical</b>	<b>Marks</b>
CIA:	CA: 3-4 Audio-Visual projects are given during this semester for submission for 75 marks + class test on theory 20 marks	=> 95+5=100
Semester Exam:		

**Paper Structure for Theory Class test:**

- A. Short Answer any two questions out of three [2 x 2 = 4]
- B. Medium Answer any two questions out of three [2 x 4 = 8]
- C. Long Answer any one question out of two [1 x 8 = 8]

**Reading/Reference Lists:**

- *The Art of the Sound Effects Editor*, Marvin M. Kerner, Focal Press (1989)
- *Sound and Recording*, Francis Rumsey and Tim McCormick, Focal Press (Sixth Edition)
- *Sound for Picture-The Art of Sound Design for Film and TV*, Tom Kenny (mix pro audio series), Artistpro (2000)
- *An Introduction to Digital Audio*, John Watkinson, Focal Press (2002)
- *Master Handbook of Acoustics*, Alton F. Everest and Ken C Pohlmann, The McGraw-Hill Companies (2009)
- *Designing Sound for Animation*, Robin Beauchamp, Focal Press