# BIRLA INSTITUTE OF TECHNOLOGY



# CHOICE BASED CREDIT SYSTEM (CBCS) CURRICULUM

(Effective from Academic Session: Monsoon 2018)

# **B.SC. ANIMATION & MULTIMEDIA**

# DEPARTMENT OF ANIMATION AND MULTIMEDIA

# Detailed Syllabus of B.Sc. A&M

Detailed Syllabus of B.Sc. A&M, I semester



**Course Code: AM101** 

**Course Title: History of Animation** 

**Pre-requisite(s):** Nil

Credits: 3 L:3 T:0 P:0 Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: I / I

Branch: BAM Type: Lecture

#### **Course Objectives**

This course enables the students to:

A.	Understand the Early approaches to motion in art
В.	Learn about different Devices that successfully displayed animated images
C.	Learn about History of American, Japanese, Indian Animation and their comparative
	study
D.	Understand Traditional Animation Process, and different techniques of Animation
Ε.	Learn how Animation has evolved with technology

#### **Course Outcomes**

After the completion of this course, students will be able to:

1	Understand how Animation started and has evolved with technology
1.	Understand now Ammation started and has evolved with technology
2.	Know about different Animation techniques and styles
3.	Know about popular Animation Studios, Films, and Artists
4.	Understand the key terms in Animation Production process
5.	Know about the application and influence of Animation

#### **Syllabus**

Module I [8 Lectures]

- Early approaches to motion in art Sequential series of events/action depicted in Egyptian Murals and Leonardo da Vinci's Drawings
- **Animation before film** Devices that successfully displayed animated images, like the Magic Lantern, Thaumatrope, Phenakistoscope, Zoetrope, Flip book, Praxinoscope.

Module II [8 Lectures]

• **History of American animation** - Biography of Walt Disney. Brief discussion of Disney studio, Warner Studio and UPA studio. Influences on pop-culture.

• Brief history of Japanese animation - Biography of Osamu Tezuka.

Module III [8 Lectures]

• **History of Indian Animation -** Case Studies of popular Indian Animation Film Makers and their Films

• **Traditional animation** – Traditional Animation Process, Terms and definitions, early examples, classic films. Animation Techniques – Stop Motion, CGI Animation

Module IV [8 Lectures]

- **Introduction and definition of important and key terms**—Cinema, theatre, 2d animation, 3d animation, Fine art vs commercial art and Design.
- **Genesis of figure drawing** Drawing and the production process of animation (to appreciate the changes that happened with time.)

Module V [8 Lectures]

- Influence of Technology and media Influence of Video camera on animation, influence of Television on animation, influence of Internet on animation.
- **Emerging technologies** –Use of animation in corporate scene.

#### **Reference Books:**

- 1. Hundred Years of Cinema Animation ByGiannalbertoBendazzi
- 2. Of Mice and Magic By Leonard Maltin
- 3. Art Over 2500 Works from Cave to Contemporary By Andrew Graham-Dixon
- 4. Art: A World History ByElne Linda Buchholz, Susanne Kaeppele, Karoline Hille, Irina Stortland, Gerhard Buhler
- 5. The Craft of International History: A Guide to Method By Marc Trachtenberg
- 6. Animators survival kit- Richard Williams
- 7. Animation writing and development- Jean Ann wright

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method	
Lecture by use of boards/ LCD/ Projectors / OHP Projectors	
Tutorial / Assignment	
Seminars	

Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping be	tween COs and Course Delivery (CD) methods	S		
CD	Course Delivery Method		Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors		C01	CD1, CD2, CD3
CD2	Tutorial / Assignment		C02	CD1, CD2, CD3

CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,
			CD4, CD5
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5
	Aids		
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		



**Course Code: AM102** 

**Course Title: Introduction to Visual Studies** 

**Pre-requisite(s):** Nil

Credits: 3 L:3 T:0 P:0

Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: I / I

Branch: BAM Type: Lecture

#### **Course Objectives**

This course enables the students to:

A.	Understand the fundamentals of Visual Art
B.	Understand Art forms, Elements of Art, Principles of Art
C.	Know about Pre-historic Art and early civilization
D.	Study various old artists discuss their art techniques and their contribution
E.	Understand basic drawings

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Implement the fundamentals of Visual Art in practice
2.	Absorb concepts of visual art
3.	Understand early attempts of art by human being
4.	Prepare a document on old artists, their techniques and contribution
5.	Draw still life, human figure in simplified forms, and submit 200 sketches of out-door
	study

#### **Syllabus**

#### Module I

Topics:Introduction to Visual Art, 2 Dimension and 3 Dimension art form, Different medium of art, Different types of Paintings. [No. of Lectures: 8]

#### Module II

Topic:Six Limbs of Indian Paintings, Elements of Art, Principles of Art Evolution of Art. Pre-modernism-Sculpture, Painting (Mural Paintings and manuscript paintings)

[No. of Lectures:8]

#### **Module III**

Topic: Pre-historic Art: Cave Paintings, Art of Indus valley civilization [No. of Lectures:8]

#### Module IV

Topic: Introduction of Artists- Picasso, Salvador Dali, Paul Gauguin, Van Goghetc.

#### Module V

Topic: Drawing Basics (Basic Shapes), Drawing Classes (Out Door), Object Drawing Classes (Still Life)
Live Model Drawing, and Perspective Drawings [No. of Lectures: 8]

#### Reference Book

- 1. Figure study by Aditya Chari
- 2. Perspective drawing by Joseph D'Amelio
- 3.Art theory for beginners (History of art) by Richard Osbome

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
<b>Examination Marks</b>					

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods			
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
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CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



Course Code: AM103

**Course Title: Introduction to Communication** 

Pre-requisite(s): Nil

Credits: 3 L:3 T:0 P:0 Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: I / I

**Branch: BAM Type: Lecture** 

#### **Course Objectives**

This course enables the students to:

A.	Understand Communication as a major and an independent discipline
В.	Understand Communication as an interdisciplinary subject
C.	Gain proficiency with the fundamental concepts of the domain
D.	Be able to apply these concepts to solve real life problems and situations
Е.	Get exposed to the fundamental theories of Communication

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Express their ideas with more confidence and clarity leading to better presentation skills
2.	Become a more sensitive and sensible human being and professional
3.	Use the principles and tools to solve problem.
4.	Understand conflict and manage stress
5.	Understand culture and challenges of cross-cultural environment better.
	-

#### **Syllabus**

#### **Module I INTRODUCTION**

[No. of Lectures:8]

Topics: Definition, Communication as a two-way process, Effective Communication, Benefits of Good and Effective Communication, Role and responsibility of Sender and Receiver.

#### Module II TYPE OF COMMUNICATION

[No. of Lectures:8]

Topics: Business & Corporate Communication, Internal and External Communication, Top-down & Bottom – up Communication, Grapevine, Advocacy Communication, Mass Communication

#### **MODULE III Non-Verbal Communication [No. of Lectures:8]**

Topics: Understanding Space, Posture, Gestures, Expressions as essential Communication Cues, Nonverbal cues in written communication, Importance and effectiveness of nonverbal communication,

#### **Module IV Multiplicity Paradigm**

[No. of Lectures:8]

Topics: Medium, media, and channels of communication, Introduction to traditional and folk media, Introduction to print and electronic media, Introduction to emerging new media

#### **Module V Communication for Animation**

[No. of Lectures:8]

Topics: Use of Animation in Communication, Relevance and use of video games in communication, Population and Target Audience, Democratization of Communication and Participation

#### **Text Book:**

1. Business Communication, Suparna Dutta, PHI, New Delhi, 2013

#### **Reference Book:**

- 1. Bovee& Hill, Business Communication Today, Tata McGraw-Hill. 2005
- 2. John Seely, Oxford Guide to Effective Writing and Speaking, OUP

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					

Mid-Term	✓	✓	✓	
Examination Marks				

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	В	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM104** 

**Course Title: Introduction to Multimedia** 

**Pre-requisite(s):** Nil

Credits: 3 L:2 T:1 P:1 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: I / I

**Branch: BAM** 

**Type: Lecture, Tutorial and Practical** 

#### **Course Objectives**

This course enables the students to:

A	Understand various elements of multimedia	
В	Gain introductory knowledge of working mechanism of these elements	
С	Understand steps involved in designing a multimedia project	
D	Understand emerging technologies in the field of multimedia	
Е	To develop ability to design a multimedia message	

#### **Course Outcomes**

After the completion of this course, students will be able to:

A	Understand various aspects of multimedia communication		
В	Technical details related to various elements of multimedia and emerging technologies		
С	Understand the role played by various multimedia platforms		
D	Design a multimedia project by combining various elements of multimedia		
Е	Design a Graphic Story book, Template of Website and App or Video		

#### **Syllabus**

#### **Module I: Introduction to Multimedia** [No. of Lectures: 8]

Topics: What is Multimedia, Elements of Multimedia in detail, Linear and Non-Linear Multimedia, Uses of Sound and Typography in Multimedia

#### Module II: Authoring Tools:

[No. of Lectures: 8]

Topics: Introduction to Authoring Tools, Different types of Authoring Tools, designing outputs using various authoring tools, Study of Media platforms related to authoring tools like print and electronics.

#### Module III: Visual Communication using Multimedia [No. of Lectures: 8]

Topics: What is Visual Communication, Use of Authoring tools in Visual Communication, Principles of Gestalt theory, Introduction to Color theory, Storytelling through multimedia.

#### **Module IVIntroduction to Internet Technology** [No. of Lectures: 8]

Topics: How internet works, Defining LAN, WAN and WWW , Uses of Internet , Understanding IP address ,ISP and role of Browser , Internet protocol (http, https, ftp, smtp, pop,)–

#### Module VEmerging Multimedia Technologies

[No. of Lectures: 8]

Topics: Introduction to AR/VR, Applications of AR/VR, Study of New Media platforms like Websites and Apps

#### **Text Book:**

- 1. Fundamentals of Creative Design by Gavin Ambrose/Paul Introduction to Multimedia by Ramesh Bangia (Khanna Book Publishing Co. Pvt. Ltd)
- 2. Mass Communication in India by Keval J. Kumar

#### **Reference Book:**

- 1 Fundamentals of Creative Design by Gavin Ambrose/Paul Harris
- 2. Fundamentals of Graphic Design by Gavin Ambrose/Paul Harris
- 3. Kidzztale byPartho Acharya
- 4. The Design Process by Karl Aspelund
- 5. Principles of Gestalt Psychology by Kurt Koffka
- 6. The Design of Everyday Things by Don Norman
- 7. Multimedia on the Web by Stephen McGloughilin

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	<b>✓</b>		
End Sem Examination Marks	✓	✓	✓	✓	<b>√</b>
Mid-Term Examination Marks	<b>√</b>	<b>√</b>			

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes			
	a	В	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM105** 

**Course Title: Experimental Animation** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: I / I

**Branch: BAM** 

**Type: Practical and Workshop** 

#### **Course Objectives**

This course enables the students to:

A.	Understand the fundamentals of Experimental Animation		
В	Understanding implementation of Animation Production Process		
C.	Learning related hardware, software and other tools for experimental animation		
D.	Introduction to Flip Book, clay modeling, cutout animation and set design		
E.	Gaining experience of working in a group		

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Submit an independent Flip Book, a Short experimental group film in any medium		
2.	Operate relevant animation and camera equipment		
3.	Understanding of character development and storytelling		
4.	Gain experience in handling different raw materials like; Clay, Paper, Sand, Colors etc.		
5.	Experience in working within a timetable and schedule		

#### **Syllabus**

#### **Module 1: Introduction to Experimental Animation**

[8 Lectures]

History (Related to Stop-Motion Short Films), Mix Media Animation, stop – Motion Animation Techniques, Cut -out Animation and Flip Book. Step by Step Procedure for Stop-Motion Films, Case Studies of Stop-Motion films, Contemporary experiments by stop motion film makers.

#### **Module 2: Software and Hardware Requirements**

[8 Lectures]

Introduction to Animation Equipments- Light box, Line Test Machine, Punch Machine, Choosing DSLR / Video Camera and lenses, Animation Software, Frame Grabber, Stop-Motion Apps. Few experiments related to stop-motion animation to be done by students.

#### **Module 3: Pre- Production Design (Planning & Design)**

[8 Lectures]

Idea – Script- Treatment, Character Design, Prop Design/ Set Design, Storyboard Design, Animatics, Layouts of Character and sets.

#### **Module 4: Production Design (Implementation)**

[8 Lectures]

Clay Modeling, Paper Cut, Puppet making, Wire frame or Armatures, building of Sets, Making Properties, Creating Animation, collecting AVIs, Basic Editing on Movie Maker or any other software.

#### **Module 5: Assignments**

[8 Lectures]

Use of conventional and unconventional methods to create visual display and motion. Students working in groups/ individual try to find innovative methods of using tools. The following assignments to be submitted by the students:

Flip Book, Animation Pre-production Film Designs, Animation Project with different media like; Paper, Clay, Sand, Colours etc. with proper editing.

#### **Reference Book:**

- 1. Stop Motion: Craft Skills for Model Animation by Susannah Shaw
- 2. Timing for Animation by Harold Whittaker and John Halas
- 3. The Advanced Art of Stop Motion By Ken A. Priebe
- 4. The Kultz Book of Animation: How to Make Your Own Stop Motion Movies By Nicholas Berger and John Cassiday
- 5. The Animator Inside of You How to Make Stop Motion and Clay Animation Basic Tricks and Tips By Chris Capps
- 6. The Art of Aardman: The Makers of Wallace & Gromit, Chicken Run, and More By Peter Lord, David Sproxton
- 7. Flipping Out: The Art of Flip Book Animation: Learn to illustrate & create your own animated flip books step by step by David Hurtado
- 8. The Animation Bible: A Practical Guide to the Art of Animating from Flipbooks to Flash Paperback by Maureen Furniss

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects

Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment	
Day to day performance & Lab Files	30	
Quiz (s)	15	
Viva	15	
End Semester Practical Examination	25	
Viva Voce / Presentation	15	

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	В	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method		
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3		
CD3	Seminars	C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5		
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5		
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				

CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		



**Course Code: AM106** 

**Course Title: Introduction to 3D** 

**Pre-requisite(s): Nil** 

Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: I / I

Branch: BAM Type: Practical

#### **Course Objectives**

This course enables the students to:

Α.	Understand forms shapes and volumes
В.	Sketch forms shapes with ease
C.	Living and Non-living objects
D.	Analyzing products and its designs
E.	Visualize and create design concepts using different mediums
F.	Visualize Prototypes and miniatures

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Solid understanding of forms shapes and volumes
2.	Create their own sketches
3.	Create product designs
4.	Creating Real world design
5.	Create miniatures and prototypes

#### **Syllabus**

Module I [No. of Lectures: 8]

Topics:

Introduction to lines, Circles, and other geometrical shapes,

Understanding the concepts of geometry and its implementation into drawing.

Understanding 3 dimensional forms.

Creating Cubes and Cuboids etc.

Module II [No. of Lectures: 8]

Topics:

Perspective and its use.

Introduction of positive and negative extrusion

Creating different Joints

Shadow creations

Projection drawing.

Module III [No. of Lectures: 8]

Topics:

**Understanding of Proportions** 

Combining Geometrical shapes to create objects

**Isometric Drawings** 

Creating Concepts and working Features of Product design

Product Design

Module IV [No. of Lectures: 8]

Topics:

Working on Real world design concepts, spotting design faults and create solutions to rectify the problems.

Module V [No. of Lectures: 8]

Topics:

Hard surface models with cardboard, glue and paper etc. Handling of Clay

Basic techniques of moulding and casting, Handling of POP

Making miniatures and prototype models using different mediums.

#### **Text Book:**

1. Perspective Drawing Handbook by Joseph D'Amelio

#### **Reference Book:**

- 1.Design Sketching by ERIK OLOFSSON
- 2. The Industrial Designer's Guide to Sketching by Nenad Pavel
- 3. Architecture Form, Space and Order by Francis D.K. Ching

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

# Course Delivery Method Lecture by use of boards/ LCD/ Projectors / OHP Projectors Tutorial / Assignment Seminars Mini Projects / Projects Laboratory Experiments / Teaching Aids Industrial / Guest Lecture Industrial Visits / in-plant training Self-learning such as use of NPTEL materials and internets Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	В	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method		
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CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5		
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5		
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				
CD8	Self-learning such as use of NPTEL materials and internets				
CD9	Simulation				

Detailed Syllabus of B.Sc. A&M, II semester



**Course Code: AM107** 

**Course Title: PRINCIPLES OF ANIMATION** 

Pre-requisite(s): Nil Credits: 3 L:3 T:0 P:0 Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: II/ I

**Branch: BAM Type: Lecture** 

#### **Course Objectives**

This course enables the students to:

A.	Provide the student with a thorough introduction to the field of animation	
В.	The development of timing and choreography skills in animation, which have a	
	profound effect on all subsequent animation production.	
C.	Range of animated films which help develop the foundations of a critical	
	understanding of animation production terminology.	
D.	The combined study of studio processes and the development of skills in this course	
	provide the basis for more advanced studies in character animation and Mechanics	
	& Motion.	
<b>E.</b>	Heavily focused on exploring the variations and meaning of timing to achieve	
	audience sympathy for the animated form.	

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Display relevant animation skills at a level suitable for further studies in animation production.
2.	Demonstrate a sound understanding of the 'principles of animation'
3.	Apply fundamental animation timing skills through the creation of sequential images.
4.	Apply fundamental processes of visual problem solving in animation.
5.	Demonstrate a sound understanding of 'Classical Animation Techniques'.

#### **Syllabus**

Module 1 (8 Lectures)

Course Overview, Introduction to the 12 Principles of Animation. Detailed understanding on Timing, Spacing, Slow In & Slow Out. Importance of sketching and analyzing movement. Software Introduction: Monkey Jam. Line Test.

In class practice:

- 1) Horizontal ball rolling for applying timing, spacing, ease-in and ease-out.
- 2) Vertical ball bounce for applying timing, spacing, ease-in and ease-out.
- 3) Ball, Cannon Ball, and Balloon bounce for applying timing, spacing, ease-in and ease-out.

- 4) Paper Animation
- 5) Ladder Exercise

Module 2 (8 Lectures)

Principles of Animation: Anticipation, Squash & Stretch, Arcs and Study of Basic Characters for Animation:

Introduction to Anticipation, Different weights, different bounces: Combination of timing, spacing, squash & stretch and arcs to create a convincing bounce. Frame by frame animation terminology: Key frames, breakdowns, in-betweens, Importance of constructive criticism and healthy habits for animators. Introduction to Dummy Characters for Animation.

In class practice:

- 1) Action with Anticipation & without Anticipation Poses
- 2) Pendulum exercise for applying Arc, timing, spacing, ease-in and ease-out.
- 3) Study animation dummy characters- Skinny Character, Fatty Character, Bony Character etc.

Module 3 (8 Lectures)

Principles of Animation: Staging, Follow Through, Pose to Pose and Straight Ahead, Secondary Action, Overlapping Action:

Flour Sack with Different Poses, Staging with Silhouette, Difference between Pose to Pose and Straight-Ahead Animation, The importance of planning, How to apply Key Frames, Breakdowns, Extremes, In-betweens in animation planning. Applying thumbnails & pose-to-pose animation principle in planning, Applying straight-ahead animation in iterative animation production. Importance of Anticipation in Animation.

In class practice:

- 1) Practice strong staging with flour sack & Silhouetting
- 2) Follow through exercise -Flag Wave, Grass in the wind animation, and Rope Swing
- 3) Differentiate Pose to Pose and Straight-Ahead Animation through any assignment
- 4) Secondary action
- 5) Practice Overlapping Action

Module 4 (8 Lectures)

Principles of Animation: Drag, Solid Drawing, Exaggeration, and Appeal:

In class practice:

- 1) Water Balloon with thread
- 2) Pendulum Cycle with a CUBE instead of sphere
- 3) Exaggeration: Experiments with few poses
- 4) Appeal in posing the flour sack or any other character

Module 5 (8 Lectures)

Basic Actions, Study and practice based on principles of animation:

Key Frames, Extremes and Breakdowns, In-betweens, Line Testing, The Best Numbering Systems, The Great Ones & Twos Exposures, The Top and Bottom Pegs, Spacing, Classic Inbetween Mistakes, Watch your Arcs, The Elongated In-between, The Rough Approach In class practice:

- 1) Head Turn with and without hairs
- 2) Walk Cycle
- 3) Run Cycle

- 3) Character Jumping (Flour Sack or any other simple character)
- 4) Study Facial Expressions Real and Cartoony
- 5) Model Sheet

NOTE: Light Box is the preferred tool for these assignments.

#### **Reference Books:**

- 1. Animator's Survival Kit Richard Williams
- 2. Cartoon Animation Preston Blair
- 3. The Illusion of Life Frank Thomas & Olie Johnstan
- 4. Cartoon Animation Preston Blair
- 5. Animator's Survival Kit Richard Williams

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	В	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods			
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM108** 

**Course Title: Theory of Visual Studies** 

**Pre-requisite(s): Nil** 

Credits: 3 L:3 T:0 P:0 Class schedule per week: 03

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: II / I

**Branch: BAM Type: Lecture** 

#### **Course Objectives**

This course enables the students to:

A.	To learn the history of perspective in Art. Understand linear perspective and areal
	perspective.
B.	Learn about anthropological differences of human figure. Anatomical differences of
	different type of animals.
C.	Learn about visual composition. How to compose a frame or space with different
	objects.
D.	Learn about development of modern Indian art.
E.	

#### **Course Outcomes**

After the completion of this course, students will be able to:

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1.	Implement the fundamentals of Visual Art in practice
2.	Understand early attempts of art by human being
3.	Absorb concepts of visual art
4.	Visit an Exhibition of Art and prepare a report.
5.	Draw still life, human figure in simplified forms, and submit 200 sketches of out-
	door study

#### **Syllabus**

Module I

3point perspective,

History of Linear perspective.

Colour perspective.

Colour theory [No. of Lectures: 6]

Module II

Importance of figure study Human figure proportions

Animal figure study [No. of Lectures:6]

Module III

Composition in art

Element of composition Rule of composition

[No. of Lectures:6]

Module IV Evaluation of modern Indian art British Colonial art

Module V Still life painting with drapery. Life Study. Rapid Sketching.

[No. of Lectures:6]

#### **Reference Book**

- 1. Figure study by Aditya Chari
- 2. Perspective drawing by Joseph D'Amelio
- 3.Art theory for beginners (History of art) by Richard Osbome
- 4. Composition in Art (dover art instruction) by Henry Rankin Poore
- 5. Composition: Understanding Line, Notan and Color (Dover Art Instruction) by Arthur Wesley Dow

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					

Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	В	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	etween COs and Course Delivery (CD) methods	3	
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM109** 

Course Title: CREATIVE WRITING & PRESENTATION SKILLS

**Pre-requisite(s): Nil** 

Credits: 3 L:2 T:0 P:2

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: II / I

**Branch: BAM** 

**Type: Lecture and Practical** 

#### **Course Objectives**

This course enables the students to:

A.	Understand Communication as a major and an independent discipline
В.	Understand the importance of presentation skills
C.	Gain proficiency with the fundamental concepts of the domain
D.	Be able to apply these concepts to solve real life problems and situations
E.	Get exposed to the fundamentals of creative writing and presentation skills

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Express their ideas with more confidence and clarity leading to better presentation
	skills and writing skills
2.	Become a more sensitive and sensible human being and professional

#### **Syllabus**

#### Module I (8 lectures)

Creative Writing: Writing Paragraphs & Essays. Writing Synopsis, concepts, covering letters, story writing, script writing, writing with humor, writing plots. Developing characters: Protagonist & Antagonist, Simple & complex, Flat & round. Understanding creative notions like: Background, Ambiance, climax & Anticlimax. Mastering figures of speech like: Irony, Sarcasm, Satire, Simile & Metaphors.

#### Module II (8 lectures)

Written Communication: Principles of written communication. Limitations of written communication. Barriers of written communication. Non-verbal aspects of written communication. Creating impressive power point presentation. Writing for different medium: Print, Radio, Television & New media. Writing press briefings.

#### **Module III (8 lectures)**

Broadening Writing Skills: Brief history of the evolution of human experience in writing. Understanding symbols, cave paintings, sculptures, pictographs. Creating the message. Relevance & importance of audience appraisal in written communication. Writing abstracts & Critical analysis.

#### Module IV (8 lectures)

Advertising: Copy writing. Creating slogans, jingles, posters & signage. Understanding the importance of advertisement and its impact on the audience. Traditional advertisement and E. advertisement.

#### Module V (8 lectures)

Professional Writing: Professional E. writing. Writing for social media & blogs. Writing letters for: complains, redressals, appointments, applications, inquiries, circular & notice.

#### **Reference Books:**

- 1. Seely John: Oxford guide to effective writing and speaking.
- 2. Grellet Françoise: Developing Reading skills, Cambridge University Press.
- 3. Gartside L.: Model Business Letters. ELBS with Pitman.
- 4. Dutta S.: Business Communication.

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

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Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture

Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# **Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure**

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
<b>Examination Marks</b>					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	c	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5	

	Aids		
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		



**Course Code: AM110** 

**Course Title: Story Appreciation for Gaming** 

**Pre-requisite(s): Nil** 

Credits: 2 L:2 T: 1 P:0 Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: II / I

**Branch: BAM** 

**Type: Lecture and Tutorial** 

#### **Course Objectives**

This course enables the students to:

-						
<b>A.</b>	Understand the video games as a tool of storytelling and entertainment. Students					
	will explore information about old games to current games. Students will have					
	discussions and observe the creative aspects of digital interactive form of art i.e.					
	Digital games.					
В.	Learn to explore and appreciate the story element of digital games with a					
	perspective of a Game Designer.					
C.	Understand the concept of process of Game Development and Game Development					
	parts.					
D.	Explore various popular digital games and to analyze them critically.					
<b>E.</b>	Share each other's experiences of different games.					
F.	Understand the fundamentals of Digital Games starting from games in general then					
	digital games. Students learn about the elements of a game.					
G.	There will be examples of number of games in class. Student need not to play all of					
	them, but he should play some of them, or, at least, watch YouTube videos of game					
	play.					

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Understand digital games and its elements.
2.	Students will be able to look at Games as digital medium for story telling
3.	Students will make up their mind if and which field of Game Production suit them.
4.	Students will explore and enjoy the story telling capabilities of games.
5.	Students will learn to critically analyze the digital games.

#### **Syllabus**

Module I [No. of Lectures: 6]

# **Topics**

- 1. Video Game Culture and Storytelling [2,3,5]
- 2. Game Narrative Basics [2,3,6]
- 3. Non-Linear Game Narrative [2]

Module II [No. of Lectures: 6]

#### **Topics**

- 1. Writing for Games [text book]
- 2. Game Characters [1,6]
- 3. Voice Over [1]

Module III [No. of Lectures:6]

#### **Topics**

- Cut Scenes and Scripted Events
- Intellectual Property (IP) Protection for Video Games
- Localization

Module IV [No. of Lectures: 5]

#### **Topics**

- 1. The Needs of the Audience
- 2. Weaving interactive stories for games.

Module V [No. of Lectures: 5]

#### **Topics**

1. Case Studies – Story in Games (Silent Hill 2 and Bioshock)

#### **Text Book:**

 Monograph of Story Appreciation for Gaming, Dept. of Animation and Multimedia, BIT Mesra Ranchi

#### **Reference Book:**

(For this paper, exposure to digital games and game videos is required.)

- 1. Chris Solarski (2017), Interactive Stories and Video Game Art: A Storytelling Frameworkfor Game Design, Taylor and Francis Group
- 2. Simon Egenfeldnt-Nielsen et al (2008) Understanding Video Games: The Essential Introduction, Routledge, Taylor and Francis, New York
- 3. Katie Salen and Eric Zimmerman (2004), Rules of Play: Game Design Fundamentals
- 4. Bob Bates (2004), Game Design
- 5. What video games have to teach us about learning and literacy by James Paul Gee (2003)
- 6. Andrew Rollings and Ernest Adams on Game Design by A Rollings E Adams, (2003) New Riders Publisher
- 7. A Game Design Vocabulary: Exploring the Foundational Principles Behind Good Game Design by Anna Anthropy, Naomi Clark
- 8. Video Game Storytelling: What Every Developer Needs to Know about Narrative Techniques, Evan Skolnick (2014), Watson-Guptill
- 9. Interactive Storytelling for Video Games: A Player-Centered Approach to Creating Memorable Characters and Stories, Josiah Lebowitz, Chris Klug (2011), Focal Press

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

Mapping	Mapping between COs and Course Delivery (CD) methods						
CD	Course Delivery Method	Course Outcome	Course Delivery Method				
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3				
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3				
CD3	Seminars	C03	CD1, CD2, CD3				
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5				
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5				
CD6	Industrial / Guest Lecture						
CD7	Industrial Visits / in-plant training						
CD8	Self-learning such as use of NPTEL materials and internets						
CD9	Simulation						



**Course Code: AM111** 

**Course Title: Introduction to Multimedia Tools** 

**Pre-requisite(s): Nil** 

Credits: 3 L: 2 T:0 P:2 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: II / I

**Branch: BAM** 

**Type: Lecture and Practical** 

#### **Course Objectives**

This course enables the students to:

A	Understand various elements of multimedia
В	Gain introductory knowledge of working mechanism of these element
С	Understand the Interface of Designing Software
D	To develop ability to design a multimedia product

#### **Course Outcomes**

After the completion of this course, students will be able to:

A	Understand various aspects of multimedia communication
В	Gain Knowledge of Designing Software's Interface
С	Gain Application Knowledge of Designing Tools
D	Practice Designing Multimedia Projects

#### **Syllabus**

Module I: [No. Of Lectures: 8]

#### Introduction to tools of multimedia elements-

Tools of multimedia elements, What is Raster, What is Vector Designing, What are Raster Designing Software's, Different File Formats used by various tools, Color Theory

[No. Of Lectures: 8]

#### Module II Learning multimedia Tools

Learning the User Interface of Raster and vector Software, Learning Tools of Raster and vector Designing Software, Working with Text, What are Layers, Introduction to Toolbar,

#### Module III Corporate Logos, Audio & Video based Content [No. Of Lectures: 8]

What is a Logo, History of Logo Designing, Uses of Logo, Elements of Logo Designing, Multimedia tools used in designing Logo,

#### Module IV Various uses of Multimedia Tools and their techniques

[No. Of Lectures: 8]

Use of Multimedia tools in Print, Use of Multimedia tools in Audio & Video , Techniques to work with images- plug-ins, image adjustments, color corrections, using layers, image effects. Techniques to work with video- - motion graphics, motion tracking, chroma, video effects, video transition, Techniques to work with audio- audio effects eg. ECHO, audio transition, Sound forge for sound editing-Techniques to work with text- text effects, text properties

#### Module V Application of Multimedia tools -

[No. Of Lectures: 8]

Use of Multimedia tools in New Media, Introduction to UI/UX Designing, Use of Multimedia tools in UI. Use of painting tools in creating 2D Characters and 3D Textures, Use of layers in Digital Painting, Layer Blending technique, Creating Custom Brushes, Lighting & Texturing using brushes, creativity and it's use, elements and principles of art and design

#### **Text Book:**

- 1. The Design Process by Karl Aspelund
- 2. Adobe Photoshop CC Classroom
- 3. Design Thinking by Gavin Ambrose/Paul Harris
- 4. Killer UX Design by Jodie Moule

#### **Reference Book:**

- 1. Fundamentals of Creative Design by Gavin Ambrose/Paul Harris
- 2. Fundamentals of Graphic Design by Gavin Ambrose/Paul Harris

**Gaps in the syllabus (to meet industry / Profession requirements)** 

Pos met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

Pos met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects

Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	<b>✓</b>		
End Sem Examination Marks	✓	✓	✓	<b>✓</b>	<b>✓</b>
Mid-Term Examination Marks	✓	<b>✓</b>			

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes			
	a	b	c	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between cos and Course Delivery (CD) methods					
CD	Course Delivery Method	<b>Course Outcome</b>	Course Delivery		
			Method		
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1,CD2,CD5		
CD2	Tutorial / Assignment	C02	CD1,CD2,CD5		
CD3	Seminars	C03	CD1,CD2,CD5,CD8		

CD4	Mini Projects / Projects	C04	CD1,CD2,CD5,CD8
CD5	Laboratory Experiments / Teaching Aids	C05	CD1,CD2,CD5,CD8
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM112** 

**Course Title: Film Appreciation** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:1 P:3

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: II / I

**Branch: BAM** 

**Type: Tutorial and Practical (Assignments)** 

The course will focus on how to appreciate cinema as well as to critically analyze its narrative and complexity.

Through screening of various Indian and western films the students will be able to understand the visual medium, theme, plot and other creative aspects of films.

#### **Course Objectives**

This course enables the students to:

A.	To become an active viewer of cinema
В	Understand the way how content, form and context work together to create meaning in film
C.	Be able to critically explore film as a dynamic, multifaceted medium
D.	Understand the creative technique of film
E.	Understanding the history of Indian and western cinema

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Critically analyze films in general
2.	Capability to understand the script and technical importance in film
3.	Will be able to differentiate the impact of different film genre
4.	Will have a better understanding of camera and editing techniques
5.	Will come up with new idea in the field of film making

#### Moudle1:

Cinema Jargon etymology, Theme, Story, Narrative, Screenplay and plot.

#### **Module 2:**

Introduction to Indian Cinema, History of Indian Cinema, Indian classical Films.

Parallel cinema, Silent cinema, Regional Cinema in India

#### **Module 3:**

World cinema, Geographical regions and cultural influence.

#### Module 4:

Classical Cinema and Modern Cinema, Equipment technology and disciplines. Animatronics and computer graphics.

#### Module 5:

Critical analysis of animated movies. Exposure to Indian classical, Japanese, American and films of rest of the world through Film Screening session

#### **Suggested Readings:**

- 1. Our Films Their Films (Satyajit Ray)
- 2. Houseful: The Golden Age of Hindi Cinema(Ziya Us Salam)
- 3. What is Cinema Volume 1&2 (Andre Bazin)
- 4. Cartoons: One Hundred Years of Cinema Animation by GiannalbertoBendazzi
- 5. The Illusion of Life: Disney Animation By Ollie Johnston and Frank Thomas

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

#### **Course Delivery Method**

Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### **Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure**

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

#### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н
L=	Low	M= Medium	H= High	

Mapping between COs and Course Delivery (CD) methods					
CD	Course Delivery Method		Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors		C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment		C02	CD1, CD2, CD3	
CD3	Seminars		C03	CD1, CD2, CD3	

CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM113** 

**Course Title: Emerging 3D Technologies** 

**Pre-requisite(s): Nil** 

Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: II / I

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A.	Introduction to 3D
В.	Understanding the 3d working environment and the pipeline
C.	Basics of Modelling Techniques
D.	Use of 3D in Modern Technologies

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Solid understanding of forms shapes and volumes	
2.	Cre	ate their own sketches
3.	Cre	ate product designs
4.	Cre	ating Real world design
5.	Cre	ate miniatures and prototypes

#### **Syllabus**

Module I [No. of Lectures: 6]

Topics:

Introduction to lines, Circles, and other geometrical shapes,

Understanding the concepts of geometry and its implementation into drawing.

Understanding 3 dimensional forms.

Creating Cubes and Cuboids etc.

Module II [No. of Lectures: 6]

Topic:

Perspective and its use.

Introduction of positive and negative extrusion

Creating different Joints

Shadow creations

Projection drawing.

Module III [No. of Lectures: 6]

Topic:

Combining Geometrical shapes to create objects

Isometric Drawings

Creating Concepts and working Features of Product design

Product Design

Module IV [No. of Lectures: 6]

Topic:

Working on Real world design concepts, spotting design faults and create solutions to rectify the problems.

Module V [No. of Lectures: 6]

Topic:

Hard surface models with cardboard, glue and paper etc. Handling of Clay

Basic techniques of moulding and casting, Handling of POP

Making miniatures and prototype models using different mediums.

#### **Reference Book:**

- 1. Autodesk 3ds Max 2018 Complete Reference Guide by Kelly L. Murdock
- 2. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo (Author)
- 3. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch
- 4. Autodesk Maya 2018 A Comprehensive Guide by Tickoo Sham

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

# Course Delivery Method Lecture by use of boards/ LCD/ Projectors / OHP Projectors Tutorial / Assignment Seminars Mini Projects / Projects Laboratory Experiments / Teaching Aids Industrial / Guest Lecture Industrial Visits / in-plant training

Self-learning such as use of NPTEL materials and internets

Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

#### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	netween COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		

## Detailed Syllabus of B.Sc. A&M, III semester



**Course Code: AM201** 

**Course Title: AUDIO VIDEO TECHNOLOGY** 

**Pre-requisite(s): Nil** 

Credits: 3 L:3 T:0 P:0 Class schedule per week: 03

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: III/ II

Branch: BAM Type: Lecture

#### **Course Objectives and Outcomes**

This course enables the students to:

<b>A.</b>	To make students learn the basics of TV and Film production	
В.	Students will be able to make their own digital films	

#### **Syllabus**

Module I: [No. of Lectures: 8]

Understanding film and digital cameras, Characteristics of camera, Controls and calibrations, Shutter speed, Aperture, F- Stop, Depth of Field, Camera Lenses, Lens part and control, Filters, Camera Mounts, FPS, Camcorder operation, ENG, EFP and studio set-up of video cameras.

Module II: [No. of Lectures: 8]

Art of Composition, Filed of View, Line of Action, 180 Degree Rule for Camera Placement, Camera Angles and Movements, Continuity, Cinematic time & space, Master Scene Technique, Screen direction, Compositional Language: Lines, Shape, Movements

Module III: [No. of Lectures: 8]

Basic Theory of lighting, Production Lighting, Three Point Lighting, Key Light, Natural light, Hard and Soft Lights, Indoor and Outdoor Lighting Technique, Color Temperature, Filters, Reflectors

Module IV:

Sound Basis, Frequency, Amplitude, Decibels, Operational Characteristics of Microphone

Audio Controls, Foley Sound, Voice over, Narration and Dubbing, Filed & Post- Production Sound Recoding and Mixing.

[No. of Lectures: 8]

Module V: [No. of Lectures: 8]

Understanding Signal Processing of S-video, Fire wire, Components and Composite signals, Digitization, Work Station management, Disk Space, File Management, Digitization, Editing Work Station management, Theory of Editing hardware and software, Editing basics, Video Compression, Offline & Online Editing, Batch Capture, Time Code & Non-linear and linear editing, Graphics and Titles, Transitions and Effects, Video formats

#### **Text Books:**

- 1. Television Production Hand Book 7th edition (Author: Herbert Zettl)
- 2. Television Production (Author: Gerald Millerson Jim Owens)
- 3. Cinematic Motion (Author: Steven D. Katz)

#### **Reference Books:**

1. The five C's of Cinematography

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	c	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method		
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3		
CD3	Seminars	C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5		
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5		
CD6	Industrial / Guest Lecture				

CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		



**Course Code: AM202** 

**Course Title: Visual Communication** 

**Pre-requisite(s): Nil** 

Credits: 2 L:2 T:0 P:0 Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: III /II

Branch: BAM Type: Lecture

#### **Course Objectives**

This course enables the students to:

<b>A.</b>	Recognize the Visual Communication as a major domain and genres of
	Communication
В.	Identify Key Elements of Visual Communication
C.	Discover conditions and requirements that will lead to effective visual
	communication
D.	Explore principles of communication which play an important role in visual
	communication.
Е.	Discover the major elements of Psychology in Visual Communication
F.	Suggest possible use of inter disciplinary inputs to make the process more
	responsive
G.	Assignments will involve the students to develop effective visual communication
	tools.

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Realize visual communication as a tool for communication
2.	Recognize the role and responsibility of psychology in the process of visual
	communication
3.	Recognize the role communication plays in the process of communication.
4.	Identify elements of interdisciplinary inquiry in visual communication
5.	Distinguish avenues where visual communication can play a critical role

#### **Syllabus**

### Module I COMMUNICATION Topics

[No. of Lectures: 6]

- Definition of Communication (1),
- Communication Paradigm (3)
- Barriers to Communication (1)
- Culture and Communication (1)

#### Module II BRAIN AND BEHAVIOUR

[No. of Lectures: 5]

#### **Topics**

- Structure of Brain (Forebrain: Thalamus, Hypothalamus, Cerebrum, Left & Right Hemisphere) (1)
- Structure of Eye & Ear (1)
- Nervous System, Neurons, Nerve Impulses, Synapses & their Functions (2)
- Sociobiology, Social Brain (1)

### Module III MEMORY Topics

[No. of Lectures:4]

- Long Term Memory, Short Term Memory, (1)
- Levels of Processing theory: Perception & Elaboration (1)
- Role of Organization & Imagery (1)
- Forgetting (1)

## Module IV COLOUR VISION Topics

[No. of Lectures: 5]

- Form, Hue, Brightness (1)
- Color Mixture, After Image Effect (1)
- Theories of Color Vision: The Young- Helmholtz Theory,, The Hering's Theory,, The Ladd Franklin Theory, Edridge Green Theory, (3)

#### Module V PERCEPTION

[No. of Lectures: 10]

#### **Topics**

- Nature and Definition (1)
- Processes Involved in Perception (1)
- Difference Perception & Sensation (1)
- Difference between Perception & Attention (1)
- Theories of Perception Structuralist's View, Gestalt's Approach, The Behaviouristic Approach (6)

#### **Text Book:**

1. B K Pattanaik, 'Introduction to Development Studies, Sage Texts, ISBN 9789351508205

#### **Reference Book:**

- 1. Introduction to Psychology Clifford T Morgan, Richard A King et al, Tata Mac Graw Hill
- 2. Psychology The Study of Human Behavior, Braj Kumar Mishra, PHI

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

#### Topics beyond syllabus / advanced topics / design

#### POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### **Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure**

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	Mapping between COs and Course Delivery (CD) methods					
CD	Course Delivery Method	Course Outcome	Course Delivery Method			
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3			
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3			
CD3	Seminars	C03	CD1, CD2, CD3			
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5			
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5			
CD6	Industrial / Guest Lecture					
CD7	Industrial Visits / in-plant training					
CD8	Self-learning such as use of NPTEL materials and internets					
CD9	Simulation					



**Course Code: AM203** 

**Course Title: Basics of Programming** 

**Pre-requisite(s):** Nil

Credits: 3 L:2 T:0 P:1 Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: III / II

**Branch: BAM** 

**Type: Lecture and Practical** 

#### **Course Objectives**

This course enables the students to:

A.	Be comfortable programming concepts so that they could use it in gaming or any other field
В.	Understand the basic concepts of programming. These concepts are relevant to any programming language and can be taught with some example exercises.

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	The student will understand basic concepts of programming
2.	The student will be able to write beginner level computer programs

#### **Syllabus**

Module I [No. of Lectures: 6]

**Topics** 

1. Introduction and Overview of Programming & Programming Language

Module II [No. of Lectures: 6]

**Topics** 

- 1. Programming Environment
- 2. Basic Syntax
- 3. Data Types

Module III [No. of Lectures:6]

**Topics** 

- 1. Variables
- 2. Keywords
- 3. Operators

Module IV [No. of Lectures: 5]

#### **Topics**

- 1. Decisions
- 2. Loops
- 3. Functions
- 4. File I / O

Module V [No. of Lectures: 5]

#### **Topics**

- 1. Numbers
- 2. Characters
- 3. Arrays
- 4. Strings

#### **Text Book:**

1. Programming for absolute beginners (No experience required) – Jerry Lee Ford

#### **Reference Book:**

- 1. How computers work? By Ron White
- 2. Computer Basic Absolute Beginners Guide, Windows 8 edition Michael Miller
- 3. Hello World! Computer Programming for kids and other beginners, Warren and Carter Sande
- 4. Computer programming for Teens by Mary Farrel
- 5. Beginning programming All in one Basic Reference for Dummies by Wallace Warg, Willey Publishing

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes			
	a	b	С	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping be	Mapping between COs and Course Delivery (CD) methods					
CD	Course Delivery Method	Course Outcome	Course Delivery Method			
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3			
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3			
CD3	Seminars	C03	CD1, CD2, CD3			
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5			
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5			
CD6	Industrial / Guest Lecture					
CD7	Industrial Visits / in-plant training					
CD8	Self-learning such as use of NPTEL materials and internets					
CD9	Simulation					



**Course Code: AM204** 

**Course Title: Vector Art Study** 

**Pre-requisite(s):** Nil

L: 2 T: 0 P: 2 **Credits: 3** Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: III / II

**Branch: BAM** 

**Type: Lecture and Practical** 

#### **Course Objectives**

This course enables the students to:

A	Gain Introductory Knowledge About Vector Art
В	Learn About the Uses of Vector Art
С	Learn the Tools of Vector Software
D	Understand Steps Involved in Designing a Vector Art Project

#### **Course Outcomes**

After the completion of this course, students will be able to:

	tempression or time testines, statement with or their test
A	Understand Various Aspects of Vector Art
В	Master the Vector Art Designing Software
С	Practice Designing Vector Animation
D	Design a Vector Art Project by Combining Various Elements of Vector Tools

#### **Syllabus**

#### **Module I: Introduction to Vector Art**

[No. Of Lectures: 8]

Vector versus Raster Software, What is Vector Art, Vector File types, Ideal platform for Web related Designs & Animation, Digital Animation

#### **Module II Introduction to Animate CC Tools:**

[No. Of Lectures: 8]

Looking at Animate CC Workspace, Creating Animate CC Document, Working with

Panels, Using Timelines and Frames, Using the Tools Panel

#### **Different tools of Vector Animation Module III**

[No. Of Lectures: 8]

Creating Shape Object, Creating Graphic Object, Creating Movie Clip, Creating Button, Tweening

#### **Module IV** Different Vector Tools for Drawing

[No. Of Lectures: 8]

Designing a Character, using a Pen tool for Drawing, Using a Brush for Drawing Using shapes for Drawing, Creating Backgrounds

Module V Creating Different forms of Digital Animation [No. Of Lectures: 8] Bouncing Ball, Walk Cycle, Run Cycle, Jump cycle, Lip Sync

#### **Text Book:**

- 1 Adobe Flash Bible
- 2. Animator Survival Kit by Richard Williams
- 3. Timing for Animation by Harold Whitekar and John Halas
- 4. Beginning Adobe Animate CC: by Joseph Labrecque

#### **Reference Book:**

- 1. Cartoon Animation by Preston Blair
- 2. Adobe Illustrator CC Classroom

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment	
Quiz (I, II)	20	

Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment Components	CO1	CO2	CO3	CO4	CO5
Quiz (I, II)	<b>✓</b>	<b>✓</b>	✓		
End Sem Examination Marks	✓	<b>√</b>	<b>√</b>	<b>✓</b>	✓
Mid-Term Examination Marks	✓	<b>√</b>			

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	c	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



Course Code: AM205

**Course Title: Animation Techniques** 

**Pre-requisite (s): Nil** 

Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: III / II

**Branch: BAM** 

Type: Lecture, Tutorial and Practical (Workshop)

#### **Course Objectives**

This course enables the students to:

A.	Understand the fundamentals of Animation Principles
В	Understanding implementation of Animation Principles through assignments
C.	Learning related hardware, software and other tools for animation techniques
D.	Gaining experience of working in a team
E.	Gaining experience of working in a group

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Submit animation assignments based on animation principles
2.	Handle the Light Box and Line Test Machine.
3.	Understand the process of key frame setting in Classical Animation Techniques
4.	Understand the process of In-betweening, Breakdown, and Clean Ups
5.	Experience in working within a timetable and schedule

#### **Syllabus**

#### **Animation Assignments:**

- 1. Bouncing Ball Animation
- 2. Pendulum Animation
- 3. Bird Flight Animation
- 4. Jump Animation
- 5. Walk Cycle in Side View
- 6. Run Cycle in Side View
- 7. Perspective Walk
- 8. Front Walk
- 9. ¾ Walk
- 10. Double Bounce Walk
- 11. Skipping

- 12. Head Turn Animation
- 13. Animal Walk
- 14. Weight Animation
- 15. Effects Animation: Flames and Smoke
- 16. Layout Design & Background Painting

#### **Reference Books**

- 1. Muybridge's Animals in Motion By Eadweard Muybridge
- 2. Muybridge's Human Figure in Motion By Eadweard Muybridge
- 3. Animator's Survival Kit Richard Williams
- 4. Cartoon Animation Preston Blair
- 5. The Illusion of Life Frank Thomas & Olie Johnstan
- 6. Cartoon Animation Preston Blair

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

#### **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes				
	a b c D				
1	L	L	L	L	
2	M	M	M	M	
3	M	M	M	M	
4	Н	Н	Н	Н	
5	Н	Н	Н	Н	

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
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CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM206** 

**Course Title: VISUAL STUDIES** 

Pre-requisite(s): AM102 Introduction to Visual Studies, AM108 Theory of Visual Studies

Credits: 2 L:0 T: 0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: III / II

Branch: BAM Type: Practical

#### Course Objectives

This course enables the students to:

A	Understand about composition of nonliving objects, Light and shadow. Ability to understand volume and size comparison
В	Understand importance of typography to express certain emotion.
С	Understand human anatomy, movements, muscles and skin texture
D	Understand different animals' anatomy, behavior and visual characteristics
Е	Understand nature, perspective, colour perspective.

#### **Course Outcomes**

After the completion of this course, students will be able to:

	s completion of this course, students will be use to:
1	Improve ability to draw objects natural way. Improve observation skill.
2	Improve ability to visualize and create typography style as per the emotion and meaning of word.
3	Able to draw human figure properly.
4	Able to draw different type of animal figure.
5	Able to draw landscape, Create background for animated film.

**Objective**: Improve Students drawing skills, which is an essential skill to work all fields involved with Animation and multimedia. Aim to improve student's skill from the figurative work to background and props designing.

#### **Syllabus**

Module I: Still life [No. of practical: 8]

Assignment :1. Still life of composition with hard materials objects

2. With soft materials like cloth, fruits, vegetable, plants etc.

**Module II: Typography** 

[No. of practical: 8]

Assignment: 1. Basic Typography. A-Z with hand.

2. Different word design according to meaning and sound.

**Module III: Human Study** 

[No. of practical: 8]

Assignment: 1. Live model study

2. Gesture drawing

3. Life sketching Module IV:

**Animal study** 

[No. of practical: 8]

Assignment: 1. Animal study from Reference book.

2. Animal study from life.

#### Module V: Landscape [No. of practical: 8]

Landscape Study

Topics: Landscape study with reference and outdoor study

#### Reference book

- 1. Art of Still Life Drawing, Sterling Publishing Co.Inc.Staff
- 2. Still-life drawing and painting, Jack Hamm
- 3. Human Figure Drawing: Drawing Gestures, Postures and Movements, Daniela Brambilla
- 4. How to Draw the Human Figure, By Tom Richardson
- 5. The Anatomy of Style, Patrick J. Jones
- 6. Figure Drawing: Design and Invention, Michael Hampton
- 7. Animal Drawing and Anatomy, By Edwin Noble
- 9. Animal Drawing: Anatomy and Action for Artists, By Charles Knight
- 10. Complete Guide to Drawing Animals, Gottfried Bammes
- 11. The Art of Painting and Drawing Animals, By Fredric Sweney
- 12. Landscape Painting: Essential Concepts and Techniques for Plein Air By Mitchell Albala
- 13. Carlson's Guide to Landscape Painting, By John F. Carlson
- 14. Dimensional Typography: Words in Space: Kiosk Report #1, By J. Abbott Miller
- 15. The Art of Type and Typography: Explorations in Use and Practice By Mary Jo Krysinski
- 16. The Fundamentals of Typography: Second Edition, By Gavin Ambrose, Paul Harris

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

## Course Delivery Method Lecture by use of boards/ LCD/ Projectors / OHP Projectors Tutorial / Assignment Seminars Mini Projects / Projects Laboratory Experiments / Teaching Aids

Industrial / Guest Lecture	
Industrial Visits / in-plant training	
Self-learning such as use of NPTEL materials and internets	
Simulation	

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

#### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM207** 

**Course Title: 3D Modeling Techniques** 

**Pre-requisite(s):** Nil

Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: III / II

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

Α.	Understand issues in Object Modeling
В.	Differentiate Organic and Inorganic Modeling
C.	Create high Poly and low poly models
D.	Understand various advance tools and techniques
Е.	Create 3D models for Games

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Fundamentals of 3D modeling
2.	Create low and high poly 3D models for games, animations etc.
3.	Understand the use of various tools & commands
4.	Understand the concept of proxy meshes
5.	Use deformers and modifiers for complex 3D models

#### **Syllabus**

Module I [No. of Lectures: 6]

Topics:

Fundamentals of 3D modelingUnderstand the use of various tools & commands

Module II [No. of Lectures: 6]

Topic:

Organic and Inorganic Modeling Understanding issues while modeling

Module III [No. of Lectures: 6]

Topic:

Low poly& high Poly 3D modelling

Module IV [No. of Lectures: 6]

Topic:

Use deformers and modifiers for complex 3D models

Module V [No. of Lectures: 6]

Topic:

Product Modeling, Use of Proxy mesh and its concepts.

### **Reference Book:**

- 1. Autodesk 3ds Max 2018 Complete Reference Guide by Kelly L. Murdock
- 2. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
- 3. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch
- 4. Autodesk Maya 2018A Comprehensive Guide by Tickoo Sham

**Gaps** in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	В	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods					
CD	Course Delivery Method	Course	Course Delivery		
		Outcome	Method		
CD1	Lecture by use of boards/ LCD/	C01	CD1, CD2, CD3		
	Projectors / OHP Projectors				
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3		
CD3	Seminars	C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,		
			CD4, CD5		
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5		
	Aids				
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				
CD8	Self-learning such as use of NPTEL				
	materials and internets				
CD9	Simulation				

Detailed Syllabus of B.Sc. A&M, IV semester



**Course Code: AM208** 

**Course Title: Communication for Development** 

**Pre-requisite(s): Nil** 

Credits: 3 L:3 T:0 P:0 Class schedule per week: 03

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: IV / II

Branch: BAM Type: Lecture

### **Course Objectives**

This course enables the students to:

A.	Recognize the process of development
В.	Identify Sustainable Development
C.	Discover conditions and requirements that will lead to sustainable development
D.	Explore how communication plays a role in the process.
Ε.	Discover how people's participation make development sustainable
F.	Suggest possible use of communication to make the process more responsive
G.	Assignments will involve the students in small action research projects wherein they
	will interact with the community to come to conclusions regarding popular problems
	related to development using communication as a tool.

#### **Course Outcomes**

After the completion of this course, students will be able to:

	T
1.	Realize communication as a tool for development
2.	Respect people's role in the process of communication
3.	Recognize the role communication plays in the process of communication.
4.	. Identify elements that promote people's participation
5.	Distinguish genres of communication like persuasive communication, advocacy
	communication, internal communication etc.

### **Syllabus**

# Module I DEVELOPMENT Topics

[No. of Lectures: 6]

- Pres
  - Definition of Development (1),
  - Sustainable Development, (3)
  - Human Rights, (1)
  - Amnesty International (1)

# Module II POPULATION Topics

[No. of Lectures: 6]

- Population Pyramid (1)
- Base of the Pyramid population (1)
- Marginalized Population (1)
- Below Poverty Line Population (1)
- Denial, Deprivation & Exploitation (2)

## Module III COMMUNICATION Topics

[No. of Lectures:6]

- Definition, Tools and Principles (1)
- Receiver, Audience, Target Audience (1)
- Types of Communication (World Bank) (1)
- Information Dissemination & Customization (1)
- Communication as a Psychosomatic Social Process (1)
- Reversal of Learning (1)

## Module IV COMMUNICATION IN ECONOMIC GOVERNANCE [No. of Lectures: 5] Topics

- Money lending & Role of Banks (1)
- Governance for Inclusion (1)
- Self-help Groups and Value addition (1)
- Role of Communication in the process (1)
- Guest Lecture (1)

#### Module V COMMUNICATION RESEARCH

[No. of Lectures: 5]

### **Topics**

- Qualitative & Quantitative Research (1)
- Action Research (1)
- Communication Needs Analysis (1)
- Communication Based Analysis (1)

#### **Text Book:**

B K Pattanaik, 'Introduction to Development Studies, Sage Texts, ISBN 9789351508205

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes			
	a	В	С	d
1	M	M	M	M
2	M	M	M	M
3	L	L	L	L
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM209** 

**Course Title: Graphics Design Communication** 

**Pre-requisite(s): Nil** 

Credits: 3 L: 2 T:0 P:2 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: IV / II

**Branch: BAM** 

**Type: Lecture and Practical** 

### **Course Objectives**

This course enables the students to:

A	Understand Graphic Designing Concepts
В	Gain Knowledge About Various Elements of Graphic Design Communication
С	Gain Knowledge About Various Graphic Designing Software's
D	Understand Emerging Technologies in the Field of Graphic Designing

#### **Course Outcomes**

After the completion of this course, students will be able to:

	tempretien er tille tettes, studente will et tiere tet
A	Develop Technical Knowhow to Design Graphics
В	Develop Technical Details Related to Various Elements of Graphic Technologies
С	Understand the Role Played by Various Multimedia Platforms
D	Design a Graphic Project

#### **Syllabus**

### **Module I : Principles of Design**

[No. Of Lectures: 8]

Balance, Contrast, Emphasis / Dominance, Harmony, Movement & Rhythm, Proportion, Repetition / Pattern, Unity & Variety. Modern Art Movement: Impressionist, Cubism, Fauvism, Murals and Abstracts, War Art Movement: Western Philosophy, Post 2<sup>nd</sup> World War Art Movements, Gestalt Principles.

### Module II Understanding Design

[No. Of Lectures: 8]

Composition & rule of 3<sup>rd</sup>, Use of geometrical patterns in design like circle, square, rectangle and triangle, 2D & 3D designs, Understanding colour wheel.

#### **Module III Computer Aided Designing:**

[No. Of Lectures: 8] Introduction to Adobe Illustrator, Toolbar, Layers, Brushes, Effects, Creating Logos, Corporate Designs, Designing Posters, Book Cover Design, Brochure and

Packaging Design, Designing Letterheads

#### **Module IV Introduction to Typography**

[No. Of Lectures: 8]

History of Typography, Different type of Typefaces, Serif & Sans-Serif, Uses of

**Typefaces** 

Module V Introduction to UI and UX Designing[No. Of Lectures:8] Introduction to UI and UX Designing, Task Centered Designing, Brainstorming, Choosing the Users, Design Principles, Critique of the Design

#### **Text Book:**

- 1. The Design Process by Karl Aspelund
- 2. Adobe Photoshop CC Classroom
- 3. Adobe Illustrator CC Classroom
- 4. Design Thinking by Gavin Ambrose/Paul Harris
- 5. Killer UX Design by Jodie Moule

#### **Reference Book:**

- 1. Fundamentals of Creative Design by Gavin Ambrose/Paul Harris
- 2. Fundamentals of Graphic Design by Gavin Ambrose/Paul Harris

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
<b>Examination Marks</b>					

### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes				
	a	b	С	d	
1	L	L	L	L	
2	M	M	M	M	
3	M	M	M	M	
4	Н	Н	Н	Н	
5	Н	Н	Н	Н	

L= Low M= Medium H= High

Mapping b	Mapping between COs and Course Delivery (CD) methods						
CD	Course Delivery Method	Course Outcome	Course Delivery Method				
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3				
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3				
CD3	Seminars	C03	CD1, CD2, CD3				
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5				
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5				
CD6	Industrial / Guest Lecture						
CD7	Industrial Visits / in-plant training						
CD8	Self-learning such as use of NPTEL materials and internets						
CD9	Simulation						



**Course Code: AM210** 

**Course Title: Research in Gaming** 

**Pre-requisite(s): Nil** 

Credits:3 L:3 T:0 P:0 Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: IV / II

Branch: BAM Type: Lecture

### **Course Objectives**

This course enables the students to:

Α.	Make student learn the process of research in context of multimedia and games
В.	Become aware of the major researches taken place so far in the domains of Digital
	Games and Multimedia

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Develop the skills to conduct a successful research required to conduct any project
	or develop strategies in today's competitive environment
2.	Write a research paper.
3.	Can take up research as a career or further study (Masters and PhD)

### **Syllabus**

Module I [No. of Lectures: 6]

### **Topics**

- 1. Basics Concepts about Research
- 2. Research Process
- 3. Major Types of Research
- 4. How to Review the Literature Review and Conduct Ethical Studies

Module II [No. of Lectures: 6]

### **Topics**

- 1. Strategies of Research Design
- 2. Qualitative and Quantitative Sampling
- 3. Qualitative and Quantitative Measurement
- 4. Analysis of Quantitative Data
- 5. Analysis of Qualitative Data

### Module III [No. of Lectures:6]

### **Topics**

- 1. Qualitative Approaches for Studying Games
  - a. Game Play Analysis
  - b. Games and information
- 2. Qualitative Approaches for Studying Play and Player

- a. Ethnography
- b. In-depth interviews
- c. Studying thoughts
- 3. Focus Group Discussion
- 4. Field Research and Focus Group Research

Module IV [No. of Lectures: 5]

### **Topics**

- 1. Experimental Research
- 2. Survey Research
- 3. Writing the Research Report and the Politics of Social Research

Module V [No. of Lectures: 5]

**Topics** 

- 1. Study of Various Research Papers
- 2. Project: Research Paper Writing

#### **Text Book:**

- 1. Game Research Methods, Petri Lankoski and Staffan Bjork (2018)
- 2. Social Research Methods: Qualitative and Quantitative Approaches, W. Lawrence Neuman (2014)

#### **Reference Book:**

- 1. Real Time Research Seann Dikkers, Eric Zimmerman, Kurt Squire, ETC Press
- 2. New Media A Critical Introduction, Martin Lister, Jon Dovey, Seth Giddings, Iain Grant, Kieran Kelly (2009), Routledge
- 3. The SAGE Encyclopedia of Qualitative Research Methods, Lisa M. Given (2008), Sage
- 4. Qualitative Research: Studying How Things Work by Robert E. Stake (2010)
- 5. Games user research: a case study approach by Garcia-Ruiz, Miguel A, Author: Garcia-Ruiz, Miguel A, (2016), CRC Press
- 6. Geoffrey Marczyk et al (2005), Essentials of Research Methodology, John Wiley & Sons Inc.
- 7. Qualitative Research Methods, Sarah J. Tracy (2013)
- 8. Research Journals and Online Libraries of Research Papers

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

### POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

### **Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure**

### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment	
Quiz (I, II)	20	
Mid-term Examination Marks	25	
Attendance	5	
End-term Examination Marks	50	

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes					
	a B c d					
1	Н	Н	Н	Н		
2	M	M	M	M		
3	M	M	M	M		
4	L	L	L	L		
5	Н	Н	Н	Н		

L= Low M= Medium H= High

Mapping b	etween COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



Course Code: AM211

**Course Title: Advanced Animation Techniques** 

Pre-requisite (s): Nil Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: IV / II

**Branch: BAM** 

**Type: Practical (Workshop)** 

### **Course Objectives**

This course enables the students to:

11110 0001	or villation the statement to
A.	Make the student familiar with the fundamental theories of different medium of 2D
	Animation Techniques
В	Understanding implementation of Animation Principles through assignments
C.	Learning related hardware, software and other tools for animation techniques
D.	Gaining experience of working in a team
E.	Gaining experience of working in a group

#### **Course Outcomes**

After the completion of this course, students will be able to:

1 11101 1110	completion of this course, students will be usic to:
1.	Submit animation assignments based on animation principles
2.	Handle the Light Box and Line Test Machine and related softwares like Adobe Animate CC and Aftereffects CC
3.	Understand the process of key frame setting inDigital & Classical Animation Techniques
4.	Understand the process of In-betweening, Breakdown, and Clean Ups
5.	Experience in working within a timetable and schedule

### **Syllabus**

### Animation Assignments based on the following topics:

- 1. Layout & Design
- 2. Facial Expressions & Animation
- 3. Various Walks
- 4. Various Run Cycles
- 5. Takes & Accents
- 6. Lip Synchronization
- 7. Dialogue & Action (Acting for Animation)
- 8. Animals in Motion (Four Legged)
- 9. Two or More Characters in a Scene
- 10. Drama & Psychological effects
- 11. 2D Effects: Rain, Fire, Explosion, Water etc.
- 12. Background Painting
- 13. Mini Project

#### **Reference Books**

- Muybridge's Animals in Motion by Eadweard Muybridge
- Muybridge's Human Figure in Motion by Eadweard Muybridge
- Animator's Survival Kit Richard Williams
- Cartoon Animation Preston Blair
- The Illusion of Life Frank Thomas &OlieJohnstan
- Animator Survival Kit (Author: Richard Williams)
- Timing for Animation (Author: Harold Whitaker)
- Animation: The Mechanics of Motion (Author: Chris Webster)

### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

## **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

CD	Course Delivery Method	Course	<b>Course Delivery</b>
		Outcome	Method
CD1	Lecture by use of boards/ LCD/	C01	CD1, CD2, CD3
	Projectors / OHP Projectors		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,
			CD4, CD5
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5
	Aids		
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		



Course Code: AM212

**Course Title: Visual Development** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: IV / II

**Branch: BAM** 

**Type: Practical** 

### **Course Objectives**

This course enables the students to:

A. To progress the student's illustration ability and skill.

#### **Course Outcomes**

After the completion of this course, students will be able to:

1. The student will be able to handle intermediate topics in drawing and illustration

### **Topics / Exercises**

### **Module I**

1. Studying master illustration and designers

### **Module II**

1. Introduction to newer tools of illustration and painting, digital media

### **Module III**

1. Still life and cast drawing

### **Module IV**

- 1. Figure drawing
- 2. Short and longer intervals

### Module V

- 1. Figure drawing using pencil, crayon, charcoal
- 2. Intro to composition, editing and combining drawings
- 3. Intro to concept art,
- 4. Process of concept art

### **Textbook:**

- 1. Successful drawing by Andrew Loomis
- 2. Figure drawing without a model Ron tinnier

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

### **Indirect Assessment**

1. Student feedback on Faculty

### 2. Student feedback on Course outcome

### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM213** 

**Course Title: Digital Film Production** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: IV/ II

**Branch: BAM** 

**Type:Practical** 

### **SYLLABUS**

### **Topics / Exercises**

### **Module I**

- 1. Basic art of filmmaking using currently available digital software/hardware
- 2. Production planning and scheduling
- 3. Budget
- 4. Field log and footage management

### **Module II**

- 1. Understanding video formats and signals
- 2. Component and composite signals
- 3. Digitization and capturing the footage
- 4. Work station management
- 5. Disk space & speed requirement

### **Module III**

- 1. Editing basics
- 2. Linear and non-linear editing
- 3. Video tape recording systems
- 4. Disc based recording systems
- 5. Offline & online editing

- 6. Batch capture
- 7. Time code & edit decision list

### **Module IV**

- 1. Video leader
- 2. Montage editing
- 3. Transition techniques
- 4. Video compression
- 5. Video & audio effects & transitions

### **Module V**

- 1. Split screen technique
- 2. Sound editing and mixing
- 3. Graphics and titles
- 4. Video compression
- 5. Project management
- 6. Mixed and un-mixed versions

### **Assignment:**

Students should submit a film (in groups) at the end of the semester.

### **Reference Books:**

- 1. Television Production Hand Book 7th edition (Author: Herbert Zettl)
- 2. Cinematic Motion (Author: Steven D. Katz)
- 3. The five C's of Cinematography

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets

Simulation

### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods	S	
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		

\*\*\*\*



**Course Code: AM214** 

Course Title: Advance 3D Modeling, Texturing, Lighting & Rendering

Pre-requisite(s): Nil Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: IV / II

**Branch: BAM Type: Practical** 

### **Course Objectives**

This course enables the students to:

A.	Understand and execute Advanced 3D Modeling techniques
В.	Concept of texturing, UV mapping etc
C.	Understand basics of lighting
D.	Study of different lighting systems
Ε.	Render image and image sequence

### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Created complex 3D models
2.	Texture simple as well as complex 3D models
3.	Understand the use of lighting systems in 3D environment
4.	Concept of shadows and depth map
5.	Render the final output as per requirement

### **Syllabus**

Module I [No. of Lectures: 6]

Topics:

Advance 3D modeling techniques for texturing and lighting

Module II [No. of Lectures: 6]

Topic:

Concepts of materials and textures, UV unwrapping &UV mapping,

Bump, displacement/normal map, Occlusion map etc.

Module III [No. of Lectures: 6]

Topic:

Introduction to light: Understand the Importance of light to create a scene,

Use of HDRI and Image based lighting

Module IV [No. of Lectures: 6]

Topic:

Concept of lighting system,

Concept of Shadows and Depth map,

Module V [No. of Lectures: 6]

Topic:

Understanding various rendering techniques for the quality output as per the end user requirements and maintaining the resolution.

Understanding Camera and its attributes

#### **Reference Book:**

- 1. Autodesk 3ds Max 2018 Complete Reference Guide by Kelly L. Murdock
  - 2. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo (Author)
  - 3. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch
  - 4. Autodesk Maya 2018A Comprehensive Guide by Tickoo Sham

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

### **Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure**

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes				
	a	b	С	D	
1	L	L	L	L	
2	M	M	M	M	
3	M	M	M	M	
4	Н	Н	Н	Н	
5	Н	Н	Н	Н	

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		

Detailed Syllabus of B.Sc. A&M, V semester



**Course Code: AM301** 

**Course Title: Visual Narrative** 

Pre-requisite(s): Nil

Credits:3 L:2 T:1 P:0 Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: V / III

**Branch: BAM** 

**Type: Lecture and Tutorial** 

### **Course Objectives**

This course enables the students to:

A. To teach the student writing and drawing for storytelling and narration.

### **Course Outcomes**

After the completion of this course, students will be able to:

1. The student will be able to write and draw for comics, graphic novels and storyboards.

#### **Syllabus**

Module I [No. of Lectures: 6]

### **Topics**

- Understanding sequential art,
- Storyboarding examples,
- Thumbnail examples,
- animatic examples

Module II [No. of Lectures: 6]

### **Topics**

- Comics and graphic novels
- Brief history,
- Major contributors,
- Frequently used terms

Module III [No. of Lectures:6]

#### **Topics**

• Narrative exercises, Single page comics, 24-hour comics

Module IV [No. of Lectures: 5]

#### **Topics**

- Panel design and camerawork,
- Understanding distance and cropping,
- POV examples

Module V [No. of Lectures: 5]

### **Topics**

- Story structure and narrative arc, Essential components of a story
- Assignment- Creating a one-page comic
- Assignment- Creating a multi-page comic (More than 2 pages)

### **Text Book:**

- Drawing words and writing pictures by Jessica abel and Matt madden,
- Graphic storytelling and visual narrative Will eisner

### Gaps in the syllabus (to meet industry / Profession requirements)

### POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes			
	a	b	С	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM302** 

**Course Title: Compositing & VFX** 

**Pre-requisite(s): Nil** 

Credits: 3 L: 2 T:0 P:2 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: V / III

**Branch: BAM** 

**Type: Lecture and Practical** 

### **Course Objectives**

This course enables the students to:

A	Understand various elements of Compositing and VFX
В	Learn About the Various Uses of Compositing and VFX in Cinema
С	Learn About the Various VFX and Compositing Software's
D	Understand Emerging Technologies in the Field of VFX and Compositing

### **Course Outcomes**

After the completion of this course, students will be able to:

7 11101 1110	completion of this course, students will be usie to:
A	Master Various Uses of VFX and Compositing
В	Master Various VFX and Compositing Software's
С	Learn to Troubleshoot VFX and Compositing Difficulties
D	Design a VFX and Compositing Project by Combining Various Elements

### **Syllabus**

### **Module I:** What is VFX

[No. Of Lectures: 8]

History of VFX, Difference between VFX &SFX, Different kinds of VFX Software's: Node based & Layer based

Module II Introduction to VFX used in modern films

[No. Of Lectures: 8]

Blue screen, Motion Tracking, Atmosphere, Rotoscoping, Wire Removal, Masking

**Module III**Animating layers

[No. Of Lectures: 8]

Transformation techniques ,Filters ,Pivot Point ,Motion Tracking , Stabilizing

a Shot

Module IVUse of Lights, Camera & Color Correction [No. Of Lectures:8]

Applying Lights & Camera in Compositing, Color Correction, Using Effects, Rendering

**Module V**Different types of digital images & file formats [No. Of Lectures: 8]

Pixel definition (24 bit & 32 bit), RGBA Color Mode, 4 Channel format, Different file formats & their utilities, Different output formats & their utilities

#### **Text Book:**

- 1. Digital Compositing for Film and Video by Steve Wright
- 2. After Effects Apprentice Trish & Chris Myers

### **Reference Book:**

1. Adobe After Effects CC Classroom by Lisa Fridsma (Author), Brie Gyncild

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

### **Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure**

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment Components	CO1	CO2	CO3	CO4	CO5
Quiz (I, II)	<b>√</b>	✓	✓		

End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

## **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM303** 

**Course Title: 2D Digital Animation** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: V / III

**Branch: BAM Type: Practical** 

### **Course Objectives**

#### This course enables the students to:

A.	Make the student familiar with the fundamental theories of different medium of 2D Animation Techniques
В	introduce students to the animation as an art form; implementing a firm understanding of timing, animation principles and the scope of techniques animation can cover.
C.	Learning related hardware, software and other tools for animation techniques
D.	learn industry standard practices in applied creativity
E.	Gaining experience of working in a group

### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Identify and apply the 12 Animation Principles through Digital Animation
2.	Work on various softwares like Adobe Flash, Adobe Animate CC and Aftereffects
	CC
3.	Understand timing and motion through key-frames, holds and in-betweens
4.	Demonstrate skills in the use of industry standard tools
5.	Experience in working within a timetable and schedule

### **Syllabus**

### **Animation Assignments based on the following topics:**

- 1. Introduction to Digital Animation
- 2. Digital Animation Softwares
- 3. Compare differences between Paperless Animation and Traditional Animation
- 4. Basic Tools for Digital Animation
- 5. Use of Camera and Pegs
- 6. Digital Rough Animation Techniques

- 7. Working on Characters
- 8. Working on Digital Backgrounds
- 9. 2D Digital Rigging
- 10. Ink & Paint
- 11. Symbol Based Animation using Library
- 12. Construct multi-layered scene
- 13. Working on Sound & Voice Over
- 14. Compositing for 2D Digital Animation
- 15. Final Cut

**Assignment**-Student will prepare approx. 15to 20 Seconds of Animation using proper timing, spacing and acting. The situation, action & dialogue would be provided to every student.

#### **Reference Books:**

- 1. The Animation Book: A Complete Guide to Animated Film Making- From Flip Books to Sound Cartoons to 3D By Kit Laybourne and John Cane Maker
- 2. Animation Unleashed: 100 Principles Every Animator, Comic Book Writers, Film Makers, Video Artist and Game Developer By Ellen Besen& Bryce Hallett
- 3. Creating Characters with Personality: For Film, TV, Animation, Video Games and Graphics Novels By Tom Ban Croft and Glen Keane
- 4. Producing Animation By Catherine Winder and Zahra Dowlatabadi
- Creating Animated Cartoons with Character: A Guide to Developing and Producing Your Own Series for TV, the Web, and Short Film By Joy Murray
- 6. Animation from Pencils to Pixels: Classical Techniques for the Digital Animator by Tony White
- 7. The Animation Book: A Complete Guide to Animated Filmmaking
- 8. Adobe Animate CC Classroom in a Book 2018, release by Pearson (English, Paperback, Russell Chun)

**Gaps in the syllabus (to meet industry / Profession requirements)** 

POs met through Gaps in the syllabus

**D** 11

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

### **Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure**

### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

### **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes				
	a	b	С	D	
1	L	L	L	L	
2	M	M	M	M	
3	M	M	M	M	
4	Н	Н	Н	Н	
5	Н	Н	Н	Н	

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods							
CD	Course Delivery Method	Course	Course Delivery				
		Outcom	ne Method				
CD1	Lecture by use of boards/ LCD/	C01	CD1, CD2, CD3				
	Projectors / OHP Projectors						
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3				
CD3	Seminars	C03	CD1, CD2, CD3				
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,				
			CD4, CD5				
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5				
	Aids						
CD6	Industrial / Guest Lecture						
CD7	Industrial Visits / in-plant training						
CD8	Self-learning such as use of NPTEL						
	materials and internets						
CD9	Simulation						



**Course Code: AM304** 

Course Title: 3D Animation, Rigging and Skinning

Pre-requisite(s): Nil Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: V / III

**Branch: BAM Type: Practical** 

# **Course Objectives**

This course enables the students to:

A.	Understanding the principles of IK and FK
В.	Rigging and Skinning characters
C.	Understand various shortcuts and techniques for animating a 3D object
D.	Animate attributes like color, transparency etc.
E.	Animate a 3D character & do Camera animation

# **Course Outcomes**

After the completion of this course, students will be able to:

1.	Understanding the principles of IK and FK and apply to characters
2.	Do Rigging and Skinning of various characters
3.	Animate simple objects and its attributes using shortcuts
4.	Animate a 3D character
5.	Do camera animation

# **Syllabus**

Module I [No. of Lectures: 6]

Understanding the principles of IK and FK and apply to characters

Module II [No. of Lectures: 6]

Rigging and Skinning

Module III [No. of Lectures: 6]

Animate simple objects and its attributes like color, transparency

Animation through deformers and modifiers

Module IV [No. of Lectures: 6]

3D Character Animation, Walk cycles and Run cycles

Module V [No. of Lectures: 6]

Camera animation

# **Reference Book:**

- 1. Autodesk 3ds Max 2018 Complete Reference Guide by Kelly L. Murdock
- 2. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
- 3. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch
- 4. Autodesk Maya 2018A Comprehensive Guide by Tickoo Sham

# **Gaps in the syllabus (to meet industry / Profession requirements)**

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem	✓	✓	✓	✓	✓
Examination Marks					
Mid-Term			✓	✓	✓
<b>Examination Marks</b>					

# **Indirect Assessment**

- Student feedback on Faculty
- Student feedback on Course outcome

Mapping between COs and Course Delivery (CD) methods						
CD	Course Delivery Method	Course Outcome	Course Delivery Method			
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3			
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3			
CD3	Seminars	C03	CD1, CD2, CD3			
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5			
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5			
CD6	Industrial / Guest Lecture					
CD7	Industrial Visits / in-plant training					
CD8	Self-learning such as use of NPTEL materials and internets					
CD9	Simulation					

Detailed Syllabus of B.Sc. A&M, VI semester



**Course Code: AM305** 

**Course Title: Direction for Animation** 

**Pre-requisite(s): Nil** 

Credits: 3 L:3 T:0 P:0 Class schedule per week: 03

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: VI / III

Branch: BAM Type: Lecture

Course Overview: This course will teach you various aspects of directional techniques, step by step procedure how to prepare

# **Course Objectives**

This course enables the students to:

1.	Provide the student with a thorough introduction to the field of animation Direction
2.	Understand step by step process of animation film development in details
3.	Understand storyboarding, film visualization, and their process
4.	Understand technical aspects of film making in terms of animation film production
5.	Understand theoretical and critical concepts when making style choices in their own
	projects.

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Demonstrate a sound understanding of Directional Techniques of Animation Films
2.	Demonstrate a sound understanding of Animation Film Making
3.	Apply fundamental of Animatic skills through the creation of sequential images of storyboarding.
4.	Apply fundamental processes of visual & technical problems solving through animation and live action shots.
5.	Design animation short project by applying various mediums, stylizations, and techniques of film making.

# **Syllabus**

Module 1 (8 Lectures)

Introduction- Direction for Animation, Responsibilities of the Director, Animation Film Techniques, Story, Casting, Music, Sound, preparing to make bar sheets, Track Analysis, and the role of Asst. Director. Selected Case studies, and Study on Animation Directors.

Module 2 (8 Lectures)

Production Process of 2D, 3D, and Experimental Animation Films- Pre-Production Process, Production Process and Post-Production Process. Selected Case studies, and Study on Animation Directors. Independent Animation Film Makers.

Module 3 (8 Lectures)

Animation Storyboarding, Purpose, Building the Story, Create the Script, Necessary Drawing Skills, storyboard your movie, Quick Method for Producing fast and rough Storyboarding, Camera Moves, Camera Angles, Important Elements of Storyboarding, Transition, Thumbnailing in Storyboarding, Method Analysis of Storyboarding, Working on Animatics. Selected Case studies, and Study on Animation Directors.

Module 4 (8 Lectures)

The Basic Applied, Staging Dialogue Sequences, Staging Dialogue Sequences with 2 Subjects and Staging Dialogue Sequences with 3 Subjects. Selected Case studies, and Study on Animation Directors.

Module 5 (8 Lectures)

Point of View, Editing Temporal Connections, Composing Shots: Spatial Connections. Selected Case studies, and Study on Animation Directors. Independent or Group Project assign by the subject teacher.

# **Text Books:**

- 1. Animation from Script to Screen by Shamus Culhane
- 2. Film Directing: Shot by Shot: Visualizing from Concept To Screen By Steven D. Katz

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
<b>Examination Marks</b>					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes				
	a b c D				
1	L	L	L	L	
2	M	M	M	M	
3	M	M	M	M	
4	Н	Н	Н	Н	
5	Н	Н	Н	Н	

L= Low M= Medium H= High

Mapping b	etween COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM306** 

**Course Title: Motion Graphics** 

**Pre-requisite(s): Nil** 

Credits: 3 L: 2 T:0 P:2 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: VI / III

**Branch: BAM** 

**Type: Lecture and Practical** 

# **Course Objectives**

This course enables the students to:

A	Understanding the Concept of Animating the Graphics
В	Understanding the Software Related to Motion Graphics
С	Understanding Steps Related to Designing Motion Graphics Project

#### **Course Outcomes**

After the completion of this course, students will be able to:

A	Mastering the Tools related to Motion Graphics Software
В	Learning About Emerging Technologies in this Field
С	Creating a Motion Graphics Project

# **Syllabus**

# Module I Creating Composition for Motion Graphics[No. Of Lectures: 8]

Defining Composition, Adding Layers, Layer blending, Size of Composition, Resolution & Quality, Safe areas, Ruler& Guide

# Module II Basic Animation [No. Of Lectures: 8]

Definition of Timeline, Broadcasting Standards & Frame Rate, Different Types of Keyframes, Various File formats for Output, Textacy (Using Texts in Motion Graphics): Creating & Animating Text

# Module III Layer Blending

[No. Of Lectures: 8]

Different Blending Techniques, Different Techniques of Creating Masks: Painting & Using Shape Tools

# Module IV Use of Lights, Camera & Color Correction [No. Of Lectures: 8]

Applying Camera & Lights, Adjusting Camera & Light Settings, Color Correction

### **Module VNesting Composition & Pre-Comp**

[No. Of Lectures: 8]

What is a Nested Composition, Uses of Nested Composition Creating a Nesting Composition, what is a Pre-Comp, Uses of Pre-Comp, Creating a Pre-Comp

#### **Text Book:**

- 1. Creating Motion Graphics with After-Effects Trish & Chris Myers
- 2. After Effects Apprentice Trish & Chris Myers

#### **Reference Book:**

1. Motion Graphics Design by Jon Krasner

# **Gaps in the syllabus (to meet industry / Profession requirements)**

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment		
Quiz (I, II)	20		
Mid-term Examination Marks	25		

Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping be	etween COs and Course Delivery (CD) methods	3		
CD	Course Delivery Method	Course	Course Delivery	
		Outcome	Method	
CD1	Lecture by use of boards/ LCD/	C01	CD1, CD2, CD3	
	Projectors / OHP Projectors			
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,	
			CD4, CD5	
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5	
	Aids			
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL			
	materials and internets			
CD9	Simulation			



**Course Code: AM307** 

**Course Title: Advance 3D Dynamics** 

Pre-requisite(s): Nil Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: VI / III

**Branch: BAM Type: Practical** 

# **Course Objectives**

This course enables the students to:

A.	Understand 3D Dynamics Workflow
В.	Understand Rigid body Dynamics
C.	Understand particle system and its workflow
D.	Cloth Dynamics simulation
Ε.	Render various 3D Dynamics and Compositions

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Understand the workflow as well as tools and techniques involved to create 3D
	Dynamics effect
2.	Understand dynamics of cloth simulation and particle attributes
3.	Render to see the final output

# **Syllabus**

Module I [No. of Lectures: 6]

Understand 3D Dynamics Workflow, Study of various tools and commands

Module II [No. of Lectures: 6]

Understand Rigid body Dynamics and soft bodies, working with rigid bodies

Module III [No. of Lectures: 6]

Understand particle system and its workflow, particle attributes and its uses

Module IV [No. of Lectures: 6]

Cloth Dynamics simulation, use of fields and forces for simulation

Module V [No. of Lectures: 6]

Render various 3D Dynamics and Compositions

#### **Reference Book:**

- 1. Autodesk 3ds Max 2018 Complete Reference Guide by Kelly L. Murdock
- 2. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
- 3. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch
- 4. Autodesk Maya 2018A Comprehensive Guide by Tickoo Sham

# Gaps in the syllabus (to meet industry / Profession requirements)

# POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes				
	a	b	С	D	
1	L	L	L	L	
2	M	M	M	M	
3	M	M	M	M	
4	Н	Н	Н	Н	
5	Н	Н	Н	Н	

Mapping	between COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM308** 

**Course Title: DEGREE SHOWCASE PROJECT** 

Pre-requisite(s): Nil Credits: 8 L:0 T:0 P:0 Class schedule per week: 00

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI / III

**Branch: BAM Type: Project** 

# **Course Objectives**

This course enables the students to:

A. To create a project in their preferred domain under the mentorship and guidance of subject teacher

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Each student will come up with a project which will help him / her to get a job in industry by showcasing it to prospective employers.
2.	It will help students to hone their skills and achieve perfection

# **SYLLABUS**

An individual project will be compiled by the student under the supervision of an internal supervisor. Every student will choose one topic from the syllabus as per their area of interest. Both the subject and the name of internal supervisor will be duly approved by the academic in-charge of the institute. The Portfolio will be submitted by the students at least one week prior to the final examination. This Portfolio will be reviewed by the internals examiners appointed by the Director.

Course Delivery Method
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Internal Marking	60
External Marking	40
Total	100

# Detailed Syllabus of B.Sc. A&M

# PROGRAM ELECTIVES (SKILL DEVELOPMENT COURSES)

# PE(SEC-I)



**Course Code: AM114** 

**Course Title: BASIC DRAWING SKILLS** 

**Pre-requisite(s):** Nil

Credits: 2 L:0 T: 0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: I / I

Branch: BAM Type: Practical

# **Course Objectives**

This course enables the students to:

A	To improve compositional sense, Understanding of Negative and positive space, distribution and control on pencil and ink brush.
В	Understand the position of objects, comparative size of objects and to understand light and shadow.
С	Understand human Proportion, movements, Gesture and to improve drawing quality.
D	Understand different types of leaf shape and plants shape. To improve concentration and observation skill.

# **Course Outcomes**

After the completion of this course, students will be able to:

7 TITCI THE	completion of this course, students will be uble to:
A	Students can create different kind of basic designs for different purpose. Able to
	finish with both brush and pen/pencil.
В	Can draw any kind of objects in front and create volume with light and shadow.
С	Able to draw human figure quickly with proper proportions
D	Able to draw observe and draw leaf and trees in details

**Objective:** Improve Students drawing skills, which is an essential skill to work all fields involved with Animation and multimedia. Aim to Prepare student for all kind of drawing work.

# **Syllabus**

**Module I**: Basic design with monochrome color distribution [No. of practical: 10] Assignment: 1. Design with basic element like square, Triangle, circle, cube etc. Black and white colour distribution with Pencil and with ink and brush.

**Module II**: Object Drawing [No. of practical: 10]

Assignment: 1. Simple object drawing with light and shadow.

**Module III**: Human Sketches [No. of practical: 10]

Assignment: 1. Gesture drawing (from Live)

2. Life sketching, (Outdoor)

**Module IV**: Nature study. [No. of practical: 10]

Assignment: 1. Study of different types of leafs.

2. Study of Different plants.

# Reference books

1. Basic Design: Principles and Practice, Kenneth F. Bates

2. Design Evolution: Theory into Practice: a Handbook of Basic Design

By Timothy Samara

- 3. Basic Design: The Dynamics of Visual Form, Maurice De Sausmarez
- 4. Sar: The Essence of Indian Design, SwapnaaTamhane, Rashmi Varma
- 5. The Fundamentals of Drawing, By Barrington Barber
- 6. Fast Sketching Techniques, David Rankin, Sketching, Pratap Mulick
- 7. Everyday Sketching and Drawing: Learn the Five-Step Technique to Illustrating Your Life, Steven B. Reddy
- 8. Drawing Nature, Stanley Maltzman
- 9.Exercises in Nature Study: With Directions for Observation, Drawing, Description and Modelling, James Nisbet

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes				
	a	b	С	d	
1	L	L	L	L	
2	M	M	M	M	
3	M	M	M	M	
4	Н	Н	Н	Н	
5	Н	Н	Н	Н	

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	(	Course	Course Delivery
		(	Outcome	Method
CD1	Lecture by use of boards/ LCD/	(	C01	CD1, CD2, CD3
	Projectors / OHP Projectors			
CD2	Tutorial / Assignment	(	C02	CD1, CD2, CD3
CD3	Seminars	(	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	(	C04	CD1, CD2, CD3,
				CD4, CD5
CD5	Laboratory Experiments / Teaching	(	C05	CD1, CD2, CD5
	Aids			
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL			
	materials and internets			
CD9	Simulation			

\*\*\*\*



**Course Code: AM115** 

**Course Title: Presentation Design** 

**Pre-requisite(s): Nil** 

Credits: 2 L:1 T:0 P:2 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: I / I

**Branch: BAM** 

**Type: Lecture and Practical** 

# **Course Objectives**

This course enables the students to:

A.	Develop appropriate presentations for projects and job interviews etc.			
В.	Students will learnthe skills to make appealing presentations and all the content			
	which would enhance the presentations like several types of graphics, animations			
	(introductory), video (introductory) etc.			

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Understand the importance of presentations				
2.	Students will be able to make presentations and content for presentation.				
	Presentation designing skills are helpful in every job. There are specific jobs also for				
	people good in this skill				

# **Syllabus**

# Module I [No. of Lectures: 5] Topics

- 1. Aesthetics of a Presentation -
  - Creative concepts about presentations from research stage to execution stage like brainstorming, planning, designing etc.
  - Conceptual Knowledge about Digital Content used in Presentations (such as Types of Graphics, Animations, Layouts (Presentation Themes), Text etc.)
  - User Interface Concepts
  - Colour Theory
  - Visual Communication
  - Case Studies of Good Presentations

# Module II [No. of Lectures: 6]

#### **Topics**

• MS Office or equivalent freeware like Libre Office (Word and Excel)

# Module III [No. of Lectures:6]

**Topics** 

- Graphic Design using Adobe Photoshop or equivalent freeware
- Basic video / sound editing
- Presentation creation in Power Point or equivalent freeware
- Exposure to Free Online Tools or Apps used for presentation design

Module IV [No. of Lectures: 6]

# **Topics**

- 1. Basic video / sound editing
- 2. Presentation creation in Power Point or equivalent freeware
- 3. Exposure to Free Online Tools or Apps used for presentation design

Module V [No. of Lectures: 5]

# **Topics**

1. Project

# Reference Books / Suggested Readings:

- 1. Help Resources from various Software Developers
- 2. How to be a Presentation God: Build, Design, and Deliver Presentations that ...By Scott Schwertly, Publisher: John Wiley and Sons
- 3. Slideology: The Art and Science of Creating Great Presentations by Nancy Duarte, O'Reilly Media Inc.
- 4. Presentation Zen: Simple Ideas on Presentation Design and Delivery, Garr Reynolds
- 5. Lean Presentation Design: How to Create Presentations That Everybody Loves, Maurizio La Cava
- 6. The Non-Designer's Presentation Book: Principles for effective presentation ... By Robin Williams, Peachpit Press

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	A	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	Mapping between COs and Course Delivery (CD) methods					
CD	Course Delivery Method		Course	Course Delivery		
	-		Outcome	Method		
CD1	Lecture by use of boards/ LCD/		C01	CD1, CD2, CD3		
	Projectors / OHP Projectors					
CD2	Tutorial / Assignment		C02	CD1, CD2, CD3		
CD3	Seminars		C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects		C04	CD1, CD2, CD3,		
				CD4, CD5		
CD5	Laboratory Experiments / Teaching		C05	CD1, CD2, CD5		
	Aids					
CD6	Industrial / Guest Lecture					
CD7	Industrial Visits / in-plant training					
CD8	Self-learning such as use of NPTEL					
	materials and internets					
CD9	Simulation					



Course Code: AM116 Course Title: Photography

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: I / I

**Branch: BAM Type: Practical** 

# **Course Objectives**

This course enables the students to:

A.	Theoretical concept of photography
В	Understanding concept of digital camera
C.	Introduction to popular hardware and software
D.	Narrative in photography
E.	Practical assignments

# **Course Outcomes**

After the completion of this course, students will be able to:

1.	The student will understand the various physical equipments of photography
2.	Comprehensive grasp of concepts
3.	Functional use of photography
4.	Professional practices and skills

The Students will create and publish their own portfolio. This portfolio will be in the form a blog, a website or a coffee table book.

# **Topics / Exercises**

# **Module I**

- 1. Introduction to Photography
- 2. Photography Basics

- 3. Camera features
- 4. Working with DSLRs Cameras
- 5. Digital imaging revolution
- 6. Flash media and storage device

# **Module II**

- 7. Advantages and disadvantages of digital photography
- 8. Visualizing
- 9. Shot design
- 10. Lens and exposure
- 11. Focus and depth of filed

# **Module III**

- 12. Creativity with aperture, lens and light
- 13. Digital camera and colour balance
- 14. Frame and composition
- 15. Visual Grammar
- 16. Perspective and angles

# **Module IV**

- 17. Lighting techniques
- 18. Understanding natural and artificial lights
- 19. Fashion photography
- 20. Nature photography
- 21. Street photography
- 22. Story telling through photography

#### **Module V**

- 23. File Compression
- 24. File formats; GIF, JPEG, Tiff, PNG PDF, RAW, etc.
- 25. Image editing and post processing
- 26. Ethics

#### **Suggested Readings:**

- 1. Better Photo Basics by Moitke Jim
- 2. The Digital Photography Book: by Kelby, Scott

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	A	b	c	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method		Course	<b>Course Delivery</b>
			Outcome	Method
CD1	Lecture by use of boards/ LCD/		C01	CD1, CD2, CD3
	Projectors / OHP Projectors			
CD2	Tutorial / Assignment		C02	CD1, CD2, CD3
CD3	Seminars		C03	CD1, CD2, CD3
CD4	Mini Projects / Projects		C04	CD1, CD2, CD3,

			CD4, CD5
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5
	Aids		
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		



**Course Code: AM117** 

**Course Title: Game Appreciation** 

**Pre-requisite(s): Nil** 

Credits: 2 L:2 T:0 P:0 Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: I / I

**Branch: BAM** 

**Type: Lecture and tutorial** 

# **Course Objectives**

This course enables the students to:

A.	Understand the video games as a tool of storytelling and entertainment. Students will
	explore information about earlier games to current games. Students will have
	discussions and observe the creative aspects of digital interactive form of art i.e. Digital
	games.
В.	Learn History and evolution of digital games. Learn to explore and appreciate digital
	games in terms of a Game Designer.
C.	Understand the concept of process of Game Development and Game Development
	parts.
D.	Explore various popular digital games and to analyze them critically.
<b>E.</b>	Share each other's experiences of different games.
F.	Understand the fundamentals of Digital Games starting from games in general then
	digital games. Students learn about the elements of a game.
G.	There will be examples of number of games in class. Student need not to play all of
	them, but he should play someof them, or, at least, watch YouTube videos of game
	play.

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Understand digital games and its elements.
2.	Students will be able to look at Games as digital medium for story telling
3.	Students will make up their mind if and which field of Game Production suit them.
4.	Students will explore and enjoy the story telling capabilities of games.
5.	Students will learn to critically analyze the digital games.

# **Syllabus**

# Module I [No. of Lectures: 6] Topics

What is Game?

- a. What is Game, How Game is Different from other modes of entertainment
- b. Elements of a game
- c. Visualizing the Game, Idea generation for games, Balance in a game History of Games

d. History of Game Consoles

e. History of Games

f. Discussion about popular games from past

Game Genre

Module II [No. of Lectures: 6]

**Topics** 

Process of Game Development Game Production Parts Game Design Document

Module III [No. of Lectures:6]

**Topics** 

Game Analysis of famous Game 'Tetris'.

Game Analysis of any current popular game for example 'Fortnite: battle Royale'.

Writing exercise – Game Analysis of some popular games by students.

Module IV [No. of Lectures: 5]

**Topics** 

Exercise - Case Studies

Exercise - Presentations by students on an era or particular game from "History of Games". (Students will present case studies and presentations in groups. It will be treated as an assignment / quiz also.)

Module V [No. of Lectures: 5]

**Topics** 

Game Play Sessions

Video Showcase of Popular Games

#### **Text Book:**

Monograph on Fundamentals of Game technology, Dept. of Animation and Multimedia, BIT Mesra

# References in Syllabus

- 1. Game Design Workshop: A Playcentric Approach to Creating Innovative Games, by Fullerton Tracy (2014), RC Press/Taylor & Francis
- 2. Understanding Video Games: The Essential Introduction by Simon Egenfeldt-Nielsen, Jonas Heide Smith, Susana Pajares Tosca, Routledge Taylor & Francis Group (2009)
- 3. Game Design for Teens by Les Pardew, Premier Press (2004)
- 4. History of Video Games Paris, David (2017)
- 5. Game Development and Production by Erik Bethke, Wordware Publishing, Inc. (2003)
- 6. Game Programming All in One by Bruno Miguel Teixeira de Sousa, Premier Press (2002)
- 7. Tetris: The Games People Play by Box Brown, Macmillan (2016)
- 8. The Tetris Effect: The Game that Hypnotized the Worldby Dan Ackerman (2016)
- 9. Gamers at Work: Stories Behind the Games People Play by Morgan Ramsay,(2012), Apress
- 10. What video games have to teach us about learning and literacy by James Paul Gee (2003)
- 11. Games user research: a case study approach by Garcia-Ruiz, Miguel A, Author: Garcia-Ruiz, Miguel A, (2016), CRC Press
- 12. The Comic Book Story of Video Games: The Incredible History of the Electronic Gaming Revolution, By Jonathan Hennessey (2017) Potter / Ten

# Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# **Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure**

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

Mapping	between COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM118** 

**Course Title: Digital Animation** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: I / I

**Branch: BAM** 

Type:Practical

NOTE- This paper excludes 3d-animation as it is treated elaborately elsewhere.

COURSE OBJECTIVE- To teach the student 2d animation on the desktop pc.

OUTCOMES- The student will be able to do 2d animation on the PC.

# **SYLLABUS**

<u>Topics / Exercises:</u>NOTE- This paper excludes 3d-animation as it is treated elaborately elsewhere.

# **Module I**

- 1. Intro to digital animation,
- 2. Digital keyframe,
- 3. The concept of Timeline,
- 4. Tools such as Adobe animate and after effects

#### Module II

1. Infographics and Visual effects, using layers and styles

# **Module III**

- 1. Principles of animation and their application
- 2. Understanding Tweening and Keyframe animation, Examples of both

#### Module IV

1. Character animation stick figure animation, cartoon drawing

# Module V

- 1. Arranging Foreground, Middle ground and Background
- 2. Sprites and sprite sheet, Creating GIFS
- 3. Assignment

# **Text Book:**

1. Animated storytelling -by Liz Blazer, Tradigital Animate CC - By Stephen Brooks

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	Mapping between COs and Course Delivery (CD) methods						
CD	Course Delivery Method	Course Outcome	Course Delivery Method				
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3				
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3				
CD3	Seminars	C03	CD1, CD2, CD3				
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5				
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5				
CD6	Industrial / Guest Lecture						
CD7	Industrial Visits / in-plant training						
CD8	Self-learning such as use of NPTEL materials and internets						
CD9	Simulation						



**Course Code: AM119** 

**Course Title: Desk Top Publishing** 

**Pre-requisite(s):** Nil

Credits: 2 L: 0 T:0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: I / I

**Branch: BAM Type: Practical** 

# **Course Objectives**

This course enables the students to:

A	Understand the Concept of Desktop Publishing
В	Gain introductory knowledge of Various Elements of Desktop Publishing
С	Understanding the Role of Various Tools of Desktop Publishing
D	Understand Emerging Technologies in the Field of DTP

#### **Course Outcomes**

After the completion of this course, students will be able to:

	The till templetion of this to wise, students will be well to.		
A	Learn Operating Mechanism of Various Tools		
В	Understand Various Software's and Hardware's Related to this Field		
С	Gain Knowledge About Troubleshooting mechanism		
D	Design a Project by Combining Various Elements of DTP		

# **Syllabus**

# **Module I Computer Fundamentals: Hardware** [No. Of Lectures: 8]

RAM, ROM, Storage Devices (HDD, Flash Drives, DVD), Input Devices (Mouse, Keyboard, Digital Pens, Touch Screens), Output Devices (VDU, Printers)

# Module II Computer Fundamentals: Operating Systems [No. Of Lectures: 8]

Windows based OS, Linux based OS, and Mac based OS, Word Processing Software's, Graphic Designing Software, Drawing and Painting Software.

Module III MS Office Suite [No. Of Lectures: 8]

Introduction to MS-Office, Creating Tables in MS-Word, Creating Reports and News Letters, Power Point Presentation, Introduction to MS-Excel, Introduction to Formulas and Function of MS-Excel.

# Module IVDesigning Software Adobe Photoshop[No. Of Lectures: 8]

Introduction to Adobe Photoshop, Toolbar in Photoshop, Introduction to Software's Interface, Editing Images, Creating Graphics, Creating Logos, Saving Files, Rendering

# **Module VDesigning Software Adobe Illustrator** [No. Of Lectures: 8]

Introduction to Adobe Illustrator, Toolbar in Illustrator, Introduction to Software's Interface, Creating Shapes, Creating Illustrations, Creating Logos, Saving Files, Rendering

# **Text Book:**

- 1. Introduction to Multimedia by Ramesh Bangia (Khanna Book Publishing)
- 2. Web Designing with Html and CSS by Jeremy Osborn and Jennifer Smith
- **3.** Adobe Photoshop CC Classroom

#### **Reference Book:**

1. Introduction to Desktop Publishing with Digital Graphics by Edition by Kevin Niemeyer

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment	
Day to day performance & Lab Files	30	

Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between cos and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1,CD2,CD5,CD8	
CD2	Tutorial / Assignment	C02	CD1,CD2,CD5, CD8	
CD3	Seminars	C03	CD1,CD2,CD5, CD8	
CD4	Mini Projects / Projects	C04	CD1,CD2,CD5,CD8	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1,CD2,CD5,CD8	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			

# PE(SEC-II)



Course Code: AM120

**Course Title: Basic Writing Skills** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: II / I

**Branch: BAM** 

**Type: Practical** 

#### **SYLLABUS**

#### Module I

- 1. Exploring writing skills for Digital Media
- 2. Online editing, designing and publishing
- 3. Privacy in digital age

#### **Module II**

- 1. Collecting Information
- 2. Curiosity and Story Ideas
- 3. Sources and Online Research
- 4. Interview Techniques

#### **Module III**

- 1. Constructing Stories
- 2. Story Organization

#### **Module IV**

- 1. Writing for the News
- 2. Convergent Media Writing

#### Module V

1. Exercises

#### **Books**

- 1. Writing for Digital Media by Brian Carroll
- 2. The handbook of communication skills, Owen Hargie

**Gaps in the syllabus (to meet industry / Profession requirements)** 

# POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

# POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes				
	a	b	С	d	
1	L	L	L	L	
2	M	M	M	M	
3	M	M	M	M	
4	Н	Н	Н	Н	
5	Н	Н	Н	Н	

L= Low M= Medium H= High

Mapping b	Mapping between COs and Course Delivery (CD) methods					
CD	Course Delivery Method	Course Outcome	Course Delivery Method			
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3			
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3			
CD3	Seminars	C03	CD1, CD2, CD3			
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5			
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5			
CD6	Industrial / Guest Lecture					
CD7	Industrial Visits / in-plant training					
CD8	Self-learning such as use of NPTEL materials and internets					
CD9	Simulation					



Course Code: AM121 Course Title: Web Design Pre-requisite(s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: II / I

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

Α.	Understand the creative aspects related to web designing
В.	Learn software tools to make websites
C.	Understand the concept of process of website designing
D.	Create the content for website like images, graphics, text, audio-video etc.
Ε.	Develop a website and host it on internet
F.	Learn basics of digital marketing

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Understand the process of web designing.
2.	Students will be able to make websites and content for websites
3.	Students will make up their mind if and which field of Web Site Design suits them.
4.	Students will be able to make career in Web Designing / Social Media / Digital
	Marketing fields.

#### **Syllabus**

Module I [No. of Lectures: 5]

# **Topics**

- Basics of Internet Technology
  - Evolution of Internet
  - Various Protocols
  - Types of Websites
  - o Domain Name, Webhosting, FTP
  - o Social Media
- Basic Concepts of Website Designing and Creative Aspects related to website designing
- Introduction to Computer based tools used for Website Design

# Module II [No. of Lectures: 6] Topics

- Content Design for a Website or Social Media page
  - a. Creation of Graphics, Animation, Banners for website and social media
  - b. Creation, Editing of Videos or Video Presentations for website and social media

- Designing layouts or templates of website in Graphic Design Software
- Strategies for Content Creation for Website

# Module III [No. of Lectures:6] Topics

- Website Development
  - a. Adobe Dreamweaver or any equivalent software (e.g. Kompozer) to design website
  - b. Website development using Free Tools on Internet like Wix, Blogger, Wordpress
- Introduction to Programming for Website Design
  - a. HTML
  - b. CSS
  - c. Basic Flash Action Script

# Module IV [No. of Lectures: 6]

# **Topics**

- Website Publication
  - o Domain Name registration (free or paid)
  - Website Uploading
- Testing and Updating

Module V [No. of Lectures: 5]

**Topics** 

• Project: Design a website and host it.

#### **Text Book:**

 Adobe Dreamweaver CS6: Classroom in a Book, Adobe Creative Team, James J. Maivald (2012)

#### **Reference Book:**

- 1. Professional Web Design: Techniques & Templates Clint Esscher, Firewall Media
- 2. Adobe Dreamweaver CS6 Digital Classroom, Jeremy Osborn & AGI Creative Team (2012), John Wiley & Sons, Inc
- 3. AdobeDreamweaver CS6 on Demand, Steve Johnson (2012), Perspection, Inc. Que Publishing
- 4. How to Design Websites, Alan Pipes (2011), Laurence King Publishing
- 5. Building a Website for Dummies, David A Crowder (2010), Wiley Publishing Inc
- 6. Basics of Web Design, Prentice Hall of India, ISBN 81-203-2433-1

#### Gaps in the syllabus (to meet industry / Profession requirements)

#### POs met through Gaps in the syllabus

# Topics beyond syllabus / advanced topics / design

#### POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

#### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes				
	a	b	С	d	
1	L	L	L	L	
2	M	M	M	M	
3	M	M	M	M	
4	Н	Н	Н	Н	
5	Н	Н	Н	Н	

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods						
CD	Course Delivery Method		Course Outcome		Course Method	Delivery
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors		C01		CD1, CD2,	CD3

CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,
			CD4, CD5
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5
	Aids		
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		



**Course Code: AM122** 

**Course Title: Comic Illustration** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: II / I

**Branch: BAM** 

**Type: Practical** 

# **Course Objectives**

This course enables the students to:

A.	To introduce comics production process.

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	The student will be able to develop a comics script to completed comic pages
2.	The student will be able to handle chores like Cover design and page management

# **Topics / Exercises: -**

#### Module I

1. Introduction to tools

#### **Module II**

- 1. Form and perspective,
- 2. Figure drawing

#### **Module III**

- 1. Action scenes,
- 2. foreshortening
- 3. expressions

#### **Module IV**

1. Composition and page design

#### Module V

- 1. Cover design,
- 2. Inking

#### **Text Book:**

- 1. Drawing comics, the marvel way By Stan lee, John Buscema
- 2. Drawing cutting edge comics Christopher Hart

# Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods	6				
CD	Course Delivery Method		ourse atcome	Cours Metho		elivery
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	CO	)1	CD1, 0	CD2, CD	03
CD2	Tutorial / Assignment	CO	)2	CD1, 0	CD2, CD	3
CD3	Seminars	CO	)3	CD1, 0	CD2, CD	93
CD4	Mini Projects / Projects	CO	)4	CD1, CD4, 0	CD2, CD5	CD3,
CD5	Laboratory Experiments / Teaching Aids	CO	)5	CD1, 0	CD2, CD	5
CD6	Industrial / Guest Lecture					
CD7	Industrial Visits / in-plant training					
CD8	Self-learning such as use of NPTEL materials and internets					
CD9	Simulation					



**Course Code: AM123** 

**Course Title: Product Modeling in 3D** 

Pre-requisite(s): Nil Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: II / I

**Branch: BAM Type: Practical** 

# **Course Objectives**

This course enables the students to:

A.	Construct 3D models for visualization and 3D printing
В.	Product development and design processes and methods
C.	Develop concepts

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Create High poly detailed 3D models
2.	Conceptualize the minor details of a product Model
3.	Beginners will be able to make Industry level 3D models
4.	Know Advance tools and commands to execute logically
5.	Work collaboratively on a team to successfully complete a design project

#### **Syllabus**

Module I [No. of Lectures: 6]

Product Model reference study, Fundamentals of 3D modeling

Module II [No. of Lectures: 6]

Product Sketch and design,

Use basic sketching techniques to communicate ideas Introduction to product design and development

Basic process to create a 3D Product

Module III [No. of Lectures: 6]

Understanding concepts, tools and techniques involved in 3D Modeling, Product Modeling concepts.

roduct Modeling concepts.

Module IV [No. of Lectures: 6]

**Product Modeling** 

Module V [No. of Lectures: 6]

Product render and composition Plan, implement and present a design project produce realistic images and simple animations of a product

# **Reference Book:**

- 1. Autodesk 3ds Max 2018 Complete Reference Guide by Kelly L. Murdock
- 2. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
- 3. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch
- 4. Autodesk Maya 2018A Comprehensive Guide by Tickoo Sham

# Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods					
CD	Course Delivery Method	Course Outcome	Course Delivery Method		
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3		
CD3	Seminars	C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5		
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5		
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				
CD8	Self-learning such as use of NPTEL materials and internets				
CD9	Simulation				



Course Code: AM124

**Course Title: Lighting for Video Production** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: II / I

**Branch: BAM** 

**Type: Practical** 

# **Course Objectives**

This course enables the students to:

A.	Understand Lighting hardware as it applies to the industry
В	Theoretical concepts of lighting for video production
C.	Planning lighting arrangements according to requirement
D.	Understanding popular lighting schemes
E.	Practical assignment

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	The student will understand the various physical equipment of lighting
2.	Comprehensive grasp of lighting theory
3.	Understanding of popular lighting systems
4.	Gain experience in handling different lighting equipment
5.	Experience in working within a timetable and schedule

# **Topics / Exercises**

#### **Module I**

1. Lighting instruments and controls

- 2. Spot, flood and handheld lights
- 3. Studio and field lighting instruments and filters
- 4. Light Contrast Ratio
- 5. Physical properties of light
- 6. Properties of light sources; intensity, direction, color temperature and size
- 7. Soft and hard light

#### **Module II**

- 8. Techniques of video production lighting
- 9. Simple lighting techniques
- 10. Creative light techniques
- 11. Understanding triangle or 3-point lighting
- 12. High key lighting and low-key lighting

#### **Module III**

- 13. Chroma key lighting
- 14. Lighting for various field of view
- 15. Study of natural light, tools of lighting, Indoor and outdoor lighting
- 16. Shooting in outdoor, indoor and night
- 17. Understanding natural light, flash, reflector

#### **Module IV**

- 18. Dealing with windows and mixed lighting
- 19. Lighting for small & multi- character set ups
- 20. Using c-stands, stands, dimmers, cookies & flagging and grids
- 21. LED lights with color temperature control
- 22. Production planning with lights
- 23. Story telling through lighting

#### Module V

**24.** Practical: Learning how to use a variety of lighting tools

#### **Practical**

Learning how to use a variety of lighting tools

#### **Suggested Readings:**

- 1. Lighting for Digital video & Television (Author: John Jackman)
- 2. Matters of Light & Depth (Author: Ken Dancyger)
- 3. Television Production Hand Book (Author: Herbert Zettl)

#### **Gaps** in the syllabus (to meet industry / Profession requirements)

# POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

# POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# **Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure**

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

#### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM125** 

Course Title: Role of Multimedia Tools in Indian Art

**Pre-requisite(s):** Nil

Credits: 2 L: 0 T:0 P:4 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: II / I

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A	Understand Various Elements of Multimedia
В	Gain Introductory knowledge About Indian Art
С	Understand Steps Involved in Designing a Multimedia Project
D	To Develop Ability to Design a Multimedia Message

#### **Course Outcomes**

After the completion of this course, students will be able to:

A	Understand Various Aspects of Multimedia Communication Involving Indian Art
В	Technical Details Related to Various Elements of Multimedia and Emerging Technologies
С	Understand the Role Played by Various Multimedia Platforms
D	Design a Multimedia Project by Combining Various Elements of Multimedia and Art

#### **Syllabus**

# Module I Using Multimedia Tools in Indian Art:

[No. Of Lectures: 8]

Introduction to Indian Art, Ancient Indian Art, Medieval Indian Art, Modern Indian Art, Introduction to Multimedia, Elements of Multimedia, Raster Designing, Vector Designing

#### Module II Introduction to Multimedia Designing Software's [No. Of Lectures: 8]

Introduction to Toolbox, Introduction to Interface, Painting Brushes, Drawing Tools, Shape Creation, Illustration Creation, Saving Files, Rendering

Module IIIMultimedia Designs based on Tanjore Art [No. Of Lectures: 8]

Introduction to Tanjore Art, Various Aspects of Tanjore Arts, Creating Tanjore Art with Multimedia Tools, Designing Logos and Posters with Tanjore Art

#### Module IV Multimedia Designs based on Madhubani Art

[No. Of Lectures: 8]

Introduction to MadhubaniArt, Various Aspects of MadhubaniArts, Creating Madhubani Art with Multimedia Tools, Designing Logos and Posters with Madhubani Art

#### Module VIntroduction to Rajasthani Miniature Art [No. Of Lectures: 8]

Introduction to Rajasthani Miniature Art, Various Aspects of Rajasthani Miniature Art, Creating Rajasthani Miniature Art with Multimedia Tools, Designing Logos and Posters with Rajasthani Miniature Art

#### **Text Book:**

- 1. Introduction to Multimedia by Ramesh Bangia (Khanna Book Publishing Co. Pvt. Ltd)
- 2. Introduction to Indian Art by Ananda K. Coomaraswamy
- 3. Adobe Photoshop CC Classroom
- 4. Adobe Illustrator CC Classroom

#### **Reference Book:**

- --

- 1. The Royal Art of Tanjore Paintings by Padma Raghavan, SmitaShiroleYadhav
- 2. Madhubani Art: Indian Art Series by Bharti Dayal
- 3. Rajasthani Miniatures: The Magic of Strokes and Colours by Daljeet

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between cos and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1,CD2,CD5,CD8	
CD2	Tutorial / Assignment	C02	CD1,CD2,CD5, CD8	
CD3	Seminars	C03	CD1,CD2,CD5, CD8	
CD4	Mini Projects / Projects	C04	CD1,CD2,CD5,CD8	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1,CD2,CD5,CD8	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			

# PE(SEC-III)



**Course Code: AM126** 

**Course Title: Fiction Writing** 

**Pre-requisite (s): Nil** 

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: III / II

**Branch: BAM** 

**Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A. To introduce systematic writing techniques to students

#### **Course Outcomes**

After the completion of this course, students will be able to:

1. Students will be able to begin writing fiction genres

#### **Topics / Exercises**

#### Module I

- 1. The use of fiction in human life
- 2. Who can write?

#### **Module II**

- 1. Personality
- 2. Talent & Discipline
- 3. Structured Writing
- 4. Free Writing

#### **Module III**

- 1. Story
- 2. Novella and Novel
- 3. Strength and Weakness of the medium

#### **Module IV**

- 1. Beginning writing Components of a story
- 2. Plots and Scenes

#### Module V

- 1. Characters and Dialogues
- 2. Research
- 3. Editing and Rewriting
- 4. Assignments

# **Text Books:**

- 1. Story by Robert Mckee
- 2. The Anatomy of Story by John Truby

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods			
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM127** 

**Course Title: Calligraphy** 

**Pre-requisite (s): Nil** 

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: III / II

**Branch: BAM** 

**Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A. To introduce traditional calligraphy and present a path of its skillful mastery.

#### **Course Outcomes**

After the completion of this course, students will be able to:

1. The student will become a skilled calligrapher by following a systematic set of exercises.

#### **Topics / Exercises**

#### Module I

- 1. Tools Paper, Ink, Nibs.
- 2. Decorative writing & Examples.

#### **Module II**

- 1. Exercising
- 2. practicing strokes

#### **Module III**

- 1. Hand lettering
- 2. planning graffiti fonts

#### **Module IV**

- 1. Florals,
- 2. borders
- 3. banners

#### **Module V**

1. Keeping a calligraphy and hand-lettering sketchbook

# Textbook -

1. Mastering the art of Calligraphy by Janet Mehigan, Hermes House Publisher

#### **Suggested Readings:**

Creative lettering and beyond – by Gabri Joy Kirkendall

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	netween COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM128** 

**Course Title: Architectural Modeling** 

Pre-requisite(s): Nil Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: III / II

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

11115 000	sibe diagons the stadents to:
A.	Construct 3D models for Architectural visualization
В.	Design processes and development methods
C.	Develop concepts and visualize
D.	Model, render and do the final composition
E.	Create a walkthrough

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Create buildings, shops, cars etc in 3D as per the plan
2.	Understand ratio and composition of various 3D models in architectural planning
3.	Understand the concepts and ideas to execute the planning
4.	Render for the final composition
5.	Create a walkthrough animation

#### **Syllabus**

Module I [No. of Lectures: 6]

3D modeling for different architectures

Module II [No. of Lectures: 6]

Understand ratio and composition of various 3D models in architectural planning, Understanding the techniques and issues while modeling

Module III [No. of Lectures: 6]

Understand the concepts and ideas to execute the planning, concept of proxy meshes

Module IV [No. of Lectures: 6]

Rendering the final composition

Module V [No. of Lectures: 6]

Create a walkthrough animation

#### **Reference Book:**

- 1. Autodesk 3ds Max 2018 Complete Reference Guide by Kelly L. Murdock
- 2. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo (Author)
- 3. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch
- 4. Autodesk Maya 2018A Comprehensive Guide by Tickoo Sham

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

#### **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes			
	a	b	c	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method		
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3		
CD3	Seminars	C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5		
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5		
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				
CD8	Self-learning such as use of NPTEL materials and internets				
CD9	Simulation				



**Course Code: AM129** 

**Course Title: Basic Video Editing** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: III / II

**Branch: BAM** 

**Type: Practical** 

#### **SYLLABUS**

#### **Topics / Exercises**

# Module I

- 1. Role of video editing in production
- 2. Types of editing
- 3. Major editing principles
- 4. Technique of video editing

#### **Module II**

- 5. Role of video editor
- 6. Editing for the genre: action, dialogue, comedy, documentary etc.
- 7. Linear and Nonlinear editing
- 8. Switcher and video mixers

#### **Module III**

- 9. Video and Effects
- 10. Aspect ratio and safe areas
- 11. ENG and EFP editing
- 12. Montage editing
- 13. Split screen editing technique

#### **Module IV**

- 14. Understanding post production workflows
- 15. Single & multi track editing
- 16. Timeline, Project and footage management
- 17. Attributes of image

#### Module V

- 18. Color correction
- 19. Sound mixing
- 20. Un-mixed and mixed master

#### **Assignment**

Students will compose a short video production individually.

#### **Reference Books:**

- 1. The Technique of Film and video editing (Author: Ken Dancyger)
- 2. Cinematic Motion (Author: Steven D. Katz)
- 3. Television Production Hand Book (Author: Herbert Zettl)

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30

Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	Mapping between COs and Course Delivery (CD) methods				
CD	<b>Course Delivery Method</b>	Course Outcome	Course Delivery Method		
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3		
CD3	Seminars	C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5		
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5		
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				
CD8	Self-learning such as use of NPTEL materials and internets				
CD9	Simulation				



Course Code: AM130 Course Title: Game Design

Pre-requisite(s): Nil

Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: III / II

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A. To make student learn the creative and technical process of Game Design and develop a design document for a Digital Game.

#### **Course Outcomes**

After the completion of this course, students will be able to:

Design a Game Design Document or similar document required during preproduction stage of any creative job like advertising, film making, and obviously game development.

#### **Syllabus**

Module I [No. of Lectures: 5]

#### **Topics**

- What is Game Design
- Role of Game Designer
- Contents of a Game Design Document

Module II [No. of Lectures: 6]

#### **Topics**

- The Game Idea
- The High Concept
- Visualizing the Game

Module III [No. of Lectures:6]

#### **Topics**

- Designing Audio
- Game Flow
- User Interface Design

Module IV [No. of Lectures: 6]

#### **Topics**

- Technical Design
- Schedules and Budgets
- Special Considerations

Module V [No. of Lectures: 5]
Topics

- Sample Game Design Documents
- Game Design Exercises

#### **Text Book:**

1. Game Design for Teens by Les Pardew, Premier Press

#### **Reference Book:**

- Rules of Play: Game Design Fundamentals by Katie Salen, Eric Zimmerman, (2003), The MIT Press
- Game Design Foundations by Roger E. Pedersen, Wordware Publishing, Inc. (2003)
- Game Design Workshop: A Playcentric Approach to Creating Innovative Games, by Fullerton Tracy (2014), RC Press/Taylor & Francis
- Andrew Rollings and Ernest Adams on Game Design by A Rollings E Adams, (2003) New Riders Publisher

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

## **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course	Course Delivery
		Outcome	Method
CD1	Lecture by use of boards/ LCD/	C01	CD1, CD2, CD3
	Projectors / OHP Projectors		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,
			CD4, CD5
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5
	Aids		
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		

# PE(SEC-IV)



**Course Code: AM131** 

**Course Title: Science Communication** 

**Pre-requisite(s): Nil** 

Credits: 2 L:2 T:0 P:0 Class schedule per week: 02

Class: B.Sc. (Animation & Multimedia)

Semester / Level: IV / II

Branch: BAM Type: Lecture

## **Course Objectives**

This course enables the students to:

A.	Recognize Science Communication as a serious academic discipline	
В.	Identify the role that Science Communication plays in the nation building process	
C.	Discover critical element of Science Communication	
D.	Recognize Science Communication as a tool for developing the scientific temperament.	
Е.	Discover the major elements of Communication in Science Communication	
F.	Suggest possible use of inter disciplinary inputs to make the Science Communication	
	more responsive & effective	
G.	Assignments will enable and encourage students to develop effective Science	
	Communication modules for different audiences.	

#### **Course Outcomes**

After the completion of this course, students will be able to:

	1
1.	Realize Science Communication as a major academic discipline
2.	Recognize the role and responsibility of Animation in the process of Science
	Communication
3.	Recognize the role Science Communication plays in the process of development
4.	Identify elements of interdisciplinary inquiry in Science Communication

#### **SYLLABUS**

MODULE 1 4 Lectures

#### Communication

- 1. Communication paradigm
- 2. Effective Communication
- 3. Barriers to Communication
- 4. Culture and Communication

MODULE 2 4 Lectures

#### **Science Communication**

1. Definition,

- 2. Key elements,
- 3. Application,
- 4. Outcome

MODULE 3 4 Lectures

#### **Participatory Communication**

- 1. Population Pyramid
- 2. Audience Appraisal
- 3. Types of Participation
- 4. Information Dissemination, Mono-logic Communication
- 5. Discussion, Di-logic Communication
- 6. Reversal of Learning

MODULE 4 8 Lectures

#### **Application Exercises**

- 1. Animating & graphically rendering scientific definitions & principles
- 2. Condensed Writing & Precise Writing, Exercises,
- 3. Technical writings & Help files
- 4. Language of Science & Creative Language
- 5. Rigor & Abstraction

MODULE 5 5 Lectures

1. Storyboarding

## **Suggested Readings:**

- 1. The Craft of Scientific Communication (2010) By Joseph E. Harmon, Alan G. Gross
- 2. Handbook of Science Communication (1998), Edited by Anthony Wilson
- 3. The Oxford Handbook of the Science of Science Communication (2017)

edited by Kathleen Hall Jamieson, Dan M. Kahan, DietramScheufele

- 4. Successful Science Communication: Telling It Like It Is (2011) edited by David J. Bennett, Richard C. Jennings
- 5. Science Communication: A Practical Guide for Scientists (2012) By Laura Bowater, Kay Yeoman, John Wiley & Sons.
- 6. Science Communication: Culture, Identity and Citizenship (2016) by Sarah R. Davies, Maja Horst

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

## Topics beyond syllabus / advanced topics / design

## POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

## **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

## **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method		
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3		
CD3	Seminars	C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5		
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5		
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				
CD8	Self-learning such as use of NPTEL materials and internets				
CD9	Simulation				



**Course Code: AM132** 

**Course Title: 3D Animation** 

Pre-requisite(s): Nil Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: IV / II

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A.	Introduction to 3D animation and its concept
В.	Understand various shortcuts and techniques for animating a 3D object
C.	Animate attributes like color, transparency etc.
D.	Animate a 3D character
Е.	Do Camera animation

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Understand basics as well as advance concepts of 3D animation
2.	Animate simple objects and its attributes
3.	Animate a 3D character
4.	Do camera animation

#### **Syllabus**

Module I [No. of Lectures: 6]

Understand basics as well as advance concepts of 3D animation Stretch and squash for 3D objects

Module II [No. of Lectures: 6]

Understand various shortcuts and techniques for animating a 3D object

Module III [No. of Lectures: 6

Animate simple objects and its attributes like color, transparency Animation through deformers and modifiers

Module IV [No. of Lectures: 6]

3D Character Animation, walk cycles and Run cycles

Module V [No. of Lectures: 6]

camera animation

#### **Reference Book:**

- 1. Autodesk 3ds Max 2018 Complete Reference Guide by Kelly L. Murdock
- 2. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
- 3. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch
- 4. Autodesk Maya 2018A Comprehensive Guide by Tickoo Sham

## Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

## Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

## **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M

3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods		
CD	<b>Course Delivery Method</b>	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM133** 

**Course Title: Matte Painting** 

**Pre-requisite(s):** Nil

Credits: 2 L: 0 T:0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: IV / II

**Branch: BAM Type: Practical** 

## **Course Objectives**

This course enables the students to:

A	Understand the Concept of Matte Painting
В	Understand Various Terminologies Related to Matte Painting
С	Understand the Software's Related to Matte Painting
D	Understand Steps Involved in Designing a Matte painting Project

#### **Course Outcomes**

After the completion of this course, students will be able to:

	tempretien er tille tettes, studente will et tiere tet
A	Master the Various Techniques Related to Matte Painting
В	Understand the Role Played by Matte Painting
С	Learn Troubleshooting during Matte Painting
D	Design a Matte Painting Project

## **Syllabus**

## **Module I Introduction to Matte Painting Tools** [No. Of Lectures: 8]

Introduction to Matte Painting, Uses of Matte Painting, Introduction Matte

Painting

Designing Software's, Image Editing Tools, Digital Painting Tools, Vector Art Tools

## Module II Color Matching & Color Correction[No. Of Lectures: 8]

Introduction to Color Theory, using Primary Colors, Using Secondary Colors, Using Tertiary Colors, Using Warm Colors, Using Cool Colors, Using Neutral Colors

## **Module III Creating Brushes**

[No. Of Lectures: 8]

Creating Custom Brushes, Creating Textures, Adding and Changing Brush Dynamics, Painting and Layer Blending Techniques

## **Module IVCreating Different Aspects of Matte Painting**

[No. Of Lectures: 8]

Introduction to Set Extension, Creating Foggy/Overcast Lighting, Daytime Lighting, Sunset / Sunrise Lighting

## Module VDesigning Perspectives [No. Of Lectures: 8]

Introduction to Perspective Drawing, Introduction to 1-Point Perspective, Introduction to 2-Point Perspective, Introduction to 3-Point Perspective,

#### **Text Book:**

- 1. The Digital Matte Painting Handbook by David B. Mattingly
- 2. Digital Compositing for Film and Video by Steve Wright

#### **Reference Book:**

1. D'artiste Matte Painting: Digital Artists Master Class by Dylan Cole

## Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
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Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

## **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

## **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping h	netween COs and Course Delivery (CD) methods	S		
CD	Course Delivery Method		Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors		C01	CD1, CD2, CD3
CD2	Tutorial / Assignment		C02	CD1, CD2, CD3
CD3	Seminars		C03	CD1, CD2, CD3
CD4	Mini Projects / Projects		C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids		C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM134** 

**Course Title: Sound Design** 

**Pre-requisite (s): Nil** 

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: IV / II

**Branch: BAM** 

**Type: Practical** 

#### **SYLLABUS**

## **Topics / Exercises**

## **Module I**

- 1. Sound Basics
- 2. Software and other production tools
- 3. Analog & digital audio signal
- 4. Frequency, amplitude, decibels etc.
- 5. Audio equipment for studio & field production

## **Module II**

- 6. Types of microphones
- 7. Audio controls, mixers
- 8. Operational characteristics of microphone
- 9. Live and postproduction mixing

## **Module III**

- 10. Voice over, narration and dubbing
- 11. Indoor, outdoor and studio recording
- 12. Single & multi track recording
- 13. Music recording
- 14. Foley recording

### **Module IV**

- 15. Understanding standard audio post production workflows
- 16. Mono & stereo sound
- 17. File Formats

- 18. Sound effects and transitions
- 19. Audio cleaning & editing

#### Module V

- 20. Sound design
- 21. Digital audio parameters.
- 22. Production sound mixing

#### **Practical**

Learning how to use sound hardware and software for production

#### **Reference Books:**

- 1. Designing Sound (Author: Andy Farnell)
- 2. Television Production Hand Book (Author: Herbert Zettl)

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

## **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method		Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors		C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment		C02	CD1, CD2, CD3	
CD3	Seminars		C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects		C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids		C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				
CD8	Self-learning such as use of NPTEL materials and internets				
CD9	Simulation		_		



**Course Code: AM135** 

**Course Title: Advertising Campaign Design** 

**Pre-requisite(s): Nil** 

Credits: 2 L:1 T:0 P:2 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: IV / II

**Branch: BAM** 

**Type: Lecture and Practical** 

## **Course Objectives**

This course enables the students to:

Α.	Understand the creative process of designing an advertising campaign
В.	Understand the Advertising Strategies adapted while designing advertisement campaign

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Design Advertising Strategies, Campaigns for products or services
2.	Make career in Advertising or similar creative industry

## **Syllabus**

Module I [No. of Lectures: 5]

## **Topics**

- 1. Understanding advertising campaign process
- 2. Research to define target, message and understand society and culture
- 3. The role of branding and positioning

Module II [No. of Lectures: 6]

#### **Topics**

- 1. Creativity for advertising
- 2. Copy writing and layout
- 3. Advertising campaigns and media
- 4. Public relations

Module III [No. of Lectures:6]

## **Topics**

- 1. Traditional Advertising
- 2. Out-of-home Advertising
- 3. Direct Marketing
- 4. Sales Promotion
- 5. Electronic and Mobile Media
- 6. Guerrilla and Other Forms of Media

Module IV [No. of Lectures: 6]

**Topics** 

1. Case Studies

Module V [No. of Lectures: 5] Topics

1. Project / Assignment: Design an advertisement campaign or write a research paper under mentorship of teacher.

#### **Text Book:**

1. Robyn Blakeman - 2015, Advertising Campaign Design: Just the Essentials - Routledge Publication

#### **Reference Book:**

- 1. Donald Parente, Kirsten Strausbaugh, Hutchinson 2014, Advertising Campaign Strategy: A Guide to Marketing Communication Plans
- 2. Robyn Blakeman, Integrated Marketing Communication, Creative Strategy from Idea to Implementation

Mitch Joel, Six Pixels of Separation: Everyone Is Connected. Connect Your Business to Everyone

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15

End Semester Practical Examination	25
Viva Voce / Presentation	15

## **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

## **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method		
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3		
CD3	Seminars	C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5		
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5		
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				
CD8	Self-learning such as use of NPTEL materials and internets				
CD9	Simulation				

Detailed Syllabus of B.Sc. A&M

**PROGRAM ELECTIVES (PE)** 

## PEI



Course Code: AM335

**Course Title: Story Boarding** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: V / III

**Branch: BAM** 

**Type: Practical** 

**COURSE OBJECTIVE** – To demonstrate the role of storyboarding in a larger production studio. To teach how to draw for storyboarding.

**COURSE OUTCOMES** – The student will be able to appreciate the importance of storyboarding. The student will be able to draw storyboards from screenplays.

#### SYLLABUS (Topics / Exercises):-

#### **Module I**

- 1. Looking at examples of Storyboards from popular TV serials and Movies,
- 2. Comparing the storyboards to the final render

#### **Module II**

1. Understanding the screenplay, story and continuity design

#### **Module III**

1. Developing ideas, thumbnailing, comparing compositions

#### **Module IV**

1. Exercise- Doing short storyboards on formatted paper

#### Module V

- 1. Developing animatics with sound from storyboards
- 2. Understanding pacing and complexity of a scenes for storyboarding
- 3. Assignment- Doing a longer storyboard OR study a storyboard from module 1

#### **Text Book:**

- 1. Directing the Story Francis Glebas, Star Wars Storyboard the original trilogy By LucasFilms
- 2. Framed ink- By Marcos MateuMestre

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

## **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

#### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course	Course	Delivery

		Outcome	Method
CD1	Lecture by use of boards/ LCD/	C01	CD1, CD2, CD3
	Projectors / OHP Projectors		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,
			CD4, CD5
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5
	Aids		
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		



**Course Code: AM332** 

**Course Title: Documentary Film Making** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: V / III

**Branch: BAM** 

**Type: Practical** 

#### **SYLLABUS**

#### **Topics / Exercises**

#### Module I

- 1. Introduction to documentary and docu-drama
- 2. Programme proposal and treatment
- 3. Programme categories
- 4. Focus on different types of documentaries; wild life, environmental, biographical, social issues etc.

#### **Module II**

- 5. Key points of film
- 6. Research
- 7. Logistics, budgeting
- 8. Planning and Scheduling
- 9. Shot break up, Questionnaire

#### **Module III**

- 10. Selecting the crew
- 11. Location, traveling and permissions
- 12. Camera angles; Objective, subjective and point-of-view

13. Frame Composition & continuity

## **Module IV**

- 14. Capture convert and transfer data on computer
- 15. Logging the tape
- 16. Post production workflows
- 17. Timeline, Project and footage management

## Module V

- 18. Editing modes; Offline & Online
- 19. Principles of editing
- 20. Graphics, credits, titles and subtitles
- 21. Voice over
- 22. Unmixed and mixed master

## **Reference Books:**

- 1. Producing with passion: Making Films that Change the World (Author: Dorothy Fadiman, Tony Levelle
- 2. The Five C's of Cinematography (Author: Joseph V. Mascelli)
- 3. Television Production Hand Book (Author: Herbert Zettl)

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

## **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

## **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	Mapping between COs and Course Delivery (CD) methods						
CD	Course Delivery Method	Course Outcome	Course Delivery Method				
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3				
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3				
CD3	Seminars	C03	CD1, CD2, CD3				
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5				
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5				
CD6	Industrial / Guest Lecture						
CD7	Industrial Visits / in-plant training						
CD8	Self-learning such as use of NPTEL materials and internets						
CD9	Simulation						



**Course Code: AM333** 

**Course Title: Film and Documentary Script Writing** 

Pre-requisite (s): Nil

**Credits: 2 L:1 T:0 P:2** 

Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: V / III

**Branch: BAM** 

**Type: Practical** 

#### **SYLLABUS**

#### **Module I: Introduction to documentary films**

What is a Documentary film?

Difference between Documentary films and other film genre.

Different types of documentary films.

#### **Module II: Planning & Scripting**

Role of script in films (Documentaries)

How to write a script.

Writing script for different types of documentary films.

Understanding the concept of beginning, middle and end.

#### **MODULE III: Research**

Importance of research in script writing.

Research on different types of script.

Understanding expansion of Ideas.

Enhancing your script from first draft to third draft.

## **Module IV: Practices**

Formulating your synopsis.

Choosing a topic.

Writing the first draft.

Final output (script) for a documentary film.

#### **Module V: Purpose of your script**

What is your story?
How to persuade the audience?
Striking an emotional chord.
Understanding the Feasibility of your script to be executed into a film.

#### **Reference Book:**

- 1. A New History of Documentary Film by Betsy A. McLane.
- 2. This Much is True: 15 Directors on Documentary Filmmaking by James Quinn.
- 3. Making Documentary Films and Videos by Barry Hampe
- 4. Writing, Directing and Producing Documentary Films and Videos by Alan Rosenthal.

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

## **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes				
	a	b	С	d	
1	L	L	L	L	
2	M	M	M	M	
3	M	M	M	M	
4	Н	Н	Н	Н	
5	Н	Н	Н	Н	

L= Low M= Medium H= High

Mapping bo	Mapping between COs and Course Delivery (CD) methods					
CD	Course Delivery Method	Course Outcome	Course Delivery Method			
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3			
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3			
CD3	Seminars	C03	CD1, CD2, CD3			
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5			
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5			
CD6	Industrial / Guest Lecture					
CD7	Industrial Visits / in-plant training					
CD8	Self-learning such as use of NPTEL materials and internets					
CD9	Simulation					

## PEII



Course Code: AM314

**Course Title: Character Design** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: V / III

**Branch: BAM** 

**Type: Practical** 

 $\textbf{COURSE OBJECTIVE-} \ \ \text{To introduce industry standard process of designing characters for animation \& } \\$ 

movies.

**COURSE OUTCOMES-** The student will be able to prepare character designs from a screenplay.

#### SYLLABUS (Topics / Exercises): -

#### Module I

- 1. The role and function of the Character Designer in the production process.
- 2. Understanding the writers' world and create the character bank.

#### **Module II**

- 1. Basic shapes and Comparative diagrams,
- 2. Design explorations
- 3. Directors role

#### **Module III**

- 1. Drawing heroes central characters and their sheets
- 2. Drawing female characters- heroines. Their sheets

#### Module IV

1. Drawing support characters, exploring description and refining

#### Module V

- 1. Understanding age-children, teens and adults
- 2. Understanding animals and creatures, examples
- 3. Exercises on the above modules and introduction to mecha characters

#### **Text Book:**

1. Creating characters with personality- by Tom Bancroft, Character Mentor – by Tom Bancroft

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

## **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

#### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

#### Mapping between COs and Course Delivery (CD) methods

CD	Course Delivery Method	Course	Course Delivery
		Outcome	Method
CD1	Lecture by use of boards/ LCD/	C01	CD1, CD2, CD3
	Projectors / OHP Projectors		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,
			CD4, CD5
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5
	Aids		
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		



**Course Code: AM315** 

**Course Title: Urban Sketching** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: V / III

**Branch: BAM** 

**Type: Practical** 

**COURSE OBJECTIVES**- To introduce urban sketching and rapid sketching as an artform.

**COURSE OUTCOMES-** The student will be able to understand Urban sketching. The student will be able to practice urban sketching.

#### **SYLLABUS (Topics / Exercises) -**

#### **Module I**

- 1. Intro to urban sketching
- 2. Drawing in a crowd
- 3. Outdoor sketching

#### **Module II**

- 1. Quick sketching
- 2. Mastery VS. spontaneity

#### **Module III**

- 1. Exploratory drawing,
- 2. Mini sketching,
- 3. simplifying,
- 4. drawing loose

#### **Module IV**

1. Elements of urban sketching- people, vehicles, trees and shrubs, buildings

#### Module V

- 1. Capturing the place, working fast, editing
- 2. Sketch-overs, digital base sketch over, aerial photography sketch over
- 3. Studying several popular artists, Collecting and copying

## **Text Book:**

- 1. Freehand drawing and discovery By James Richards
- 2. Everyday sketching and drawing by Steven B Reddy

## Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

## **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes

	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM317** 

**Course Title: Writing for Advertising** 

Pre-requisite(s): Nil Credits: 2 L:2 T:0 P:0 Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: V / III

Branch: BAM Type: Lecture

#### **Course Objectives**

This course enables the students to:

A.	Understand the art and techniques of writing for Advertising
В.	Learn skills required to write and design Advertising Campaigns

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Write and Design Advertising Campaigns
2.	Make career in Advertising field

#### **Syllabus**

Module I [No. of Lectures: 5]

# **Topics**

- 1. Understanding Copywriting
  - (i) What is Copywriting
  - (ii) Benefits of Copywriting
  - (iii) Focusing onthe customer
  - (iv) Unique Selling Points

Module II [No. of Lectures: 6]

#### **Topics**

- 1. Tone
  - (i) Tone of Voice
  - (ii) Attitude
  - (iii) Writing like you talk
- 2. Elements of Copy Writing
  - (i) Headlines and Slogans
  - (ii) Structure

- (iii) Taglines
- (iv) Metaphors and Similes
- (v) Call to Action

Module III [No. of Lectures:6] Topics

- 1. Persuasion
  - (i) Liking
  - (ii) Social Proof
  - (iii) Consistency
  - (iv) Authority
  - (v) Scarcity
  - (vi) Reciprocity
- 2. Psychological Aspects of Advertising

Module IV [No. of Lectures: 6]

**Topics** 

1. How to write messages for various Communication purposes

Module V [No. of Lectures: 5]

**Topics** 

1. Case Studies

#### **Text Book:**

- Paul Lima (2011), Copywriting That Works: Bright Ideas to Help You Inform, Persuade, Motivate and Sell!
- Tom Albrighton (2013), The-ABC-of-Copywriting

#### **Reference Book:**

- 1. Victor O. Schwab (2016), How to Write A Good Advertisement: A Short Course in Copywriting
- 2. Neil Hoechlin 2018, The Ultimate Copywriting Guide for Beginners to Advanced: A short course
- 3. Be a Brilliant Business Writer: Write Well, Write Fast and Whip the Competition Jane Curry and Diana Young, Ten Speed Press
- 4. Writing for Digital Media, Brian Carroll (2010), Routledge

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

# Topics beyond syllabus / advanced topics / design

# POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment	
Quiz (I, II)	20	
Mid-term Examination Marks	25	
Attendance	5	
End-term Examination Marks	50	

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods					
CD	Course Delivery Method	Course Outcome	Course Delivery Method		
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3		
CD3	Seminars	C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5		
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5		
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				
CD8	Self-learning such as use of NPTEL materials and internets				
CD9	Simulation				



**Course Code: AM337** 

**Course Title: Fundamentals of Theatre & Acting** 

**Pre-requisite(s): Nil** 

Credits: 2 L:2 T:0 P:0 Class schedule per week: 03

Class: B.Sc. (Animation & Multimedia)

Semester / Level: V / III

Branch: BAM Type: Lecture

# **Course Objectives**

This course enables the students to:

A.	Recognize Theatre & Acting as serious tools of communication			
В.	Identify important milestones in the process of the evolution of theatre			
C.	Discover critical elements, conditions & requirements of theatre & acting			
D.	Explore how communication plays a role in theatre and acting			
Е.	Discover factors that make theatre and acting effective and why so			
F.	Suggest possible use theatre to make the process of communication more effective			
	& responsive			
G.	Assignments will involve the students in small groups where in the they will learn to			
	produce, direct, & act in serious, meaningful and goal oriented dramas			

#### **Course Outcomes**

After the completion of this course, students will be able to:

	T
1.	Realize theatre & acting as a tool for serious communication
2.	Respect people's role in the process of communication
3.	Recognize the role theatre plays in the process of development.
4.	Identify elements that promote people's participation and acceptance
5.	Distinguish genres of communication like persuasive communication, advocacy
	communication, internal communication etc.

#### **SYLLABUS**

#### Module I

#### Drama

- 1. Origin of English Drama
- 2. Miracle Plays & Morality Plays
- 3. Role of Guilds & Church in the Evolution of Drama
- 4. Secular Period of Drama, University Wits, Renaissance Drama
- 5. Stage during Shakespearean Period

#### **Module II**

# Story for Drama

- 1. Narrative: Definition, Narrator, Types of Narratives
- 2. Story: Definition, Types of Stories,
- 3. Plot (Aristotle & Gustav Freytag)
- 4. Drama: Evolution of structure and stage

#### **Module III**

Culture

- 1. The Role of the storyteller
- 2. Importance of understanding of rituals, ceremonies, and folk customs
- 3. Drama and Language
- 4. Script Writing Exercises
- 4. Theatre Games, Role Plays & Related Skill Building Activities
- 5. Exposure to Contemporary Drama.

#### Module IV

Acting

- 1. Understanding Empathy, Sympathy & Intuition, Emotions & Feelings
- 2. Characterization: Round Character, Flat Character, Complex Character, Personality
- 3. The demands of performance: Acting for Stage, Acting for Films
- 4. Monologue, Soliloquy, Dialogue

#### Module V

Theater Workshop

#### **Suggested Readings:**

- 1. The Art of Film Acting by Jeremiah Comey
- 2. A Short History of English Literature, William J Long
- 3. The Science and Art of Acting for the Camera: A practical approach to film, television and commercial acting by John Howard Swain (2017), Taylor and Francis
- 4. Play the Moment Not the Story: Notebook Acting Actor Script Journal Theater Drama Stage Light

by Acting Publishing

- 5. The Longman Anthology of Drama and Theater: A Global Perspective, by Michael L. Greenwald (Author), Roger Schultz (Author), Roberto Dario Pomo (Author)
- 6. Introduction to Theatre Arts 2 Teacher's Guide: An Action Handbook for Middle Grade and High School Students and Teachers by Suzi Zimmerman

**Gaps** in the syllabus (to meet industry / Profession requirements)

# POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

# POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# **Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure**

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment	
Day to day performance & Lab Files	30	
Quiz (s)	15	
Viva	15	
End Semester Practical Examination	25	
Viva Voce / Presentation	15	

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

#### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Method	Delivery

CD1	Lecture by use of boards/ LCD/	C01	CD1, CD2, CD3
	Projectors / OHP Projectors		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,
			CD4, CD5
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5
	Aids		
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		

# PEIII



**Course Code: AM326** 

**Course Title: Stop Motion** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: V / III

**Branch: BAM Type: Practical** 

# **Course Objectives**

#### This course enables the students to:

A.	Develop storytelling skill through Stop Motion Techniques
В	Understand the Stop Motion Techniques
C.	Learn related hardware, software, Lighting and other technical tools for stop motion techniques
D.	Learn industry standard practices in applied creativity
E.	Gaining experience of working in a group

#### **Course Outcomes**

After the completion of this course, students will be able to:

	1 /
1.	Gain experience in film making process using stop motion techniques
2.	Show professional competencies in the field of stop-motion animation
3.	Demonstrate skills in the use of industry standard tools
4.	Experience in working within a timetable and schedule

## **Syllabus**

#### **Animation Assignments based on the following topics:**

- 1. Developing story- idea, script, treatment, planning shots basic film grammar/composition of shots the storyboard, Editing animatics and story reels.
- 2. Coat hangers for armatures making your own model, character design, working with modelling clays, making puppet.
- 3. The maquette, ball and socket armature, mould making hard and soft moulds, casting, colouring, costumes/dressing
- 4. Design and building of sets, Interior sets, Exterior sets
- 5. Character Animation
- 6. Filming, Motion control, and Lighting
- 7. Final Compositing & Editing

Assignment-Student will choose a short story and prepare a stop motion clip using proper timing, spacing and acting.

#### **Reference Books:**

- 1. Stop Motion Craft skills for model animation By Susannah Shaw
- 2. Stop Motion Filmmaking: The Complete Guide to Fabrication and Animation by Christopher Walsh
- 3. The Advanced Art of Stop-Motion Animation by Ken Priebe
- 4. Cracking Animation: The Aardman Book of 3-D Animation by Peter Lord (Author), Nick Park (Author), Brian Sibley (Author)

#### **Gaps in the syllabus (to meet industry / Profession requirements)**

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM323** 

**Course Title: CLASSICAL ANIMATION** 

**Pre-requisite(s): Nil** 

Credits: 2 L:0 T:0 P:4 Class schedule per week: 02

Class: B.Sc. (Animation & Multimedia)

Semester / Level: V / III

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A.	Provide the student with a thorough introduction to the field of Classical animation
В.	Understand Principles of Animation
C.	Assess and critique past and current animation trends
D.	Understand classical animation pipeline step by step
Ε.	Understand various case studies of classical animation based short animated films

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Create traditional and computer-generated animation based on current industry trends and practices.		
2.	Define and apply design principles and theories to animation production		
3.	Apply fundamental animation timing skills through the creation of sequential images.		
4.	Demonstrate progress in basic drawing and animation skills through animation assignment.		
5.	Critically analyze creative work and the work of others		

#### **Syllabus**

Module 1 (4 Lectures)

2D Animation Overview –Script, Storyboard, Soundtrack, Track Breakdown, Designs, Animatic, Layouts, Dope Sheets and Production Folders, Pencil Tests, Pose Tests, Clean-Up, Ink and Paint, Backgrounds, Checking, Final Shoot/Composite, Final Edit and Dub, The Tools of the Trade, Lightbox, Peg Holes and Peg Bars, Field Sizes.

Module 2 (4 Lectures)

Principles of Animation- Key Poses, Breakdowns, and Inbetweens, Timing, Charts, Slowing-In and Slowing-Out, Extreme Positions, Arcs and Paths of Action, Holds, Emphasis, Anticipation, Weight and Weighted Movement, Flexibility and Fluid Joint Movement, Overlapping Action, Generic Walks, Keys, Passing Position, Inbetweens, Walk Cycles, Personality Walks and Timing, Runs and Run Cycles, Personality Runs and Timing, Silhouetting, Dialogue and Lip Sync, Laughter, Takes, Eyes and Expressions.

Module 3 (4 Lectures)

Animating Step by Step - Key Poses, Attitude and Dynamics, In-betweens, Adding Mouths, Staging, Camera Angles, Working with Characters, Extreme Action, Clean-Up, Drawing for Animators, Drawing Terminology.

Module 4 (4 Lectures)

2D Animation Basics - Keys, Inbetweens, and Timing, Charts and In-between Counting, Straight-Ahead Animation, Slowing-In and Slowing-Out, Working in Thirds, How to In-between, Paths of Action, Superimpositions, Multiple Superimpositions, Dope (Exposure) Sheets and Production Folders, The Dope Sheet, Frame Lines, Animator's Notes, Audio Breakdown, Animation Layers, Shooting or Camera Instructions, Rules for Dope Sheets, The Production Folder, Special Instructions, Material Used From Other Scenes, Material Used in Other Scenes, Attached Dope Sheet, Flipping and Peg Bars, Using Peg Bars, Top Pegs vs. Bottom Pegs, Bottom Pegs Flipping, Top Pegs Flipping, Whole Scene Flipping.

Module 5 (8 Lectures)

# Assignments

Case studies of classical animation based short films, animation appreciation, International Animation Artists, and Discussion on Animation Film Festivals.

Assignment: Students have to create an 11 seconds of classical animation scene using the light box.

#### **Reference Books:**

- 1. Animator's Survival Kit Richard Williams
- 2. Cartoon Animation Preston Blair
- 3. The Illusion of Life Frank Thomas & Olie Johnstan
- 4. Chuck Amuck! and Chuck Reduces by Charles M. (Chuck) Jones
- 5. Animation: Pencil to Pixel by Tony White
- 6. Timing for Animation by Harold Whitaker
- 7. The Animation Book: A Complete Guide to Animated Filmmaking--From Flip-Books to Sound Cartoons to 3- D Animation by Kit Laybourne

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

# Course Delivery Method Lecture by use of boards/ LCD/ Projectors / OHP Projectors Tutorial / Assignment Seminars Mini Projects / Projects Laboratory Experiments / Teaching Aids

Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	D
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping be	etween COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course	Course Delivery
		Outcome	Method
CD1	Lecture by use of boards/ LCD/	C01	CD1, CD2, CD3
	Projectors / OHP Projectors		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3

CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



Course Code: AM319

**Course Title: 3D Sculpting** 

Pre-requisite(s): Nil Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: V / III

**Branch: BAM Type: Practical** 

# **Course Objectives**

This course enables the students to:

A.	Study model references and implement ideas accordingly
В.	Understand basic structure of sketch and design
C.	Do 3D sculpting using different 3D tools
D.	Understand various 3D sculpting techniques
Е.	Rendering 3D sculpted Models

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Do	3D sculpting for various 3D models.
2.	Imp	lement ideas and techniques to render the final output

#### **Syllabus**

Module I	No. of l	Lectures: 6	Ś
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Topics:

Study model references and implement ideas accordingly to dp to the final sculpting

Module II [No. of Lectures: 6]

Topic:

Understand basic structure of sketch and design

Module III [No. of Lectures: 6]

Topic:

3D sculpting using different 3D tools

Module IV [No. of Lectures: 6]

Topic:

3D sculpting techniques and workflow

Module V [No. of Lectures: 6]

Topic:

Rendering 3D sculpted Models

#### **Reference Book:**

- 1. Autodesk 3ds Max 2018 Complete Reference Guide by Kelly L. Murdock
- 2. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
- 3. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch
- 4. Autodesk Maya 2018A Comprehensive Guide by Tickoo Sham

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

#### **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods	S		
CD	Course Delivery Method		Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors		C01	CD1, CD2, CD3
CD2	Tutorial / Assignment		C02	CD1, CD2, CD3
CD3	Seminars		C03	CD1, CD2, CD3
CD4	Mini Projects / Projects		C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids		C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM320** 

**Course Title: 3D Motion Graphics and Dynamics** 

Pre-requisite(s): Nil Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: V / III

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A.	Study examples of 3D Motion graphics & Dynamics
В.	Understand concepts of 3D Motion graphics & Dynamics
C.	Creating 3D motion Graphics
D.	Working on Various Platforms for Motion Graphics
Ε.	Rendering Motion Graphics and Compositions

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Understand the workflow as well as tools and techniques involved to create a 3D
	motion Graphics
2.	Understand various methods to use 3D dynamics to create Motion Graphics

# **Syllabus**

Module I [No. of Lectures: 6]

Topics:

Study of 3D Motion graphics & Dynamics examples

Module II [No. of Lectures: 6]

Topic:

Concepts of 3D Motion graphics & Dynamics

Module III [No. of Lectures: 6]

Topic:

Creating 3D motion Graphics

Module IV [No. of Lectures: 6]

Topic:

Working on Various Platforms for Motion Graphics,

Use of 3D Dynamics for Motion Graphics

Module V [No. of Lectures: 6]

Topic:

Rendering Motion Graphics and Compositions

#### **Reference Book:**

- 1. Autodesk 3ds Max 2018 Complete Reference Guide by Kelly L. Murdock
- 2. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo (Author)
- 3. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch
- 4. Autodesk Maya 2018A Comprehensive Guide by Tickoo Sham

# Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes					
	a b c d					
1	L	L	L	L		
2	M	M	M	M		
3	M	M	M	M		
4	Н	Н	Н	Н		
5	Н	Н	Н	Н		

L= Low M= Medium H= High

Mapping	Mapping between COs and Course Delivery (CD) methods					
CD	Course Delivery Method		Course Outcome	Course Delivery Method		
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors		C01	CD1, CD2, CD3		
CD2	Tutorial / Assignment		C02	CD1, CD2, CD3		
CD3	Seminars		C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects		C04	CD1, CD2, CD3, CD4, CD5		
CD5	Laboratory Experiments / Teaching Aids		C05	CD1, CD2, CD5		
CD6	Industrial / Guest Lecture					
CD7	Industrial Visits / in-plant training					
CD8	Self-learning such as use of NPTEL materials and internets					
CD9	Simulation					

# **PEIV**



**Course Code: AM311** 

**Course Title: Magazine Design** 

**Pre-requisite(s): Nil** 

Credits: 2 L: 0 T:0 P:4 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: V/ III

**Branch: BAM Type: Practical** 

# **Course Objectives**

This course enables the students to:

A	Understand the Concept of Mass Communication
В	Gain Introductory Knowledge About Magazines
С	Understand the Designing Process of Magazines
D	Understand the Various Steps in Designing a Magazine

#### **Course Outcomes**

After the completion of this course, students will be able to:

A	Learn About Various Platforms Available for Publishing Magazines
В	Understand Various Software's Related to Magazine Designing
С	Learn Various Designing Guidelines for Magazines
D	Design a Magazine

# **Syllabus**

# **Module I Introduction About Magazine** [No. Of Lectures: 8]

What is a Magazine, Structure of a Magazine, Ownership of a Magazine, Magazine Design Case Study

Module II Introduction to Multimedia Tools for Magazine Design [No. Of Lectures: 8]

Tools Used for Magazine Design, Introduction to Design Interface, Toolbar, Different Size of Canvas, File and Format for Scanning, Rendering and Printing of Magazine

#### Module III Magazine Design

[No. Of Lectures: 8]

Magazine Branding, Color Theory, Typography, Grids and Layouts, Paper Quality and Thickness, Different Types of Printing Techniques (Offset and Digital)

# **Module IVIntroduction to Digital Magazine**

[No. Of Lectures: 8]

What is a Digital Magazine, Role of Internet, Multimedia Elements Used in Digital Magazine, Role of Social Media in News Distribution, Fake News

#### **Module VDifferent Categories of Magazines** [No. Of Lectures: 8]

Political magazines, Currents Affairs Magazine, Economic Journals, Entertainment Magazines, Designing Creation for Different Categories, Variation in Color Theory

#### **Text Book:**

- Introduction to Multimedia by Ramesh Bangia (Khanna Book Publishing Co. Pvt. Ltd)
- Web Design in a Classroom by Jeremy Osborn, Jennifer Smith
- Mass Communication in India by Keval J. Kumar
- 4Adobe Photoshop CC Classroom

#### **Reference Book:**

- 1. The Design Process by Karl Aspelund
- 2. Design Thinking by Gavin Ambrose/Paul Harris
- 3. The Design of Everyday Things Don Norman
- 4. 100 Things Every Designer Needs to Know Susan M Weinschenk

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

# **Course Delivery Method**

Lecture by use of boards/ LCD/ Projectors / OHP Projectors

Tutorial / Assignment

Seminars

Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between cos and Course Delivery (CD) methods					
CD	Course Delivery Method		Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors		C01	CD1,CD2,CD5,CD8	
CD2	Tutorial / Assignment		C02	CD1,CD2,CD5, CD8	
CD3	Seminars		C03	CD1,CD2,CD5, CD8	
CD4	Mini Projects / Projects		C04	CD1,CD2,CD5,CD8	

CD5	Laboratory Experiments / Teaching Aids	C05	CD1,CD2,CD5,CD8
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM328** 

**Course Title: Apps Creation** 

Pre-requisite(s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: V /III

**Branch: BAM Type: Practical** 

# **Course Objectives**

This course enables the students to:

A.	To develop the multimedia content for apps and compile them together as an app	
В.	Learn software tools to develop multimedia content to make Apps	
C.	. Get Introduced to User Interface Design	

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Create Multimedia Content for Apps and compile them together as an App	
2.	Learn to host App on App Stores	

# **Syllabus**

Module I [No. of Lectures: 5]

# **Topics**

1. UI design basics, Intro to Design and protype, Designing a simple Mobile app.

Module II [No. of Lectures: 6]

#### **Topics**

- 1. Platforms to know- Android and Ios
- 2. Task analysis- Planning and choosing software.
- 3. Adobe XD workspace, brief introduction

Module III [No. of Lectures:6]

#### **Topics**

- 1. Typography and colors considerations
- 2. Empty state and Empty state Illustrations- Introduction to beginners.
- 3. Input states and Input- Examples

Module IV [No. of Lectures: 6]

# **Topics**

1. Designing the main screen- Creating lists and displaying Info

Module V [No. of Lectures: 5]

# **Topics**

- 1. Prototyping and Sharing work, Adapting to different screens.
- 2. Class Demonstration

#### **Text Book:**

• Jump Start Adobe XD 1st Edition by Daniel Schwarz

#### **Reference Book:**

- Skill share lectures on 'UI Design Basics: Design and Prototype Your First Mobile App'
- Adobe XD cc classroom in a book 2019 edition By Brian wood

# Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method		
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3		
CD2	Tutorial / Assignment C02		CD1, CD2, CD3		
CD3	Seminars	C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5		
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5		
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				
CD8	Self-learning such as use of NPTEL materials and internets				
CD9	Simulation				



**Course Code: AM336** 

**Course Title: Digital Painting** 

Pre-requisite (s): Nil

**Credits: 2 L:0 T:0 P:4** 

Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: V / III

**Branch: BAM** 

**Type: Practical** 

#### **COURSE OBJECTIVE-**

To make the learner comfortable with painting and coloring on the desktop

#### **COURSE OUTCOMES -**

The student will be able to work in professional painting projects on the desktop.

#### **SYLLABUS**

MODULE I – [No. of Lectures: 6]

- 1. Digital painting tools,
- 2. Strength and weakness,
- 3. Software and platforms

MODULE II- [No. of Lectures: 5]

- 1. Brushes, types of brushes,
- 2. Making new brushes

MODULE III - [No. of Lectures: 5]

- 1. Layers,
- 2. Layer styles,
- 3. Masks,

4. Hue saturation and other options

MODULE IV - [No. of Lectures: 5]

- 1. Simple brush coloring and
- 2. Dynamic brushes,

MODULE V – [No. of Lectures: 6]

- 1. Paintovers and kitbashing,
- 2. Examples of popular digital painting- study of examples.

#### TEXTBOOK-

- 1. Beginners guide to digital painting in photoshop -By 3DTOTAL publishing, various
- 2. Digital painting for the complete beginner CarlynBeccia

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			

# PE V



**Course Code: AM324** 

**Course Title: VFX in 2D Animation** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: VI / III

**Branch: BAM** 

**Type: Practical** 

# **Course Objectives**

This course enables the students to:

A.	Learning the theory behind effects animation
B.	Animating VFx in 2D

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	The student will be able to do SFx animation in 2D format

# **Topics / Exercises: -**

#### **Module I**

1. History of SFx Animation

# **Module II**

1. Drawing for Sfx, Studying Natural Behaviors

# **Module III**

- 1. Liquids and their motions
- 2. Droplets and Waves

# **Module IV**

- 1. Fire
- 2. Smoke
- 3. Explosions
- 4. Swirls
- 5. Tornados

#### Module V

1. Props, Starfield and Misc. Items

# **Text Book:**

1. Elemental Magic Volume 1, Joseph Gilland

# **Suggested Reading:**

1. Elemental Magic Volume 2, Joseph Gilland

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes						
	a	b	С	d			
1	L	L	L	L			
2	M	M	M	M			
3	M	M	M	M			
4	Н	Н	Н	Н			
5	Н	Н	Н	Н			

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods	S		
CD	Course Delivery Method		Course	Course Delivery
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors		Outcome C01	Method CD1, CD2, CD3
CD2	Tutorial / Assignment		C02	CD1, CD2, CD3
CD3	Seminars		C03	CD1, CD2, CD3
CD4	Mini Projects / Projects		C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids		C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM325** 

**Course Title: Production Design** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI / III

**Branch: BAM** 

**Type: Practical** 

## **Course Objectives**

This course enables the students to:

A.	To enable the student to understand narrative and subject of a screenplay.
B.	To enable the student to design cinematography that is respectful of the subject.

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	The	student	will	have	a	deep	understanding	of	the	responsibility	of	a
	cine	natograpl	ner.									
2.	The	student w	ill be a	able to	WO	rk in a	larger production	n pro	ject.			

#### **Topics / Exercises: -**

#### **Module I**

1. Careful examination of the screenplay, storyboard, story etc.

# **Module II**

- 1. Location scouting,
- 2. Still photography,

#### **3.** Annotated script

# **Module III**

- 1. Script breakdown
- 2. Budget allocation

#### **Module IV**

- 1. Static art and Dynamic art
- 2. Makeup
- 3. Set design
- 4. Costume

#### Module V

- 1. Lighting, camera
- 2. Shot flow
- 3. Camera handling
- 4. Editing

#### **Text Book:**

- Shot by shot By Steven Katz,
- Five Cs of cinematography by Joseph v Mascelli

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment		
Quiz (I, II)	20		
Mid-term Examination Marks	25		

Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes					
	a	b	С	d		
1	L	L	L	L		
2	M	M	M	M		
3	M	M	M	M		
4	Н	Н	Н	Н		
5	Н	Н	Н	Н		

L= Low M= Medium H= High

Mapping b	netween COs and Course Delivery (CD) methods	3	
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM322** 

**Course Title: 3D Compositing for Camera** 

Pre-requisite(s): Nil Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI / III

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A.	Analyse and study various 3D composition for cameras
В.	Understand 2D and 3D camera Tracking
C.	Know Fundamentals of 3D Tracking
D.	Create VFx Compositions
E.	Render various 3D Compositions

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Understand the workflow as well as tools and techniques involved to create
	VfxCompostions using the concept of 3D Camera tracking
2.	Render to see the final output

## **Syllabus**

Module I [No. of Lectures: 6]

Topics:

Analyse and study various 3D composition for cameras,

camera tracking concept study

Module II [No. of Lectures: 6]

Topic:

2D and 3D camera Tracking

1Module III [No. of Lectures: 6]

Topic:

Fundamentals of 3D Tracking

Module IV [No. of Lectures: 6]

Topic:

VFx Compositions and its implimentation

Module V [No. of Lectures: 6]

Topic:

Render various 3D Compositions

#### **Reference Book:**

- 1. Autodesk 3ds Max 2018 Complete Reference Guide by Kelly L. Murdock
- 2. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo (Author)
- 3. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch
- 4. Autodesk Maya 2018A Comprehensive Guide by Tickoo Sham

## Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

CD	Course Delivery Method	Course	<b>Course Delivery</b>
		Outcome	Method
CD1	Lecture by use of boards/ LCD/	C01	CD1, CD2, CD3
	Projectors / OHP Projectors		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,
			CD4, CD5
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5
	Aids		
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		

# PE VI



**Course Code: AM309** 

**Course Title: Storytelling using Multimedia** 

**Pre-requisite(s): Nil** 

Credits: 2 L: 0 T:0 P:4 Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: VI / III

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A	Understand the Concept of Storytelling through Multimedia
В	Gain Knowledge of Various Elements of Multimedia
С	Understand Steps Involved in Creating a Multimedia Story
D	Do's and Don'ts of a Multimedia Based Story

#### **Course Outcomes**

After the completion of this course, students will be able to:

A	Learning to Use Various Elements of Multimedia in Story Building
В	Learning Technical Details of Software's Needed to Create Multimedia Based Story
С	Learning About Various Multimedia Platforms where Such Stories Can be Published
D	Design a Multimedia Based Story project

#### **Syllabus**

#### Module ITelling a Story Using Multimedia Elements [No. Of Lectures: 8]

What is a Story, Different Components of a Story, Researching for the Story, Internet as a Medium for Storytelling, Creating a Script from Story

#### Module II Elements of Multimedia Storytelling

Introduction to Multimedia, Understanding Different Elements of Multimedia, Use of Multimedia Elements in Storytelling, Using Different Categories of Authoring Tools

[No. Of Lectures: 8]

#### **Module III Editing Elements of Multimedia**

Image Editing Software, Word Processing Software, Video Editing Software, Audio Editing Software

[No. Of Lectures: 8]

# **Module IV Storyboarding** [No. Of Lectures: 8]

Introduction to Storyboarding, Perspective Drawing, Drawing from a Script, Animatic Basic

#### Module VDesigning Interface for Multimedia Story [No. Of Lectures: 8]

What is Interface, Principles of Designing, Essential Requirement for Multimedia Story, Linear Vs Non-Linear Interaction

#### **Text Book:**

- 1. Introduction to Multimedia by Ramesh Bangia (Khanna Book Publishing Co. Pvt. Ltd)
- 2. Web Design in a Classroom by Jeremy Osborn, Jennifer Smith
- 3. Mass Communication in India by Keval J. Kumar
- 4. Adobe Photoshop CC Classroom
- 5. Web Design in a Classroom by Jeremy Osborn, Jennifer Smith

#### **Reference Book:**

- 1. The Design Process by Karl Aspelund
- 2. Design Thinking by Gavin Ambrose/Paul Harris
- 3. Screenplay: The Foundations of Screenwriting by Syd Field
- 4. The Design of Everyday Things Don Norman
- 5. 100 Things Every Designer Needs to Know Susan M Weinschenk

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	Mapping between COs and Course Delivery (CD) methods				
CD	Course Delivery Method		Course	Course Delivery	
	-		Outcome	Method	
CD1	Lecture by use of boards/ LCD/		C01	CD1, CD2, CD3	
	Projectors / OHP Projectors				
CD2	Tutorial / Assignment		C02	CD1, CD2, CD3	
CD3	Seminars		C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects		C04	CD1, CD2, CD3,	
				CD4, CD5	
CD5	Laboratory Experiments / Teaching		C05	CD1, CD2, CD5	
	Aids				
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				
CD8	Self-learning such as use of NPTEL				
	materials and internets				
CD9	Simulation				



**Course Code: AM312** 

**Course Title: Graphic Novel** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: VI / III

**Branch: BAM** 

**Type: Practical** 

COURSE OBJECTIVES- To teach appreciation for graphic novels. To teach skills needed to produce graphic novels.

COURSE OUTCOMES- The student will be able to appreciate graphic fiction. The student will be able to write and draw for graphic novels.

#### **SYLLABUS**

#### **Topics / Exercises: -**

#### **Module I**

- 1. Understanding graphic novels,
- 2. Difference between comics and graphic novels

#### **Module II**

- 1. Appreciating Pioneers in the fiels- Will Eisner, Frank Miller
- 2. Appreciating Scott McCloud, Introduction only

#### **Module III**

- 1. Writing for graphic novels,
- 2. story and structure

#### **Module IV**

- 1. Outlining the graphic novel creating scenes
- 2. Starting to draw rough,
- **3.** The writer's drawings

# **Module V**

- 1. Page design
- 2. Panel layout

#### **Text Book:**

- 1. Graphic storytelling and visual narrative -By Will Eisner,
- 2. Understanding comics By Scott McCloud

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
<b>Examination Marks</b>					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods			
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3	
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3	
CD3	Seminars	C03	CD1, CD2, CD3	
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM316** 

**Course Title: Participatory Communication** 

**Pre-requisite(s): Nil** 

Credits: 2 L: 2 T:0 P:0 Class schedule per week: 03

**Class: B.Sc. (Animation & Multimedia)** 

Semester / Level: VI / III

**Branch: BAM Type: Lecture** 

## **Course Objectives**

This course enables the students to:

A	Recognize the critical role that participatory communication plays in nation building
В	Recognize the important role and responsibility that the receiver / audience play in communication paradigm
С	Recognize the importance of a feedback means in communication

#### **Course Outcomes**

After the completion of this course, students will be able to:

1	Successfully assess the audience / receiver
2	Successfully engage with the audience / receiver of communication
3	Successfully ensure the active participation of the audience
4	Successfully design effective communication modules

#### **Syllabus**

Module I: [No. of Lectures: 6]

- 1. Communication: Definition & Paradigm
- 2. Effective Communication
- 3. Barriers to Communication

#### Module II: [No. of Lectures: 6]

- 1. Effective Communication: Message, Message / Content Creation, Visualization, coding & Decoding,
- 2. Audience
- 3. Receiver- definition & understanding the receiver/ audiences, Audience appraisal with special reference to the social and economic background

#### **Module III: Culture & Communication**

- 1. Definition, Role of Environment in Culture,
- 2. Formation & Evolution of Social Groups,
- 3. Transmission of Culture, Taboos

#### **Module IV:**

[No. of Lectures:5]

- 1. Media Definition,
- 2. Folk Media,
- 3. Mass Media,
- 4. Emerging Media,
- 5. Democracy and Media,
- 6. Outreach, Role of Communication

#### **Module V:**

[No. of Lectures:5]

- 1. Reversal of Learning
- 2. Types of Participation-passive participation, active participation, empowered participation

#### **Suggested Books:**

- 1. Facilitator's Guide to Participatory Decision-Making by Sam Kaner, Michael Doyle, et al.
- 2. Participatory Communication (World Bank Working Papers Book 170) by Paolo Mefalopulos and Thomas Tufte
- 3. 2. Participatory Culture in a Networked Era: A Conversation on Youth, Learning, Commerce, and Politics by Henry Jenkins, Mizuko Ito, et al.

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	etween COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		

\*\*\*\*



**Course Code: AM318** 

**Course Title: Media Studies** 

**Pre-requisite(s): Nil** 

Credits: 2 L: 0 T:0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI / III

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A	Recognize Media as a critical agent for change
В	Recognize the importance of Media in nation building process
С	Value ethics in Media

#### **Course Outcomes**

After the completion of this course, students will be able to:

1	Recognize Media as tool for communication
2	Recognize the creative components of media
3	Create Media content

# **Syllabus**

Module I [No. of Lectures: 4]

Definition Need for Media Evolution of Media

Module II [No. of Lectures: 4]

Types of Media Folk Media Mass Media. Emerging Media

Module III [No. of Lectures: 4]

Democracy Democracy Definition Other forms of Polity Right to expression People and Responsibility
Media & Society
Civic Society and Education.
Population Pyramid
AKAB Assessment
Communication Environment
Media Environment
Media Activism

Module IV [No. of Lectures: 4]

Communication & Media Communication Needs Assessment Communication Based Assessment Emerging Media & Society

Module V [No. of Lectures: 4]

Media and Ethics Fundamentals of Advertising Survey, Sampling and Media

# Suggested Books: -

- 1. Critical Media Studies: An Introduction by Brian L. Ott and Robert L. Mack
- 2. Loose-Leaf Version for Media & Culture: An Introduction to Mass Communication by Richard Campbell, Christopher R. Martin, et al.
- 3. Mix It Up: Popular Culture, Mass Media, and Society (Second Edition) by David Grazian
- 4. How to Read a Film: Movies, Media, and Beyond by James Monaco
- 5. Careers in Media and Communication by Stephanie A. Smith

**Gaps in the syllabus (to meet industry / Profession requirements)** 

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

# Course Delivery Method Lecture by use of boards/ LCD/ Projectors / OHP Projectors Tutorial / Assignment Seminars Mini Projects / Projects Laboratory Experiments / Teaching Aids Industrial / Guest Lecture Industrial Visits / in-plant training

Self-learning such as use of NPTEL materials and internets
Simulation

# **Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure**

# **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Quiz (I, II)	20
Mid-term Examination Marks	25
Attendance	5
End-term Examination Marks	50

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

Course Outcome	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	Mapping between COs and Course Delivery (CD) methods						
CD	Course Delivery Method	Course	<b>Course Delivery</b>				
		Outcome	Method				
CD1	Lecture by use of boards/ LCD/	C01	CD1, CD2, CD3				
	Projectors / OHP Projectors						
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3				
CD3	Seminars	C03	CD1, CD2, CD3				
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,				
			CD4, CD5				
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5				
	Aids						

CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		

# PE VII



**Course Code: AM327** 

**Course Title: Game Making in Blender** 

**Pre-requisite(s):** Nil

Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI / III

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

<b>A.</b>	Use Blender software for 3D Modeling, Animation and Game Development
В.	Explore 3D Game Engine Blender and Game Development using Game Engine

#### **Course Outcomes**

After the completion of this course, students will be able to:

1. Understand the process of 3D Game Development using Game Engine	
--	--

#### **Syllabus**

Module I [No. of Lectures: 5]

**Topics** 

• Blender User Interface

Module II [No. of Lectures: 6]

**Topics** 

• Modeling in Blender

Module III [No. of Lectures:5]

**Topics** 

• Material in Blender

Module IV [No. of Lectures: 5]

**Topics** 

• Animation in Blender

Module V [No. of Lectures: 7]

**Topics** 

1. Game Project in Blender

#### **Text Book:**

- Blender 3D Basics, Fisher Gordon (2012), Packet Publishing
- Blender Game Engine: Beginner's Guide, Bacone Victor Kuller (2012), Packt Publishing

#### **Reference Book:**

1. Blender Software Help and Youtube Resources

- 2. Blender 3D Architecture, Buildings, and Scenery: Create photorealistic 3D architectural visualizations of buildings, interiors, and environmental scenery, Allan Brito (2008), Packet Publishing
- 3. 3D Scientific Visualization with Blender, Brian R. Kent(2015), Morgan & Claypool

## Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

#### **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes				
	a	b	С	d	
1	L	L	L	L	
2	M	M	M	M	
3	M	M	M	M	

4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

CD	Course Delivery Method	Course	Course Delivery
		Outcome	Method
CD1	Lecture by use of boards/ LCD/	C01	CD1, CD2, CD3
	Projectors / OHP Projectors		
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3,
			CD4, CD5
CD5	Laboratory Experiments / Teaching	C05	CD1, CD2, CD5
	Aids		
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL		
	materials and internets		
CD9	Simulation		



**Course Code: AM329** 

**Course Title: Advance Game Engine** 

**Pre-requisite(s): Nil** 

Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI /III

Branch: BAM Type: Practical

#### **Course Objectives**

This course enables the students to:

A.	Design a Game Level using any prevalent Game Engine software
В.	Learn required software tools to make game levels
C.	Understand the process designing interactive multimedia applications

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Understand how to use Game Engines
2.	Create 3D game levels using Game Engines

#### **Syllabus**

Module I [No. of Lectures: 5]

**Topics** 

Game Engine User Interface

Module II [No. of Lectures: 6]

#### **Topics**

- Making a navigable Game Level using basic geometry tools
- Make a Terrain

Module III [No. of Lectures:6]

**Topics** 

• Explore the Libraries of Game Assets

Module IV [No. of Lectures: 6]

**Topics** 

- Adding interactive and other features to enhance the gaming level (Depending upon the type of game engine being taught. For example, if Unreal Editor is being taught then Terrain, Matinee, Trigger, Blue Print and Emitters etc.)
- Game Testing and Debugging

Module V [No. of Lectures: 5]

#### **Topics**

• Project Development

#### **Text Book:**

• Help Resources from Game Engine Software Developer

#### **Reference Book:**

- Learning C# by Developing Games with Unity 3D: Learn the fundamentals of C# to create scripts for your Game Objects, Terry Norton (2013), Packt Publishing
- Unity 3D and PlayMaker essentials: game development from concept to publishing, Miles, Jere (2016), Taylor & Francis, A K Peters/CRC Press
- Learning C++ by Creating Games with UE4: Learn C++ programming with a fun, real-world application that allows you to create your own games! William Sherif (2015), Packt Publishing
- Unreal Engine Game Development Blueprints: Discover all the secrets of Unreal Engine and create seven fully functional games with the help of step-by-step instructions, Nicola Valcasara (2015), Packet Publishing

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	Mapping between COs and Course Delivery (CD) methods					
CD	Course Delivery Method	Course Outcome	Course Delivery Method			
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3			
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3			
CD3	Seminars	C03	CD1, CD2, CD3			
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5			
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5			
CD6	Industrial / Guest Lecture					
CD7	Industrial Visits / in-plant training					
CD8	Self-learning such as use of NPTEL materials and internets					
CD9	Simulation					



**Course Code: AM330** 

**Course Title: Game Design Documentation** 

**Pre-requisite(s): Nil** 

Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI / III

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A.	Understand the process of Game Design and how to document it
В.	Design Game Design Documents and other creative elements for Games

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Contribute in a Game Development as an artist and game designer
2.	Work in Multimedia Projects as a Designer and work in Pre-production Field

#### **Syllabus**

Module I [No. of Lectures: 5]

**Topics** 

- 1. Brief History of Video Games
- 2. Game Genres
- 3. Understanding Game Production Pipeline

Module II [No. of Lectures: 6]

#### **Topics**

- 1. Idea Generation
- 2. Writing the Story / Writing for Games
- 3. Basics of Game Design Document Writing

Module III [No. of Lectures:6]

#### **Topics**

- 1. Character
- 2. Camera
- 3. Controls
- 4. Game Art (Asset) Creation

Module IV [No. of Lectures: 6]

# **Topics**

- 1. User Interface
- 2. Game Design Document Templates

3. Case Studies - Game Design Documents and Creative Aspects of Digital Games

Module V [No. of Lectures: 5]
Topics

- 1. Exposure to Game Engine Software for Game Development
- 2. Features of Game Engine

#### **Text Book:**

1. Level Up!: The Guide to Great Video Game Design, Scott Rogers (2010), Wiley

#### **Reference Book:**

- 1. Game Design Workshop: A Play centric Approach to Creating Innovative Games, by Fullerton Tracy (2014), RC Press/Taylor & Francis
- 2. Game Design for Teens by Les Pardew, Premier Press
- 3. Game Art: Art from 40 Video Games and Interviews with Their Creators, Matt Sainsbury
- 4. Video Game Art, Nic Kelman
- 5. Drawing Basics and Video Game Art: Classic to Cutting-Edge Art, Chris Solarski
- 6. Game Art: Creation, Direction, and Careers, Riccard Linde
- 7. Works of Game: On the Aesthetics of Games and Art, John Sharp
- 8. How to Become a Video Game Artist: The Insider's Guide to Landing a ..., Sam R. Kennedy
- 9. Interactive Stories and Video Game Art: A Storytelling Framework for Game Design, Chris Solarski
- 10. The Art of Game Design: A Book of Lenses, Second Edition, Jesse Schell
- 11. Artcade: The Book of Classic Arcade Game Artwork, Tim Nicholls, Neil Grayson
- 12. The Art of Video Games: From Pac-Man to Mass Effect., Chris Melissinos, Patrick O'Rourke

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment		
Day to day performance & Lab Files	30		
Quiz (s)	15		
Viva	15		
End Semester Practical Examination	25		
Viva Voce / Presentation	15		

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping b	etween COs and Course Delivery (CD) methods		
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1, CD2, CD3
CD2	Tutorial / Assignment	C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		



**Course Code: AM310** 

**Course Title: UI and UX Designing** 

**Pre-requisite(s):** Nil

Credits: 2 L: 0 T:0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI / III

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A	Understand the Concept of UI and UX
В	Understanding Principles of Designing a UI/UX
С	Understanding Software Used in this Process
D	Understanding the Role Played by UI-UX in Modern Times

#### **Course Outcomes**

After the completion of this course, students will be able to:

A	Mastering Designing Principles of UI/UX
В	Learning UI/UX Software's Used in Designing Such platforms
С	Learning About the Emerging Technologies Related to this Field
D	Design a UI/UX Project based on Various Learnt Technologies
Е	Design a Graphic Story book, Template of Website and App or Video

#### **Syllabus**

Module I Introduction to UI and UX Designing

[No. Of Lectures: 8]

Introduction to UI and UX Designing, Task Centered Designing, Brainstorming, Choosing the Users, Design Principles, Critique of the Design

Module II Elements of User Interface [No. Of Lectures: 8]

User Experience Design, Goals of User Interface, Customer Profile Design, Structure of UI, Elements of User Interface

Module III Information Architecture

[No. Of Lectures: 8]

Brand Goals, Auditing Designs of Competitors, Review User Needs, Functionality and Usability of Design , Typography , Studying Contemporary Designs

Module IV User Story Deeper Analysis

Prioritizing the User Goals, User Experience Overview, Brand Attributes, Site Taxonomy (Desktop and Mobile), Feature Prioritization

Module V Multimedia Tools for Designing UI & UX

[No. Of Lectures: 8]

[No. Of Lectures: 8]

Introduction to Designing Tools, Shape Creation Tools, Color Correction Tools, Interface Designing Principles.

#### **Text Book:**

1Introduction to Multimedia by Ramesh Bangia (Khanna Book Publishing Co. Pvt. Ltd)

- 2. Web Design in a Classroom by Jeremy Osborn, Jennifer Smith
- 3. Adobe Photoshop CC Classroom
- 4. Ux-design-for-startups-marcin-treder
- 5. Killer UX Design by Jodie Moule

#### **Reference Book:**

- 1. The Design Process by Karl Aspelund
- 2. Design Thinking by Gavin Ambrose/Paul Harris
- 3. The Design of Everyday Things Don Norman
- 4. 100 Things Every Designer Needs to Know Susan M Weinschenk

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	g between cos and Course Delivery (CD)	methods	
CD	Course Delivery Method	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors	C01	CD1,CD2,CD5,CD8
CD2	Tutorial / Assignment	C02	CD1,CD2,CD5, CD8
CD3	Seminars	C03	CD1,CD2,CD5, CD8
CD4	Mini Projects / Projects	C04	CD1,CD2,CD5,CD8
CD5	Laboratory Experiments / Teaching Aids	C05	CD1,CD2,CD5,CD8
CD6	Industrial / Guest Lecture		
CD7	Industrial Visits / in-plant training		
CD8	Self-learning such as use of NPTEL materials and internets		
CD9	Simulation		

# PE VIII



Course Code: AM331

**Course Title: Film Production Design** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI / III

**Branch: BAM** 

**Type: Practical** 

#### **SYLLABUS**

#### **Topics / Exercises**

#### Module I

Overview of Pre-Production Program Ideas, Theme Production Models and Treatment Research Budgeting

#### **Module II**

Story boarding Scene break down Rehearsals Planning and Scheduling

#### **Module III**

Set and Costume Design Props TechnicalRequirements Experimental Set Design Miniatures

#### **Module IV**

Set Plan and Positioning
Shot break up
Visualization & Sequencing

#### Module V

Camera Angles and Movements Blocking and Staging Movement and Transition

#### **Reference Books:**

- 1. Producing with passion: Making Films that Change the World (Author: Dorothy Fadiman, Tony Levelle
- 2. Shot by Shot (Author: Steven D. Katz)
- 3. The Five C's of Cinematography (Author: Joseph V. Mascelli)
- 4. Television Production Hand Book (Author: Herbert Zettl)

**Gaps in the syllabus (to meet industry / Profession requirements)** 

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

# **Mapping of Course Outcomes into Programme Outcomes**

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping	between COs and Course Delivery (CD) methods			
CD	Course Delivery Method	Course Outcome	Course Delivery Method	
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CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5	
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5	
CD6	Industrial / Guest Lecture			
CD7	Industrial Visits / in-plant training			
CD8	Self-learning such as use of NPTEL materials and internets			
CD9	Simulation			



**Course Code: AM313** 

**Course Title: Layout Design** 

Pre-requisite (s): Nil

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI / III

**Branch: BAM** 

**Type: Practical** 

**COURSE OBJECTIVE** – To teach layout design for a larger production studio.

**COURSE OUTCOMES-** The student will be able to draw layout and design backgrounds for animation and live action projects.

#### **SYLLABUS**

#### **Topics / Exercises: -**

#### **Module I**

- 1. Understanding the production process,
- 2. Role and function of layout in preproduction and production

#### **Module II**

- 1. Script breakdown,
- 2. Annotated screenplay,
- 3. thumbnails,
- 4. budget allocation

#### **Module III**

- 1. Rough drawings,
- 2. overhead plans,
- 3. camera placements

#### **Module IV**

- 1. Creating 3d models,
- 2. perspective,
- 3. tricks and shortcuts

#### Module V

- 1. Composition, path of action, cinematic consideration
- 2. Grids and guides, camera movement arrows, types of pan
- 3. Assignment, critical study of a master's work sample

# **Text Book:**

- 1. Layout and Composition for animation -by Ed Ghertner,
- 2. Layout and background by Walt Disney archives

Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

# Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
Examination Marks					

# **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods					
CD	Course Delivery Method	Course Outcome	Course Delivery Method		
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CD3	Seminars	C03	CD1, CD2, CD3		
CD4	Mini Projects / Projects	C04	CD1, CD2, CD3, CD4, CD5		
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5		
CD6	Industrial / Guest Lecture				
CD7	Industrial Visits / in-plant training				
CD8	Self-learning such as use of NPTEL materials and internets				
CD9	Simulation				



**Course Code: AM321** 

**Course Title: Product Designing & Visualization** 

Pre-requisite(s): Nil Credits: 2 L:0 T:0 P:4 Class schedule per week: 04

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI /III

**Branch: BAM Type: Practical** 

#### **Course Objectives**

This course enables the students to:

A.	Study and analyze Various Product Designs
В.	Sketch basic Product design Concepts
C.	Create product design in 2D
D.	Create product design in 3D
E.	Rendering Product for final composition

#### **Course Outcomes**

After the completion of this course, students will be able to:

1.	Visualize and design all types of industry standard 3D products
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# **Syllabus**

Module I [No. of Lectures: 6]

Topics:

Product Model design reference study

Module II [No. of Lectures: 6]

Topic:

Product Sketch and design concepts using basic sketching techniques,

Introduction to product design tools and its workflow

Module III [No. of Lectures: 6]

Topic:Product design concepts in 2D

Module IV [No. of Lectures: 6]

Topic:

Basic process and implementation of various tools and commands to create a 3D Product

Module V [No. of Lectures: 6]

Topic:

Rendering Product for final composition

#### **Reference Book:**

- 1. Autodesk 3ds Max 2018 Complete Reference Guide by Kelly L. Murdock
- 2. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
- 3. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch
- 4. Autodesk Maya 2018A Comprehensive Guide by Tickoo Sham

#### Gaps in the syllabus (to meet industry / Profession requirements)

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design

Course Delivery Method
Lecture by use of boards/ LCD/ Projectors / OHP Projectors
Tutorial / Assignment
Seminars
Mini Projects / Projects
Laboratory Experiments / Teaching Aids
Industrial / Guest Lecture
Industrial Visits / in-plant training
Self-learning such as use of NPTEL materials and internets
Simulation

#### Course Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

#### **Direct Assessment**

Assessment Tools	% Contribution during CO Assessment
Day to day performance & Lab Files	30
Quiz (s)	15
Viva	15
End Semester Practical Examination	25
Viva Voce / Presentation	15

Assessment	CO1	CO2	CO3	CO4	CO5
Components					
Quiz (I, II)	✓	✓	✓		
End Sem Examination	✓	✓	✓	✓	✓
Marks					
Mid-Term	✓	✓	✓		
<b>Examination Marks</b>					

#### **Indirect Assessment**

- 1. Student feedback on Faculty
- 2. Student feedback on Course outcome

<b>Course Outcome</b>	Programme Outcomes			
	a	b	С	d
1	L	L	L	L
2	M	M	M	M
3	M	M	M	M
4	Н	Н	Н	Н
5	Н	Н	Н	Н

L= Low M= Medium H= High

Mapping between COs and Course Delivery (CD) methods						
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CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5			
CD6	Industrial / Guest Lecture					
CD7	Industrial Visits / in-plant training					
CD8	Self-learning such as use of NPTEL materials and internets					
CD9	Simulation					