BIRLA INSTITUTE OF TECHNOLOGY

CHOICE BASED CREDIT SYSTEM (CBCS) CURRICULUM

(Effective from Academic Session: Monsoon 2022)

B.SC. ANIMATION & MULTIMEDIA

DEPARTMENT OF ANIMATION AND MULTIMEDIA

Institute Vision

To become a Globally Recognized Academic Institution in consonance with the social, economic and ecological environment, striving continuously for excellence in education, research and technological service to the National needs.

Institute Mission

- To educate the students at the Graduate, Post-graduate and Doctoral levels to effectively and efficiently perform challenging socially and economically relevant Scientific, Engineering and Managerial jobs in industry.
- To provide excellent research and development environment, infrastructure and facility to take up cutting edge Doctoral research programmes and relevant projects.
- To develop effective teaching-learning skills and state-of-the-art research potential, ability and attitude of the faculty.
- To bridge skill gaps, re-skill the learners and trainers in accordance to the emerging needs of Industry 4.0 education, and research and other emerging areas.

Department Vision

Pursuit of excellence in order to be recognized as a pioneer and frontrunner in the field of Animation and Multimedia studies in the country; to be in consonance with the emerging and current socio-economic reality and simultaneously be responsive to our ecological environment and remain motivated to contribute to the Nation building process through excellence in research and development activities and being alert and responsive to the needs of Industry 4.0 as a national and a global mandate.

Department Mission

- Enable students to achieve excellence both in skill and knowledge that is at par with industry especially Industry 4.0 standards and perform better in challenging situations
- To encourage cutting-edge, interdisciplinary and futuristic research in response to the needs of the Government, Industry and Society
- To nurture first generation entrepreneurs with innovative mind-set, responsive and adaptable to the broad range of industries including the fast-emerging Industry 4.0.
- To develop a curriculum where students will intrinsically understand the requirements and standards of the Industry and remain equipped to achieve the next level
- To provide excellent Consulting, and Research & Development facilities for faculty and students.
- To uphold the values of Personal Integrity and Social Responsibility

Graduate Attributes

1. **Technical Expertise**- Apply knowledge of Graphics, Aesthetics, Ergonomics and Perspective to solve complex design problems with simplicity and elegance.

2. **Design Thinking** - Identify, formulate, research, literature and analyse complex design problems. Packaging cryptic and voluminous content into simple and attractive packages that are accessible and user friendly.

3. **Design/ Development of Solutions**: Design solutions for complex engineering problems and design system components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.

4. **Understand the requirements of the client:** using research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of information to provide valid conclusions.

5. **Modern Tool Usage** – Have familiarity with cutting edge tools, techniques and processes. Be able to model, scale and predict relevant parameters of the project.

6. **The Designer and Society**: Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional design practice.

7. **Environment and Sustainability**: Understand the impact of professional design solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of design practice.

9. **Individual and Team Work**: Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.

10. **Outreach:** Communicate effectively on complex design activities with the professional community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations and give and receive clear instructions.

11. **Project Management and Finance**: Demonstrate knowledge and understanding of design principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. **Life-long Learning**: Recognize the need for and have the preparation and ability to engage in independent and life- long learning in the broadest context of technological change.

Programme Educational Objectives (PEOs)

1. To develop Animation, Multimedia and Communication competence of the students to enable them to take up eminent and gainful position in the Industry and/or foray as first-generation entrepreneurs in the domain;
2. To impart professional education and training in the field of 2D & 3D Animation, Digital Games, Film Making, Post-production, Graphic Designing, User Interface Designing, Web & Apps Designing and Communication Education especially keeping in mind the needs of Industry 4.0;
3. To disseminate knowledge and information by facilitating industry-academia interface and continuing interaction with Alumni to meet the demand of quality education and creating an ecosystem relevant to the Nation building process;
4. To produce graduates who are socially responsible and capable of engaging in Lifelong learning; and
5. Create scholars involved and engaged in futuristic research and quality consulting.

(A) Programme Outcomes (POs)

On successfully completing the program, a graduate should be able to:

1. **Technical Expertise**- Apply knowledge of Graphics, Aesthetics, Ergonomics and Perspective to solve complex design problems with simplicity and elegance.

2. **Design Thinking** - Identify, formulate, research, literature and analyse complex design problems. Packaging cryptic and voluminous content into simple and attractive packages that are accessible and user friendly.

3. **Design/ Development of Solutions**: Design solutions for complex engineering problems and design system components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.

4. **Understand the requirements of the client:** using research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of information to provide valid conclusions.

5. **Modern Tool Usage** – Have familiarity with cutting edge tools, techniques and processes. Be able to model, scale and predict relevant parameters of the project.

6. **The Designer and Society**: Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional design practice.

7. **Environment and Sustainability**: Understand the impact of professional design solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of design practice.

9. **Individual and Team Work**: Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.

10. **Outreach:** Communicate effectively on complex design activities with the professional community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations and give and receive clear instructions.

11. **Project Management and Finance**: Demonstrate knowledge and understanding of design principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. **Life-long Learning**: Recognize the need for and have the preparation and ability to engage in independent and life- long learning in the broadest context of technological change.

(B) Programme Specific Outcomes (PSOs)

13. Apply the basic concepts of classical and emerging notions of Animation, Multimedia and Communication Studies and interdisciplinary knowledge to identify & analyse complex issues and arrive at solutions affecting contemporary organisations and the Industry.
14. Identify suitable resources and utilise them optimally to respond efficiently to the needs of society, economy and the Nation building.
15. Become effective decision makers committed to professional & personal ethics as well as social responsibility and be abreast of and qualified to respond to the needs and demands of Industry 4.0. Initiate and participate in the change process and value creation across all levels.

BIRLA INSTITUTE OF TECHNOLOGY – MESRA, RANCHI

NEW COURSE STRUCTURE– To be effective from Academic Session 2022-23
Based on CBCS & OBE Model
BACHELOR OF SCIENCE IN ANIMATION & MULTIMEDIA

SEMESTER WISE CREDIT DISTRIBUTION

The total minimum credits for completing Bachelor of Animation & Multimedia is 120

S. No	Semester	Course Category	Credits	Total
1	FIRST	Programme Core	18	20
		Programme Electives	02	
2	SECOND	Programme Core	18	20
		Programme Electives	02	
3	THIRD	Programme Core	18	20
		Programme Electives	02	
4	FOURTH	Programme Core	18	20
		Programme Electives	02	
5	FIFTH	Programme Core	12	20
		Programme Electives	08	
6	SIXTH	Programme Core	06	20
		Programme Electives	08	
		Research Project	06	
Total				**120**

BACHELOR OF SCIENCE IN ANIMATION & MULTIMEDIA

SEMESTER WISE CREDIT DISTRIBUTION (Based on CBCS & OBE Model)

Semester / Session of Study (Recommended)	**Course Level**	**Course Code**	**Courses**	**Mode of delivery & credits** *L-Lecture; T-Tutorial; P-Practical*			**Total Credits** *C - Credits*
				L (Periods/week)	T (Periods/week)	P (Periods/week)	
		THEORY					
FIRST **Monsoon**	**FIRST**	AM101-R1	History of Animation	3	1	0	4
		AM102-R1	Introduction to Visual Studies	3	1	0	4
		AM104-R1	Introduction to Multimedia	3	1	0	4
		LABORATORIES					
		AM105-R1	Experimental Animation	0	0	5	2.5
		AM106	Introduction to 3D	0	0	4	2
		MT132	Communication Skills I	0	0	3	1.5
		ELECTIVES (To be opted from List of SKILL DEVELOPMENT COURSES)					
		PE(SEC-I)	Paper -I (Skill Enhancement Course)	-	-	-	2
		TOTAL					**20**

Semester / Session of Study (Recommended)	**Course Level**	**Course Code**	**Courses**	**Mode of delivery & credits** *L-Lecture; T-Tutorial; P-Practical*			**Total Credits** *C - Credits*
		THEORY					
SECOND Spring	**FIRST**	AM107	Principles of Animation	3	0	0	3
		AM108-R1	Theory of Visual Studies	3	1	0	4
		AM110	Story Appreciation for Gaming	3	0	0	3
		AM111-R1	Introduction to Multimedia Tools	3	1	0	4
		LABORATORIES					
		AM112	Film Appreciation	0	0	4	2
		AM113	Emerging 3D Technologies	0	0	4	2
		ELECTIVES (To be opted from List of SKILL DEVELOPMENT COURSES)					
		PE(SEC-II)	Paper -II (Skill Enhancement Course)	-	-	-	2
		TOTAL					**20**

Semester / Session of Study (Recommended)	Course Level	Course Code	Courses	Mode of delivery & credits *L-Lecture; T-Tutorial; P-Practical*			Total Credits *C - Credits*
				L (Periods/week)	T (Periods/week)	P (Periods/week)	
THIRD Monsoon	**SECOND**	**THEORY**					
		AM201	Audio Visual Technology	3	0	0	3
		AM202	Visual Communication	3	0	0	3
		AM203	Basics of Programming	3	0	0	3
		AM204	Vector Art Study	2	0	2	3
		LABORATORIES					
		AM205	Animation Techniques	0	0	4	2
		AM206	Visual Studies	0	0	4	2
		AM207	3D Modeling Techniques	0	0	4	2
		ELECTIVES (To be opted from List of SKILL DEVELOPMENT COURSES)					
		PE(SEC-III)	Paper -III (Skill Enhancement Course)	-	-	-	2
		TOTAL					**20**

SEMESTER /Session of Study (Recommended)	LEVEL	Course Code	Courses	Mode of delivery & credits *L-Lecture; T-Tutorial; P-Practical*			Total Credits C-Credits
				L (Periods/week)	T (Periods/week)	P (Periods/week)	
		THEORY					
FOURTH **Spring**	**SECOND**	AM208	Communication for Development	3	0	0	3
		AM209-R1	Graphics Design Communication	3	1	0	4
		AM210	Research in Gaming	3	0	0	3
		LABORATORIES					
		AM211	Advanced Animation Techniques	0	0	4	2
		AM212	Visual Development	0	0	4	2
		AM213	Digital Film Production	0	0	4	2
		AM214	Advance 3D Modeling, Texturing, Lightning & Rendering	0	0	4	2
		ELECTIVES (To be opted from List of SKILL DEVELOPMENT COURSES)					
		PE(SEC-IV)	Paper -IV (Skill Enhancement Course)	-	-	-	2
		TOTAL					**20**

SEMESTER /Session of Study (Recommended)	LEVEL	Course Code	Courses	Mode of delivery & credits *L-Lecture; T-Tutorial; P-Practical*			Total Credits C-Credits
				L (Periods/week)	T (Periods/week)	P (Periods/week)	
		THEORY					
FIFTH Monsoon	**THIRD**	AM301-R1	Visual Narratives	3	1	0	4
		AM302	Compositing & VFX	2	0	2	3
		LABORATORIES					
		AM303-R1	2D Digital Animation	0	0	3	1.5
		AM304	3D Animation, Rigging & Skinning	0	0	4	2
		MT133	Communication Skills II	0	0	3	1.5
		ELECTIVES (To be opted from List of Program Elective (PE))					
		PEI	Paper -V Programme Elective	-	-	-	2
		PEII	Paper -V Programme Elective	-	-	-	2
		PEIII	Paper -V Programme Elective	-	-	-	2
		PEIV	Paper -V Programme Elective	-	-	-	2
		TOTAL					**20**

SEMESTER /Session of Study (Recommended)	LEVEL	Course Code	Courses	Mode of delivery & credits *L-Lecture; T-Tutorial; P-Practical*			Total Credits C-Credits
				L (Periods/week)	T (Periods/week)	P (Periods/week)	
SIXTH Spring	THIRD	**THEORY**					
		AM305-R1	Direction for Animation	2	0	0	2
		AM306-R1	Motion Graphics	1	0	2	2
		LABORATORIES					
		AM307	Advance 3D Dynamics	0	0	4	2
		AM308-R1	Degree Showcase Project				6
		ELECTIVES (To be opted from List of Program Elective (PE))					
		PEV	Paper -VI Programme Elective	-	-	-	2
		PEVI	Paper -VI Programme Elective	-	-	-	2
		PEVII	Paper -VI Programme Elective	-	-	-	2
		PEVIII	Paper -VI Programme Elective	-	-	-	2
		TOTAL					20
		TOTAL PROGRAM CREDITS					**120**

PROGRAM ELECTIVES (LIST OF SKILL ENHANCEMENT COURSES)							
				Mode of delivery & credits *L-Lecture; T-Tutorial; P-Practical*			**Total Credits**
PE / LEVEL	**Programme Elective (PE)**	**Code No**	**Name of the PE Course**	**L (Periods/week)**	**T (Periods/ week)**	**P (Periods/ week)**	**C**
1	PE(SEC-I)	AM114	Basic Drawing Skills	0	0	4	2
		AM115	Presentation Design	0	0	4	2
		AM116	Photography	0	0	4	2
		AM117	Game Appreciation	2	0	0	2
		AM118	Digital Animation	0	0	4	2
		AM119	Desktop Publishing	0	0	4	2
1	PE(SEC-II)	AM120	Basic Writing Skills	0	0	4	2
		AM121	Web Design	0	0	4	2
		AM122	Comic Illustration	0	0	4	2
		AM123	Product Modeling in 3D	0	0	4	2
		AM124	Lighting for Video Production	0	0	4	2
		AM125	Role of Multimedia Tools in Indian Art	0	0	4	2
2	PE(SEC-III)	AM126	Fiction Writing	0	0	4	2
		AM127	Calligraphy	0	0	4	2
		AM128	Architectural Modeling	0	0	4	2
		AM129	Basic Video Editing	0	0	4	2
		AM130	Game Design	0	0	4	2
2	PE(SEC-IV)	AM131	Science Communication	2	0	0	2
		AM132	3D Animation	0	0	4	2

		AM133	Matte Painting	0	0	4	2
		AM134	Sound Design	0	0	4	2
		AM135	Advertising Campaign Design	0	0	4	2

LIST OF PROGRAM ELECTIVES (PE)							
`				**Mode of delivery & credits *L-Lecture; T-Tutorial; P-Practical***			**Total Credits**
PE / LEVEL	**Programme Elective (PE)**	**Code No**	**Courses**	**L (Periods /week)**	**T (Periods /week)**	**P (Periods/ week)**	**C**
3	PEI	AM335	Story Boarding	0	0	4	2
3		AM332	Documentary Film Making	0	0	4	2
3		AM333	Film & Documentary Script Writing	0	0	4	2
3	PEII	AM314	Character Design	0	0	4	2
3		AM315	Urban Sketching	0	0	4	2
3		AM317	Writing for Advertising	2	0	0	2
3		AM337	Fundamentals of Theatre and Acting	2	0	0	2
3	PEIII	AM326	Stop Motion	0	0	4	2
3		AM323	Classical Animation	2	0	0	2
3		AM319	3D Sculpting	0	0	4	2
3		AM320	3D Motion Graphics and Dynamics	0	0	4	2
3	PEIV	AM311	Magazine Design	0	0	4	2
3		AM328	Apps Creation	0	0	4	2
3		AM336	Digital Painting	0	0	4	2
3	PEV	AM324	VFX in 2D Animation	0	0	4	2
3		AM325	Production Design	2	0	0	2
3		AM322	3D Compositing for Camera	0	0	4	2
3	PEVI	AM309	Storytelling Using Multimedia	0	0	4	2
3		AM312	Graphic Novel	2	0	0	2

3		AM316	Participatory Communication	2	0	0	2
3		AM318	Media Studies	0	0	4	2
3	PEVI I	AM327	Game Making in Blender	0	0	4	2
3		AM329	Advance Game Engine	0	0	4	2
3		AM330	Game Design Documentation	0	0	4	2
3		AM310	UI & UX Designing	0	0	4	2
3	PEVI II	AM331	Film Production Design	0	0	4	2
3		AM313	Layout Design	0	0	4	2
3		AM321	Product Designing and Visualization	0	0	4	2

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Detailed Syllabus of

B.Sc. A&M

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

COURSE INFORMATION SHEET

Course Code: AM101-R1

Course Title: History of Animation

Pre-requisite(s): Nil
Credits: 4 L:3 T:1 P:0
Class schedule per week: 04
Class: B.Sc. (Animation & Multimedia)
Semester / Level: I / I
Branch: BAM
Name of the Teacher:

Course Objectives
This course enables the students to:

1	Understand the Early approaches to motion in art
2	Learn about different Devices that successfully displayed animated images
3	Learn about History of American, Japanese, Indian Animation and their comparative study
4	Understand Traditional Animation Process, and different techniques of Animation
5	Learn how Animation has evolved with technology

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

CO1	Understand how Animation started and has evolved with technology
CO2	Know about different Animation techniques and styles
CO3	Know about popular Animation Studios, Films, and Artists
CO4	Understand the key terms in Animation Production process
CO5	Know about the application and influence of Animation

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module I **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.	**8**
Module II **History of American animation** - Biography of Walt Disney. Brief discussion of Disney studio, Warner Studio and UPA studio. Influences on pop-culture.	**8**

Brief history of Japanese animation - Biography of Osamu Tezuka.	
Module III **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	**8**
Module IV **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.)	**8**
Module V **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.	**8**

Reference Books:

1. Hundred Years of Cinema Animation By Giannalberto Bendazzi
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 By Elne 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)

1.Make the students aware of the culture of animation

2.Enable them to enter the fraternity of animation

3.Focus on principles and not on figure and facts

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1. Major companies working in industry
2. Popular people and pioneers in the industry all over the world

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	3	2	1	1	1	2	2	1	2	2	1	3	3	3	3
CO2	3	2	3	3	3	3	1	2	3	3	1	3	3	3	3
CO3	2	2	2	3	2	2	2	3	2	3	1	3	3	3	3
CO4	3	3	3	2	3	3	3	3	2	3	2	2	1	2	3
CO5	3	3	2	3	3	3	3	3	3	3	2	2	1	2	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

Course Code: AM102-R1
Course Title: Introduction to Visual Studies
Pre-requisite(s): Nil
Credits: 4 L:3 T:1 P:0
Class schedule per week: 04
Class: B.Sc. (Animation & Multimedia)
Semester / Level: I / I
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1	Understand the fundamentals of Visual Art
2	Understand Art forms, Elements of Art, Principles of Art
3	Know about Pre-historic Art and early civilization
4	Study various old artists discuss their art techniques and their contribution
5	Understand basic drawings

Course Outcomes

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

CO1	Implement the fundamentals of Visual Art in practice
CO2	Absorb concepts of visual art
CO3	Understand early attempts of art by human being
CO4	Prepare a document on old artists, their techniques and contribution
CO5	Draw still life, human figure in simplified forms, and submit 200 sketches of out- door study

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module I Introduction to Visual Art, 2 Dimension and 3 Dimension art form, Different medium of art, Different types of Paintings.	**8**
Module II Six Limbs of Indian Paintings, Elements of Art, Principles of Art Evolution of Art. Pre-modernism-Sculpture, Painting (Mural Paintings and manuscript paintings)	**8**
Module III Pre-historic Art: Cave Paintings, Art of Indus valley civilization	**8**
Module IV Introduction of Artists- Picasso, Salvador Dali, Paul Gauguin, Van Gogh etc	**8**
Module V Drawing Basics (Basic Shapes), Drawing Classes (Out Door), Object Drawing Classes (Still Life) Live Model Drawing, and Perspective Drawings	**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)

1. Introduce students to various art forms
2. Appreciate broad demarcation within art forms
3. Appreciate the choices available for work

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1. Understanding different tools

2. Various specializations in art field

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)	✓	✓	✓		
End Sem Examination Marks	✓	✓	✓	✓	✓

Mid-Term Examination Marks	✓	✓	✓		

Indirect Assessment

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

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
CO1	3	2	1	1	1	2	2	1	2	2	1	3	3	3	3
CO2	3	2	3	3	3	3	1	2	3	3	1	3	3	3	3
CO3	2	2	2	3	2	2	2	3	2	3	1	3	3	3	3
CO4	3	3	3	2	3	3	3	3	2	3	2	2	1	2	3
CO5	3	3	2	3	3	3	3	3	3	3	2	2	1	2	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

Course Code: AM104-R1
Course Title: Introduction to Multimedia
Pre-requisite(s): Nil
Credits: 4 L:3 T:1 P:0
Class schedule per week: 04
Class: B.Sc. (Animation & Multimedia)
Semester / Level: I / I
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand various elements of multimedia
2.	Gain introductory knowledge of working mechanism of these elements
3.	Understand steps involved in designing a multimedia project
4.	Understand emerging technologies in the field of multimedia
5.	To develop ability to design a multimedia message

Course Outcomes

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

CO1	Understand various aspects of multimedia communication
CO2	Technical details related to various elements of multimedia and emerging technologies
CO3	Understand the role played by various multimedia platforms
CO4	Design a multimedia project by combining various elements of multimedia
CO5	Design a Graphic Story book, Template of Website and App or Video

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module I: Introduction to Multimedia Topics: What is Multimedia, Elements of Multimedia in detail, Linear and Non-Linear Multimedia, Uses of Sound and Typography in Multimedia	**8**
	8

Module – II **Authoring Tools** 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** Topics: What is Visual Communication, Use of Authoring tools in Visual Communication, Principles of Gestalt theory, Introduction to Color theory, Storytelling through multimedia.	**8**
Module – IV **Introduction to Internet Technology** 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,)–	**8**
Module – V **Emerging Multimedia Technologies** Topics: Introduction to AR/VR, Applications of AR/VR, Study of New Media platforms like Websites and Apps	**8**

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 by Partho 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)

1. Introduction to Financial Planning During Project Design
2. Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

1. Introduction to International Collaboration
2. More Emphasis on Financially Viability of Project
3. Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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

Indirect Assessment

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	3	3	1	1	1	1	1	1	1	1	1	1	3	1	1
CO3	3	3	3	1	3	1	2	1	1	2	1	1	3	1	2
CO4	3	3	3	3	3	1	3	1	1	2	2	1	3	2	3
CO5	3	3	3	3	3	2	3	1	1	2	2	1	3	2	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (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			

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COURSE INFORMATION SHEET

Course Code: AM105-R1

Course Title: Experimental Animation

Pre-requisite (s): Nil
Credits: 2.5 L:0 T:0 P:5
Class schedule per week: 05
Class: B.Sc. (Animation & Multimedia)
Semester / Level: I / I
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1	Understand the fundamentals of Experimental Animation
2	Understanding implementation of Animation Production Process
3	Learning related hardware, software and other tools for experimental animation
4	Introduction to Flip Book, clay modeling, cutout animation and set design
5	Gaining experience of working in a group

Course Outcomes

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

CO1	Submit an independent Flip Book, a Short experimental group film in any medium
CO2	Operate relevant animation and camera equipment
CO3	Understanding of character development and storytelling
CO4	Gain experience in handling different raw materials like; Clay, Paper, Sand, Colors etc.
CO5	Experience in working within a timetable and schedule

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module 1 Introduction to Experimental Animation 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.	**8**
Module 2 Software and Hardware Requirements Introduction to Animation Equipment- 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.	**8**

Module 3 Pre- Production Design (Planning & Design) Idea – Script- Treatment, Character Design, Prop Design/ Set Design, Storyboard Design, Animatics, Layouts of Character and sets.	**8**
Module 4 Production Design (Implementation) 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.	**8**
Module 5 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.	**8**

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)

1.Need to implement the principles.

2. Should participates in competition.

POs met through Gaps in the syllabus

2, 3, 8, 7, 10

Topics beyond syllabus / advanced topics / design

1. Should intern in an agency.

POs met through topics beyond syllabus / advanced topics / design

1, 3, 9, 11, 12, 13, 14, 15

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	**Program Outcomes (POs)**												**Program Specific Outcomes (PSOs)**		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	3	3	1	1	1	1	1	1	1	1	1	1	3	1	1
CO3	3	3	3	1	3	1	2	1	1	2	1	1	3	1	2
CO4	3	3	3	3	3	1	3	1	1	2	2	1	3	2	3

CO5	3	3	3	3	3	2	3	1	1	2	2	1	3	2	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (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			

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand forms shapes and volumes
2.	Sketch forms shapes with ease
3.	Living and Non-living objects
4.	Analyzing products and its designs
5.	Visualize and create design concepts using different mediums

Course Outcomes

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

CO1	Solid understanding of forms shapes and volumes
CO2	Create their own sketches
CO3	Create product designs
CO4	Creating Real world design
CO5	Create miniatures and prototypes

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module I 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.	**8**
Module II Perspective and its use. Introduction of positive and negative extrusion Creating different Joints Shadow creations Projection drawing.	**8**

Module III Understanding of Proportions Combining Geometrical shapes to create objects Isometric Drawings Creating Concepts and working Features of Product design Product Design	**8**
Module IV Working on Real world design concepts, spotting design faults and create solutions to rectify the problems.	**8**
Module V 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.	**8**

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)

Detailed study on international designer works.

POs met through Gaps in the syllabus

2,5,6,7,10,12

Topics beyond syllabus / advanced topics / design

Outdoor design studies

Other software and tools like google sketch Up

POs met through topics beyond syllabus / advanced topics / design

1,2,3,5,6,7,8,9,10,11,12

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1
CO2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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		

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COURSE INFORMATION SHEET

Course Code: MT 132
Course Title: Communication Skills I
Pre-requisite(s): Nil
Credits: 1.5 L:0 T:0 P:3
Class schedule per week: 03
Class: B.Sc. (Animation & Multimedia)
Level: I (First Year)
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

A.	To demonstrate ability to listen to and comprehend complex speech in English, listen to explanations, descriptions, messages, news stories, opinions, solutions, etc.
B.	To demonstrate ability to speak effectively in English with peers, teachers, and others, handle the various speaking situations in their academic and social sphere with confidence.
C.	To demonstrate ability to read and analyse functional texts with confidence; apply critical thinking, analysis and problem-solving skills to the reading material
D.	To demonstrate ability to write messages, personal accounts, critical reviews, short biographies, describe processes, write persuasive essays, etc.
E.	To demonstrate a strong hold on functional grammar which helps them avoid common errors in communication

Course Outcomes

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

1	Communicate confidently in English with their peers and teachers in the immediate environment and with colleagues, clients, etc. in their future workplaces
2	Apply their learning of English to domain subjects and make presentations, posters, write research papers, lab reports, etc with confidence.
3	Handle communicative situations in their academic like such as conversations, discussions, interviews, presentations, seminars, webinars, etc. with confidence
4	Prepare for their future workplaces and their requirements such as handling team huddles, meetings, phone calls, client visits, field visits, inspections, etc.
5	Apply critical thinking abilities to analyses problems, brainstorm solutions, handle situations that require persuasive skills, etc.

Syllabus

Module I: Effective Listening

The importance of listening; Listening or descriptions of people; listening for opinions; listening for complaints; Listening to people making, accepting, and declining requests; Listening to news stories; listening to messages and a podcast; Process of Listening, Types of Listening, Barriers to Effective Listening, Listening at different managerial levels.
Listening for information about living abroad; listening to opinions; Listening to complaints; Listening to environmental problems; listening for solutions; Listening to descriptions of important events; listening to regrets and explanations; Listening to explanations; listening for the best solution; Listening to past obstacles and how they were overcome; listening for people's goals for the future.

Module II: Speaking with Confidence

Describing personalities; expressing likes and dislikes; agreeing and disagreeing; complaining; Talking about possible careers; describing jobs; deciding between two jobs; Making direct and indirect requests; accepting and declining requests; Narrating a story; describing events and experiences in the past; Talking about traveling abroad; expressing emotions; describing cultural expectations; giving advice; Describing problems; making complaints; explaining something that needs to be done; Identifying and describing problems; coming up with solutions; Asking about preferences; discussing different skills to be learned; talking about learning methods; talking about life skills; asking for and giving advice or suggestions; talking about things to be accomplished in the future; Describing milestones; describing turning points; describing regrets and hypothetical situations; Describing qualities for success; giving reasons for success; interviewing for a job; talking about ads and slogans; Drawing conclusions; offering explanations; Giving opinions for and against controversial topics; offering a different opinion; agreeing and disagreeing

Module III: Art of Reading

Reading about unusual social networking sites; Reading about different types of workplaces; Reading about talking to friends about difficult topics; Types of Reading, Methods of Reading, Reading Comprehension.
Reading about the reliability of online content; Reading about a problem with a ride-sharing service; Reading about a creative solution to a problem; Reading about different studying styles; Reading about young scientist; Reading about futurists and their predictions for the year 2050; Reading about a conflict and advice on how to fix it; Reading about advertisements; Reading about unexplained events; Reading about a job role; Reading about plagiarism in the digital age.

Module IV: Writing Skills

Writing a description of a good friend; Writing about two career choices; Writing a message with requests; Writing a personal account; Writing a pamphlet for tourists; Writing a critical online review; Writing a post on a community website; Writing about a skill; Writing a message of advice; Writing a biography; Writing a message of apology; Writing a TV or web commercial; Writing about a process; Writing a persuasive essay; Writing a personal statement for an application.

Module V: Advanced Writing Skills

Art of condensation: Précis writing, Summary, Abstract, Synopsis, Paraphrasing; Paragraph writing; Essay writing: Writing a persuasive essay; Writing a biography; Writing about a

process; Writing a personal statement for an application; Writing a critical online review; Writing about a complicated situation; Report writing, Writing technical proposals.

Textbooks:

T1. Communication Skills IInd edition, Sanjay Kumar & PushpLata, Oxford University Press

T2. Business Correspondence and Report Writing,R.C.Sharma, Krishna Mohan.Mcgraw Hill

T3. Communication for Business,Shirley Taylor, V.Chandra, Pearson

T4. Basic Business Communication- .Lesikar I Flatley, McGraw Hill.

T5. Business Communication Today ,Bovee, Thill and Chatterjee, Pearson

Coursebook: Interchange 5 edition Level 3, Jack C. Richards, Jonathan Hull, Susan Proctor, Cambridge University Press

Components: Student's Book with online self-study (print/online bundle)

CEFR level: B1

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

COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Provide the student with a thorough introduction to the field of animation
2.	The development of timing and choreography skills in animation, which have a profound effect on all subsequent animation production.
3.	Range of animated films which help develop the foundations of a critical understanding of animation production terminology.
4.	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.
5.	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:

CO1	Display relevant animation skills at a level suitable for further studies in animation production.
CO2	Demonstrate a sound understanding of the 'principles of animation'
CO3	Apply fundamental animation timing skills through the creation of sequential images.
CO4	Apply fundamental processes of visual problem solving in animation.
CO5	Demonstrate a sound understanding of ‘Classical Animation Techniques’.

Syllabus

Module	**No. of Lectures**
Module 1 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	6 Lectures

Module 2 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.	6 Lectures
Module 3 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	6 Lectures
Module 4 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	6 Lectures
Module 5 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 In-between Mistakes, Watch your Arcs, The Elongated In-between, The Rough Approach In class practice: 1) Head Turn with and without hairs	6 Lectures

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.	

Text Books:

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

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): To be more artistic and digital

POs met through Gaps in the syllabus: 1, 2, 5, 8, 9, 10, 12, 13, 14, 15

Topics beyond syllabus / advanced topics / design: Introduce effective Storytelling or gags through the classical animation exercises.

POs met through topics beyond syllabus / advanced topics / design: 2, 4, 6, 8, 9, 10, 12, 13, 14, 15

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	3	2	2	3	1	1	1	2	2	1	1	3	3	2	2
CO2	3	2	2	3	1	2	1	2	3	2	1	3	3	2	2
CO3	3	2	2	3	1	2	1	2	3	2	2	3	3	2	2
CO4	1	3	3	1	2	2	2	3	2	3	3	3	3	1	2
CO5	2	2	2	3	1	2	1	2	3	2	1	3	3	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

Course Code: AM108-R1
Course Title: Theory of Visual Studies
Pre-requisite(s): Nil
Credits: 4 L:3 T:1 P:0
Class schedule per week: 04
Class: B.Sc. (Animation & Multimedia)
Semester / Level: II / I
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

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

Course Outcomes

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

CO1	Implement the fundamentals of Visual Art in practice
CO2	Understand early attempts of art by human being
CO3	Absorb concepts of visual art
CO4	Visit an Exhibition of Art and prepare a report.
CO5	Draw still life, human figure in simplified forms, and submit 200 sketches of out-door study

Syllabus

Module	No. of Lectures
Module I 3-point perspective History of Linear perspective Colour perspective Colour theory	6
Module II Importance of figure study Human figure proportions About animal figure study	6
Module III Composition in art Element of composition Rule of composition	6

Module IV Evaluation of modern Indian art British Colonial art	6
Module V Still life painting with drapery Life Study Rapid Sketching	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):

1. Study of various cultures, costumes, landscapes, human and animal structure as per their native places.

POs met through Gaps in the syllabus: 2, 3, 4, 6, 7, 10, 12

Topics beyond syllabus / advanced topics / design:

1. Study of dummy Models and armatures of human and animals.

POs met through topics beyond syllabus / advanced topics / design: 1, 2, 4, 5, 6, 9, 10, 12

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes into Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	2	1	2	2	2	3	2	1	3	3	1	1
CO2	1	2	2	1	1	2	2	2	1	1	1	3	3	2	2
CO3	2	2	2	3	1	3	2	2	3	2	1	3	3	2	2
CO4	3	3	3	3	2	3	2	2	3	2	2	3	3	3	2
CO5	3	2	3	2	1	2	1	2	3	2	1	3	3	2	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

Course Code: AM110
Course Title: Story Appreciation for 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: II / I
Branch: BAM
Name of the Teacher:

Course Objectives
This course enables the students to:

1.	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.
2.	Learn to explore and appreciate the story element of digital games with a perspective of a Game Designer.
3.	Understand the concept of process of Game Development and Game Development parts.
4.	Explore various popular digital games and to analyze them critically.
5.	Share each other's experiences of different games.
6.	Understand the fundamentals of Digital Games starting from games in general then digital games. Students learn about the elements of a game.
7.	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:

CO1	Understand digital games and its elements.
CO2	Students will be able to look at Games as digital medium for story telling
CO3	Students will make up their mind if and which field of Game Production suit them.
CO4	Students will explore and enjoy the story telling capabilities of games.
CO5	Students will learn to critically analyze the digital games.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I	**6**

Video Game Culture and Storytelling: How various games have become part of culture (of some nations), Storytelling capabilities of video games **Game Narrative Basics:** How games can be used for narrative purpose **Non-Linear Game Narrativ**e: Non-linear storytelling and its types	
Module – II **Writing for Games: T**he art, style and format of writing Games. **Game Characters:** Understanding characters and Developing Characters **Voice Over:** Types of Voice in Games, Studying examples	**6**
Module – III **Cut Scenes and Scripted Events:** Machinima, Types and Examples **Intellectual Property (IP) Protection for Video Games:** Types of IP in Games **Localization:** What is Localization, why it is important, How to do localization	**6**
Module – IV **The Needs of the Audience:** What game audience look for in a game **Weaving interactive stories for games:** How to add interactivity in games	**5**
Module – V **Case Studies**: Story in Games (Silent Hill 2 and Bioshock)	**5**

Text Book:

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

Reference Books:

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

1. Chris Solarski (2017), Interactive Stories and Video Game Art: A Storytelling Frame work for 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)

1. Introduce the students to storytelling aspects of digital games specifically
2. More exposure of digital games is required

POs met through Gaps in the Syllabus

6, 7, 10, 12

Topics beyond syllabus/Advanced topics/Design

1. Serious Games
2. Exposure to games of different genre
3. Game Development

POs met through Topics beyond syllabus/Advanced topics/Design

4, 1, 3

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	3	2	1	1	1	2	2	1	2	2	1	3	3	3	3
CO2	3	2	3	3	3	3	1	2	3	3	1	3	3	3	3
CO3	2	2	2	3	2	2	2	3	2	3	1	3	3	3	3
CO4	3	3	3	2	3	3	3	3	2	3	2	2	1	2	3
CO5	3	3	2	3	3	3	3	3	3	3	2	2	1	2	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

Course Code: AM111-R1
Course Title: Introduction to Multimedia Tools
Pre-requisite(s): Nil
Credits: 4 L: 3 T:1 P:0
Class schedule per week: 04
Class: B.Sc. (Animation & Multimedia)
Semester / Level: II / I
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand various elements of multimedia
2.	Gain introductory knowledge of working mechanism of these element
3.	Understand the Interface of Designing Software
4.	To develop ability to design a multimedia product

Course Outcomes

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

CO1	Understand various aspects of multimedia communication
CO2	Gain Knowledge of Designing Software's Interface
CO3	Gain Application Knowledge of Designing Tools
CO4	Experiment with Design Parameters
CO5	Practice Designing Multimedia Projects

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module I **Introduction to tools of multimedia elements-**	**8**

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	
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,	**8**
Module – III **Corporate Logos, Audio & Video based Content** What is a Logo, History of Logo Designing, Uses of Logo, Elements of Logo Designing, Multimedia tools used in designing Logo	**8**
Module – IV **Various uses of Multimedia Tools and their techniques** 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	**8**
Module – V **Application of Multimedia tools -** 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	**8**

Text Books:

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 Books:

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)

3. Introduction to Financial Planning During Project Design
4. Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

4. Introduction to International Collaboration
5. More Emphasis on Financially Viability of Project
6. Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	2	2	2	2	2	2	2	2	2	3	1	2
CO2	1	1	1	1	2	1	1	1	1	1	1	1	3	2	2
CO3	2	1	1	1	2	1	2	1	1	1	1	1	3	3	2
CO4	2	2	3	2	3	1	1	1	1	1	1	1	3	3	2
CO5	3	3	3	3	3	1	1	1	1	1	1	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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
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			

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COURSE INFORMATION SHEET

Course Code: AM112

Course Title: Film Appreciation

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

Name of the Teacher:

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:

1	To become an active viewer of cinema
2	Understand the way how content, form and context work together to create meaning in film
3	Be able to critically explore film as a dynamic, multifaceted medium
4	Understand the creative technique of film
5	Understanding the history of Indian and western cinema

Course Outcomes

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

CO1	Critically analyze films in general
CO2	Capability to understand the script and technical importance in film
CO3	Will be able to differentiate the impact of different film genre
CO4	Will have a better understanding of camera and editing techniques
CO5	Will come up with new idea in the field of film making

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module 1 Cinema Jargon etymology, Theme, Story, Narrative, Screenplay and plot	**8**
Module 2 Introduction to Indian Cinema, History of Indian Cinema, Indian classical Films, Parallel cinema, Silent cinema, Regional Cinema in India	**8**
Module 3 World cinema, Geographical regions and cultural influence	**8**
Module 4 Classical Cinema and Modern Cinema, Equipment technology and disciplines. Animatronics and computer graphics	**8**
Module 5 Critical analysis of animated movies. Exposure to Indian classical, Japanese, American and films of rest of the world through Film Screening session	**8**

Reference Books:

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 Giannalberto Bendazzi
5. The Illusion of Life: Disney Animation By Ollie Johnston and Frank Thomas

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

1. Expansive reading from the library.
2. Be aware of cinema from different global region.

POs met through Gaps in the syllabus: 6, 7, 8, 10, 12

Topics beyond syllabus / advanced topics / design

1. Biography and body-of- work of eminent directors.

POs met through topics beyond syllabus / advanced topics / design : 14, 15

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	2	2	2	2	2	2	2	2	2	3	1	2
CO2	1	1	1	1	2	1	1	1	1	1	1	1	3	2	2
CO3	2	1	1	1	2	1	2	1	1	1	1	1	3	3	2
CO4	2	2	3	2	3	1	1	1	1	1	1	1	3	3	2
CO5	3	3	3	3	3	1	1	1	1	1	1	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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
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			

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Introduction to 3D
2.	Understanding the 3d working environment and the pipeline
3.	Basic Modeling tools
4.	Modelling Techniques
5.	Use of 3D in Modern Technologies

Course Outcomes

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

CO1	Basic understanding of 3D space
CO2	Process of 3D film making
CO3	Create basic 3D models
CO4	Creating various 3D products and environments
CO5	Understanding of Upcoming 3D technologies

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Introduction to 3D, Understanding 3D Software Interface.	**8**
Module II Understanding 3d production pipeline,	**8**
Module – III Introduction to various modeling tools and commands, use of shortcuts,Working with image reference while modelling,	**8**
Module – IV	**8**

Concepts of Mirroring, Cloning, Merging etc., Concept of mesh smooth, mirroring, duplicating , merging, edge looping etc	
Module – V Concepts and working principles of AR, VR etc. Use of 3D in upcoming technologies in various platforms	**8**

Text Book:

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

Reference Book:

1. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo (Author)
2. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch

Gaps in the Syllabus (to meet Industry/Profession requirements)

3. More emphasis on upcoming gadgets and technical skills and softwares

POs met through Gaps in the Syllabus

1,5,9,12

Topics beyond syllabus/Advanced topics/Design

4. Augment Reality, Virtual reality
5. 3D Priting

POs met through Topics beyond syllabus/Advanced topics/Design

1,5,9,12

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 Course outcome

CO1	Basic understanding of 3D space
CO2	Process of 3D film making
CO3	Create basic 3D models
CO4	Creating various 3D products and environments
CO5	Understanding of Upcoming 3D technologies

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
CO1	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1
CO2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO3	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1
CO4	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1
CO5	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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		

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

COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1	To teach students the basics of TV and Film production.
2	Choose apt equipment for the purpose at hand.
3	Appreciate budget constraints.
4	Compare between different makes of gadgets.
5	Be ready and aware toward changing technology.

Course Outcomes

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

CO1	Students will be able to make their own digital films
CO2	Will be able to scale hardware requirement with respect to narrative.
CO3	Be able to predict technological and social changes regarding broadcast.
CO4	Composition will become more pragmatic and hardware enabled.
CO5	Be able to choose gadgets for production.

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module I 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	8

Module II 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	8
Module III 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	8
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	8
Module V 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	8

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)

1. Theoretical knowledge of hardware and software.

POs met through Gaps in the syllabus: 10, 12

Topics beyond syllabus / advanced topics / design

1. Should flow-up with digital film production.

POs met through topics beyond syllabus / advanced topics / design : 13, 14, 15

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	**Program Outcomes (POs)**												**Program Specific Outcomes (PSOs)**		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
CO1	2	2	2	2	2	2	2	2	2	2	2	2	3	1	2

CO2	1	1	1	1	2	1	1	1	1	1	1	1	3	2	2
CO3	2	1	1	1	2	1	2	1	1	1	1	1	3	3	2
CO4	2	2	3	2	3	1	1	1	1	1	1	1	3	3	2
CO5	3	3	3	3	3	1	1	1	1	1	1	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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
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			

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COURSE INFORMATION SHEET

Course Code: AM202
Course Title: Visual 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: III / II
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Recognize the Visual Communication as a major domain and genres of Communication
2.	Identify Key Elements of Visual Communication
3.	Discover conditions and requirements that will lead to effective visual communication
4.	Explore principles of communication which play an important role in visual communication.
5.	Discover the major elements of Psychology in Visual Communication
6.	Suggest possible use of inter disciplinary inputs to make the process more responsive
7.	Assignments will involve the students to develop effective visual communication tools.

Course Outcomes

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

CO1	Realize visual communication as a tool for communication
CO2	Recognize the role and responsibility of psychology in the process of visual communication
CO3	Recognize the role communication plays in the process of communication.
CO4	Identify elements of interdisciplinary inquiry in visual communication
CO5	Distinguish avenues where visual communication can play a critical role

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module I **COMMUNICATION** Definition of Communication, Communication Paradigm, Barriers to Communication, Culture and Communication, animation as tool of communication.	**7**
Module II **BRAIN AND BEHAVIOUR**	**7**

Structure of Brain (Forebrain: Thalamus, Hypothalamus, Cerebrum, Left & Right Hemisphere), Structure of Eye & Ear, Nervous System, Neurons, Nerve Impulses, Synapses & their Functions, Sociobiology, Social Brain	
Module III **MEMORY** Long Term Memory, Short Term Memory, Levels of Processing theory: Perception & Elaboration, Role of Organization & Imagery, Forgetting	**7**
Module IV **COLOUR VISION** Form, Hue, Brightness , Color Mixture, After – Image Effect , Theories of Color Vision: The Young- Helmholtz Theory,, The Hering's Theory,, The Ladd - Franklin Theory, Edridge - Green Theory	**7**
Module V **PERCEPTION** Nature and Definition Processes Involved in Perception Difference Perception & Sensation Difference between Perception & Attention Theories of Perception – Structuralist's View, Gestalt's Approach, The Behaviouristic Approach	**8**

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)

1. Need to be more cinema centric.

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1. Practical application of communication through animation & multimedia.

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	2	2	2	2	2	2	2	2	2	3	1	2
CO2	1	1	1	1	2	1	1	1	1	1	1	1	3	2	2
CO3	2	1	1	1	2	1	2	1	1	1	1	1	3	3	2
CO4	2	2	3	2	3	1	1	1	1	1	1	1	3	3	2
CO5	3	3	3	3	3	1	1	1	1	1	1	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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
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			

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COURSE INFORMATION SHEET

Course Code: AM203
Course Title: Basics of Programming
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
Name of the Teacher:

Course Objectives
This course enables the students to:

1.	Be comfortable programming concepts so that they could use it in gaming or any other field
2.	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:

CO1	The student will understand basic concepts of programming
CO2	The student will be able to write beginner level computer programs
CO3	Student will be able to use programming concepts learned in developing interactive multimedia applications in domains like web-designing or game development
CO4	Develop logical thinking (flow charting, gantt chart etc.)
CO5	Can proceed to learn advanced programming languages

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I **Introduction:** Overview of Programming & Programming Language, What is a program, Core Hardware Components to Run a Program, Understand what programming is in a simple way, Introduction to Computer Programming, Applications of computer programs, Examples of prevalent programming languages, Algorithm	**6**
Module – II **Programming Environment:** Computer Programming Environment, Text Editor, Complier, Interpreter	**6**

Basic Syntax: Make a simple program in C, Basic rules to write a program, Functions, comments, semicolons, syntax error, program explanation, Write Hello World program in C or any other languages Data Types: Data types in any programming language	
Module – III Variables: What are variables, Create, Store and Retrieve Variables, Write a program to explain the variables Keywords: keywords or reserved keywords in programming language, Explain with some example keywords with their importance or significance, Write a program and explain keyword used in that, various rules regarding keywords?, examples of keywords in C or Java or Python. Operators: What is operator in C, types of basic operators are there in C, Arithmatic Operators, Relational Operators, Logical Operators.	**6**
Module – IV **Decisions:** Explain Decision statements in programming with example and flow diagram, "If" conditional/ decision statement with flow diagram and a program, "If-else" conditional/ decision statement with flow diagram and a program, "If-elseif" conditional/ decision statement with flow diagram and a program, "Switch" conditional/ decision statement with flow diagram, "Switch" conditional/ decision statement with a program. **Loops**: Concept of Loops, types of Loops in C. Explain with example, how a loop works in a program, Write "Hello World" five times using all loops, Write 1 to 10 numbers using loops, Give example of while, do…while and for loop, continue statement in loops, break statement in loops, types of loops depending upon the position of a control statement Functions: Function in programming, Why we need functions, How a function is defined in C Explain important concepts related to it., How a function is defined in C, Explain with an example program., How a function is called in C Explain with an example program. File I / O: What is the role of files and directories in computers, importance of giving some input in files, various file operation modes, how to open a file (for example a text file) in a C program, Write a program to use a file in C program	**5**
Module – V **Numbers:** Number data type in C programming, List various number data types and their properties, primitive and user-defined data types, Explain the concept of number data types with an example program, Explain concept of	**5**

Math functions in C with an example program, List various Math functions in C and write their purpose, purpose of number data types. Characters: Character data type in programming language C, Concept of character data type in a program, Escape Sequences in C with an example, program various escape sequences in C language Arrays: Explain the concept of array, Explain the creation, assignment (initialize), and accessing of arrays, Write a program to explain the concept of arrays Strings: Explain the concept of Strings in C with an example	

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)
Introduce the students to basic programming which might be useful in interactive multimedia development

POs met through Gaps in the Syllabus
1, 5, 11

Topics beyond syllabus/Advanced topics/Design
Advance Concepts of Programming

POs met through Topics beyond syllabus/Advanced topics/Design
2, 3, 5

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	**Program Outcomes (POs)**												**Program Specific Outcomes (PSOs)**		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
CO1	2	2	2	2	2	2	2	2	2	2	2	2	3	1	2
CO2	1	1	1	1	2	1	1	1	1	1	1	1	3	2	2
CO3	2	1	1	1	2	1	2	1	1	1	1	1	3	3	2
CO4	2	2	3	2	3	1	1	1	1	1	1	1	3	3	2
CO5	3	3	3	3	3	1	1	1	1	1	1	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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
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			

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COURSE INFORMATION SHEET

Course Code: AM204
Course Title: Vector Art Study
Pre-requisite(s): Nil
Credits: 3 L: 2 T: 0 P: 2
Class schedule per week: 03
Class: B.Sc. (Animation & Multimedia)
Semester / Level: III / II
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Gain Introductory Knowledge About Vector Art
2.	Learn About the Uses of Vector Art
3.	Learn the Tools of Vector Software
4.	Understand Steps Involved in Designing a Vector Art Project

Course Outcomes

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

CO1	Understand Various Aspects of Vector Art
CO2	Learning Vector Art Illustration Tools
CO3	Master the Vector Art Designing Software
CO4	Practice Designing Vector Animation
CO5	Design a Vector Art Project by Combining Various Elements of Vector Tools

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module I **Introduction to Vector Art** Vector versus Raster Software, What is Vector Art , Vector File types , Ideal platform for Web related Designs & Animation , Digital Animation	**8**
Module – II **Introduction to Animate CC Tools:** Looking at Animate CC Workspace, Creating Animate CC Document, Working with Panels, Using Timelines and Frames, Using the Tools Panel	**8**
Module – III	**8**

Different tools of Vector Animation Creating Shape Object, Creating Graphic Object, Creating Movie Clip, Creating Button, Tweening	
Module – IV **Different Vector Tools for Drawing** Designing a Character, using a Pen tool for Drawing, using a Brush for Drawing Using shapes for Drawing, Creating Backgrounds	**8**
Module – V **Creating Different forms of Digital Animation** Bouncing Ball, Walk Cycle, Run Cycle, Jump cycle, Lip Sync	**8**

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)

1)Introduction to Financial Planning During Project Design

2)Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

1)Introduction to International Collaboration
2)More Emphasis on Financially Viability of Project
3)Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO3	2	2	2	1	2	1	2	1	1	1	1	1	3	2	1
CO4	2	2	3	2	2	1	1	1	1	1	1	1	3	2	2
CO5	3	3	3	3	3	2	2	2	2	2	2	2	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand the fundamentals of Animation Principles
2.	Understanding implementation of Animation Principles through assignments
3.	Learning related hardware, software and other tools for animation techniques
4.	Gaining experience of working in a team
5.	Gaining experience of working in a group

Course Outcomes

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

CO1	Submit animation assignments based on animation principles
CO2	Handle the Light Box and Line Test Machine.
CO3	Understand the process of key frame setting in Classical Animation Techniques
CO4	Understand the process of In-betweening, Breakdown, and Clean Ups
CO5	Experience in working within a timetable and schedule

Syllabus

Practical Assignments on Light box	No. of Hours
1. Bouncing Ball Animation	3
2. Pendulum Animation	3
3. Bird Flight Animation	3
4. Jump Animation	3
5. Walk Cycle in Side View	3
6. Run Cycle in Side View	3
7. Perspective Walk	3
8. Front Walk	3
9. ¾ Walk	3
10. Double Bounce Walk	3
11. Skipping	3
12. Head Turn Animation	3
13. Animal Walk	3
14. Weight Animation	3
15. Effects Animation: Flames and Smoke	3
16. Layout Design & Background Painting	3

Text Book:

1. Monograph on Animation Techniques, Dept. of Animation and Multimedia, BIT Mesra

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 & OlieJohnstan
6. Cartoon Animation – Preston Blair

Gaps in the syllabus (to meet industry / Profession requirements): To be more technical/ digital

POs met through Gaps in the syllabus: 4, 5, 9, 10, 12

Topics beyond syllabus / advanced topics / design: Acting for Animation

POs met through topics beyond syllabus / advanced topics / design: 1, 2, 4, , 9, 10, 12, 13, 14, 15

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 Course outcome

Mapping of Course Outcomes into Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	2	2	2	1	1	3	2	1	3	3	1	1
CO2	3	2	2	3	2	2	1	1	3	2	1	3	3	1	1
CO3	3	3	2	3	1	2	1	2	3	2	1	3	3	1	1

CO4	3	3	2	3	1	1	1	1	2	1	1	3	3	1	1
CO5	2	2	2	3	1	2	1	1	3	2	2	3	3	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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OURSE INFORMATION SHEET

Course Code: AM206
Course Title: VISUAL STUDIES
Pre-requisite(s):AM102-R1 Introduction to Visual Studies, AM108-R1 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
Name of the Teacher:

Course Objectives
This course enables the students to:

1.	Understand about composition of nonliving objects, Light and shadow. Ability to understand volume and size comparison
2.	Understand importance of typography to express certain emotion.
3.	Understand human anatomy, movements, muscles and skin texture
4.	Understand different animals' anatomy, behavior and visual characteristics
5.	Understand nature, perspective, colour perspective.

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

CO1	Improve ability to draw objects natural way. Improve observation skill.
CO2	Improve ability to visualize and create typography style as per the emotion and meaning of word.
CO3	Able to draw human figure properly.
CO4	Able to draw different type of animal figure.
CO5	Able to draw landscape, Create background for animated film.

Syllabus

Module/ Practical Assignments	**No. of Hours**
Module I: Still life Assignment :1. Still life of composition with hard materials objects 2. With soft materials like cloth, fruits, vegetable, plants etc.	8
Module II: Typography Assignment: 1. Basic Typography. A-Z with hand. 2. Different word design according to meaning and sound	8

Module III: Human Study Assignment: 1. Live model study 2. Gesture drawing 3. Life sketching	8
Module IV: Animal study Assignment: 1. Animal study from Reference book. 2. Animal study from life	8
Module V: Landscape Landscape Study Topics: Landscape study with reference and outdoor study **Assignment File Preparation**	8

Reference books

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
8. Animal Drawing: Anatomy and Action for Artists, By Charles Knight
9. Complete Guide to Drawing Animals, Gottfried Bammes
10. The Art of Painting and Drawing Animals, By Fredric Sweney
11. Landscape Painting: Essential Concepts and Techniques for Plein Air By Mitchell Albala
12. Carlson's Guide to Landscape Painting, By John F. Carlson
13. Dimensional Typography: Words in Space: Kiosk Report #1, By J. Abbott Miller
14. The Art of Type and Typography: Explorations in Use and Practice By Mary Jo Krysinski
15. The Fundamentals of Typography: Second Edition, By Gavin Ambrose, Paul Harris

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

POs met through Gaps in the syllabus: Nil

Topics beyond syllabus / advanced topics / design: Nil

POs met through topics beyond syllabus / advanced topics / design: Nil

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

Student feedback on Course outcome

Mapping of Course Outcomes into Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	2	1	2	1	1	2	2	1	2	2	1	1
CO2	2	2	2	2	1	1	1	1	2	2	1	2	2	1	1
CO3	2	2	2	2	1	2	1	1	2	2	1	2	2	1	1
CO4	2	2	2	2	1	2	1	1	2	2	1	2	2	1	1
CO5	2	2	2	2	1	2	1	1	2	2	1	2	2	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

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 / Second
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand issues in Object Modeling
2.	Differentiate Organic and Inorganic Modeling
3.	Create high Poly and low poly models
4.	Understand various advance tools and techniques
5.	Create 3D models for Games

Course Outcomes

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

CO1	Fundamentals of 3D modeling
CO2	Create low and high poly 3D models for games, animations etc.
CO3	Understand the use of various tools & commands
CO4	Understand the concept of proxy meshes
CO5	Use deformers and modifiers for complex 3D models

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Topics: Fundamentals of 3D modeling Understand the use of various tools & commands..	**8**
Module II Topic: Introduction to various 3D modeling Techniques: - Organic and Inorganic Modeling, Understanding issues while modeling	**8**
Module III Topic:	**8**

Polygon modeling techniques, use of various tools & commands, Technical issues related to polygon modeling, Concept of Low poly & High poly modeling.	
Module IV Topic: Managing huge sets and models using proxy meshes.	**8**
Module V Topic: Use deformers and modifiers for complex 3D models,Product Modeling, Use of Proxy mesh and its concepts. exporting the models from scene to scene for facilitating faster production	**8**

Text Book:

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

Reference Book:

1. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
2. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch

Gaps in the Syllabus (to meet Industry/Profession requirements)

1. More emphasis on advanced 3D softwares for high poly modeling

POs met through Gaps in the Syllabus

1,4,5,8,9,12,13

Topics beyond syllabus/Advanced topics/Design

1. Advanced 3D softwares
2. 3D hardware

POs met through Topics beyond syllabus/Advanced topics/Design

1,5,8,9,11,12

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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

COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1	Recognize the process of development
2	Identify Sustainable Development
3	Discover conditions and requirements that will lead to sustainable development
4	Explore how communication plays a role in the process.
5	Discover how people's participation make development sustainable
6	Suggest possible use of communication to make the process more responsive
7	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:

CO1	Realize communication as a tool for development
CO2	Respect people's role in the process of communication
CO3	Recognize the role communication plays in the process of communication.
CO4	Identify elements that promote people's participation
CO5	Distinguish genres of communication like persuasive communication, advocacy communication, internal communication etc.

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module – I **DEVELOPMENT-** Definition of Development, Sustainable Development, Human Rights, Amnesty International	
Module – II **POPULATION -** Population Pyramid, Base of the Pyramid population, Marginalized Population	

Below Poverty Line Population Denial, Deprivation & Exploitation	
Module – III **COMMUNICATION** - Definition, Tools and Principles, Receiver, Audience, Target Audience, Types of Communication (World Bank) , Information Dissemination &Customization, Communication as a Psychosomatic Social Process, Reversal of Learning	
Module – IV **COMMUNICATION IN ECONOMIC GOVERNANCE -** Money lending & Role of Banks, Governance for Inclusion, Self-help Groups and Value addition , Role of Communication in the process, Guest Lecture	
Module – V **COMMUNICATION RESEARCH -** Qualitative & Quantitative Research, Action Research, Communication Needs Analysis, Communication Based Analysis	

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

Course Code: AM209-R1
Course Title: Graphic Design Communication
Pre-requisite(s): Nil
Credits: 4 L: 3 T:1 P:0
Class schedule per week: 04
Class: B.Sc. (Animation & Multimedia)
Semester / Level: IV / II
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand Graphic Designing Concepts
2.	Gain Knowledge About Various Elements of Graphic Design Communication
3.	Gain Knowledge About Various Graphic Designing Software's
4.	Understand Emerging Technologies in the Field of Graphic Designing

Course Outcomes

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

CO1	Understand the Concept of Design Graphics Communication
CO2	Learn About Various Graphic Design Communication Models
CO3	Develop Technical Details Related to Various Elements of Graphic Technologies
CO4	Understand the Role Played by Various Multimedia Platforms
CO5	Design a Graphic Project

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module – I **Principles of Design** Graphic Communication Model, 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 2nd World War Art Movements**,** Gestalt Principles.	**8**

Module – II **Understanding Design** Composition & rule of 3rd, Use of geometrical patterns in design like circle, square, rectangle and triangle, 2D & 3D designs, Understanding colour wheel.	**8**
Module – III **Computer Aided Designing**: Introduction to Adobe Illustrator, Toolbar, Layers, Brushes, Effects, Creating Logos, Corporate Designs, Designing Posters, Book Cover Design, Brochure and Packaging Design, Designing Letterheads	**8**
Module – IV **Introduction to Typography** History of Typography, Different type of Typefaces, Serif & Sans-Serif, Uses of Typefaces	**8**
Module – V **Introduction to UI and UX Designing** Introduction to UI and UX Designing, Task Centered Designing , Brainstorming , Choosing the Users , Design Principles , Critique of the Design	**8**

Text Books:

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 Books:

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)

5. Introduction to Financial Planning During Project Design
6. Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

7. Introduction to International Collaboration
8. More Emphasis on Financially Viability of Project
9. Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	3	3	3	2	3	2	2	2	2	2	2	2	3	2	3
CO2	3	3	3	3	3	3	2	2	2	2	2	2	3	3	3
CO3	3	3	3	3	3	3	3	2	2	2	2	2	3	3	3
CO4	3	3	3	3	3	3	3	2	3	2	2	2	3	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

Course Code: AM210
Course Title: Research in Gaming
Pre-requisite(s): Nil
Credits: 3 L:3 T:0 P:0
Class schedule per week: 3
Class: B.Sc. (Animation & Multimedia)
Semester / Level: IV /Second
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Make student learn the process of research in context of multimedia and games
2.	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:

CO1	Develop the skills to conduct a successful research required to conduct any project or develop strategies in today's competitive environment
CO2	Write a research paper.
CO3	Can take up research as a career or further study (Masters and PhD)
CO4	Implement skills of conducting research in his / her job (projects)
CO5	Will learn to do documentation and presentation of research content

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I Basics Concepts about Research: Research Process: Major Types of Research: How to Review the Literature Review and Conduct Ethical Studies:	**8**
Module – II Strategies of Research Design, Qualitative and Quantitative Sampling, Qualitative and Quantitative Measurement, Analysis of Quantitative Data, Analysis of Qualitative Data	**7**
Module – III **Qualitative Approaches for Studying Games:** Game Play Analysis, Games and information	**7**

Qualitative Approaches for Studying Play and Player: Ethnography, In-depth interviews, Studying thoughts **Focus Group Discussion** **Field Research and Focus Group Research**	
Module – IV Experimental Research: Survey Research: Writing the Research Report and the Politics of Social Research:	**7**
Module – V Study of Various Research Papers Project: Research Paper Writing	**7**

Text Books:

1. Game Research Methods, Petri Lankoski and Staffan Bjork (2018)

2. Social Research Methods: Qualitative and Quantitative Approaches, W. Lawrence Neuman (2014)

Reference Books:

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)

Gives the basic knowledge about the process of research relevant for animation and multimedia professional

POs met through Gaps in the Syllabus

3, 4, 12

Topics beyond syllabus/Advanced topics/Design

Serious Games
Storytelling in Digital Games
Game Development

POs met through Topics beyond syllabus/Advanced topics/Design

2, 3, 4, 12

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	3	3	3	2	3	2	2	2	2	2	2	2	3	2	3
CO2	3	3	3	3	3	3	2	2	2	2	2	2	3	3	3
CO3	3	3	3	3	3	3	3	2	2	2	2	2	3	3	3
CO4	3	3	3	3	3	3	3	2	3	2	2	2	3	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Make the student familiar with the fundamental theories of different medium of 2D Animation Techniques
2.	Understanding implementation of Animation Principles through assignments
3.	Learning related hardware, software and other tools for animation techniques
4.	Gaining experience of working in a team
5.	Gaining experience of working in a group

Course Outcomes

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

CO1	Submit animation assignments based on animation principles
CO2	Handle the Light Box and Line Test Machine and related softwares like Adobe Animate CC and Aftereffects CC
CO3	Understand the process of key frame setting in Digital & Classical Animation Techniques
CO4	Understand the process of In-betweening, Breakdown, and Clean Ups
CO5	Experience in working within a timetable and schedule

Syllabus

Animation Assignments based on the following topics:

MODULE	No. of Lectures / Hours
MODULE I Layout & Design Facial Expressions & Animation Various Walks Various Run Cycles	8
MODULE II Takes & Accents Lip Synchronization	8
MODULE III Dialogue & Action, Acting for Animation	8
MODULE IV	8

Two or More Characters in a Scene, Drama & Psychological effects 2D Effects: Rain, Fire, Explosion, Water etc.	
MODULE V Background Painting Mini Project	8

Text Books:

1. Monograph on Advanced Animation Techniques, Animation & Multimedia Dept. of Animation and Multimedia, BIT Mesra

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
5. Creating Animated Cartoons with Character: A Guide to Developing and Producing Your Own Series for TV, the Web, and Short Film By Joy Murray

Gaps in the syllabus (to meet industry / Profession requirements): Missing Digital Content (Animation Software learning)
POs met through Gaps in the syllabus: 1, 4, 9, 12, 13
Topics beyond syllabus / advanced topics / design: To keep gag development Process and short storytelling.
POs met through topics beyond syllabus / advanced topics / design: 4, 9, 10, 11, 12, 13

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 Course outcome

Mapping of Course Outcomes into Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	2	2	2	1	1	3	2	1	3	3	1	1
CO2	3	2	2	3	2	2	1	1	3	2	1	3	3	1	1
CO3	3	3	2	3	1	2	1	2	3	2	1	3	3	1	1
CO4	3	3	2	3	1	1	1	1	2	1	1	3	3	1	1
CO5	2	2	2	3	1	2	1	1	3	2	2	3	3	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives
This course enables the students to:

1.	To progress the student's illustration ability and skill.
2.	To teach students popular tools of drawing.
3.	Suggest the students to develop a taste of favored tools.
4.	To show various types of figure drawing.
5.	Expose students to master of art.

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

CO1	The student will be able to handle intermediate topics in drawing and illustration
CO2	The students will his journey in figure drawing.
CO3	Learn popular tools and papers.
CO4	Knowledge of old masters and their practices.
CO5	Become aware of studio culture.

MODULE	(NO. OF LECTURE HOURS)
Module I Studying master illustration and designers	**8**
Module II	**8**

Introduction to newer tools of illustration and painting, digital media	
Module III Still life and cast drawing	**8**
Module IV Figure drawing, Short and longer intervals	**8**
Module V Figure drawing using pencil, crayon, charcoal, Intro to composition, editing and combining drawings, Intro to concept art, Process of concept art	**8**

Textbook:

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

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

1.Need more practice sessions.

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1. Will be able to start commercial art.
2. Be comfortable in a studio environment.
3. Knowledge about tools.

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 Course outcome

Mapping of Course Outcomes into Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	2	2	2	1	1	3	2	1	3	3	1	1
CO2	3	2	2	3	2	2	1	1	3	2	1	3	3	1	1
CO3	3	3	2	3	1	2	1	2	3	2	1	3	3	1	1
CO4	3	3	2	3	1	1	1	1	2	1	1	3	3	1	1
CO5	2	2	2	3	1	2	1	1	3	2	2	3	3	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	3	3	3	2	3	2	2	2	2	2	2	2	3	2	3
CO2	3	3	3	3	3	3	2	2	2	2	2	2	3	3	3
CO3	3	3	3	3	3	3	3	2	2	2	2	2	3	3	3
CO4	3	3	3	3	3	3	3	2	3	2	2	2	3	3	3
CO5	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives
This course enables the students to:

1.	Practical experience of digital film making.
2.	Understand the various aspects related to film production.
3.	Be able to mount and maneuver broadcast equipment.
4.	Be aware of maintenance and safety considerations on the sets.
5.	Be able to generate footage with respect to narrative.

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

CO1	Will successfully design a production.
CO2	Will be able to translate the director vision on the sets.
CO3	Can do effective location scouting and hardware management.
CO4	Students will be able to make short film, Advertisement, Documentaries, etc.
CO5	Students will be able to make career in Film and Tv production.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Basic art of filmmaking using currently available digital software/hardware, Production planning and scheduling, Budget, Field log and footage	**8**

management	
Module II Understanding video formats and signals, Component and composite signals, Digitization and capturing the footage, Workstation management, Disk space & speed requirement	**8**
Module III Editing basics, Linear and non-linear editing, Video tape recording systems Disc based recording systems, Offline & online editing, Batch capture Time code & edit decision list	**8**
Module IV Video leader, Montage editing, Transition techniques, Video compression Video & audio effects & transitions	**8**
Module V Split screen technique, Sound editing and mixing, Graphics and titles, Video compression, Project management, Mixed and un-mixed versions Assignment: Students should submit a film (in groups) at the end of the semester.	**8**

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)

1. Understand equipment from a creative point of view.
2. Be able to implement innovative approach.

POs met through Gaps in the syllabus: 1, 2, 5

Topics beyond syllabus / advanced topics / design

1. Be ready to become a technical expert.
2. Be an asset to the production crew at top creative levels.

POs met through topics beyond syllabus / advanced topics / design: 13, 14, 15

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 Course outcome

Mapping of Course Outcomes into Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	2	2	2	1	1	3	2	1	3	3	1	1
CO2	3	2	2	3	2	2	1	1	3	2	1	3	3	1	1
CO3	3	3	2	3	1	2	1	2	3	2	1	3	3	1	1
CO4	3	3	2	3	1	1	1	1	2	1	1	3	3	1	1
CO5	2	2	2	3	1	2	1	1	3	2	2	3	3	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

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 / Second
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand and execute Advanced 3D Modeling techniques
2.	Concept of texturing, UV mapping etc
3.	Understand basics of lighting
4.	Study of different lighting systems
5.	Render image and image sequence

Course Outcomes

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

CO1	Created complex 3D models
CO2	Texture simple as well as complex 3D models
CO3	Understand the use of lighting systems in 3D environment
CO4	Concept of shadows, depth map & Rendering engines
CO5	Render the final output as per requirement

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Advance 3D modeling techniques for texturing and lighting .	**8**
Module – II Concepts of materials and textures, UV unwrapping &UV mapping, Bump, displacement/normal map, Occlusion map etc.	**8**
Module – III Introduction to light: Understand the Importance of light to create a scene,	**8**

Use of HDRI and Image based lighting	
Module – IV Concept of lighting system, Concept of Shadows and Depth map,	**8**
Module – V Understanding various rendering techniques for the quality output as per the end user requirements and maintaining the resolution. Understanding Camera and its attributes	**8**

Text Book:

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

Reference Book:

1. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo (Author)
2. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch

Gaps in the Syllabus (to meet Industry/Profession requirements)

1. More emphasis on photo realistic renderings using render farm

POs met through Gaps in the Syllabus

1,4,5,8,9,12,13

Topics beyond syllabus/Advanced topics/Design

6. Network rendering
7. 3D lighting and rendering softwares

POs met through Topics beyond syllabus/Advanced topics/Design

1,5,8,9,11,12

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

2. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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Detailed Syllabus of

B.Sc. A&M, V semester

COURSE INFORMATION SHEET

Course Code: AM301-R1
Course Title: Visual Narrative
Pre-requisite(s): Nil
Credits: 4 L:3 T:1 P:0
Class schedule per week: 04
Class: B.Sc. (Animation & Multimedia)
Semester / Level: V / III
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	To teach the student writing and drawing for storytelling and narration.
2.	Understand sequential art.
3.	Various models of sequential art accepted in the industry.
4.	Exposure to graphic novels.
5.	Doing one complete project.

Course Outcomes

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

CO1	The student will be able to write and draw for comics, graphic novels and storyboards.
CO2	Appreciation of graphics novels.
CO3	Look at various storyboard examples.
CO4	Be able to do narrative design.
CO5	Successfully complete one storyboard project.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Understanding sequential art, Storyboarding examples, Thumbnail examples, animatic examples	**6**
Module II Comics and graphic novels, Brief history, Major contributors, Frequently used terms	**6**
Module III Narrative exercises, Single page comics, 24-hour comics	**6**
Module IV Panel design and camera work, Understanding distance and cropping,	**5**

POV examples	
Module V Story structure and narrative arc, Essential components of a story, Assignment- Creating a one-page comic Assignment- Creating a multi-page comic (More than2 pages)	**5**

Text Book:

1. Drawing words and writing pictures – by Jessica abel and Matt madden,
2. Graphic storytelling and visual narrative – Will eisner

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

1. Need industry exposure.

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1. Should follow-up with visual narrative.

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives
This course enables the students to:

1.	Understand various elements of Compositing and VFX
2.	Learn About the Various Uses of Compositing and VFX in Cinema
3.	Learn About the Various VFX and Compositing Software's
4.	Understand Emerging Technologies in the Field of VFX and Compositing

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

CO1	History of VFX and Compositing
CO2	Master Various Uses of VFX and Compositing
CO3	Master Various VFX and Compositing Software's
CO4	Learn to Troubleshoot VFX and Compositing Difficulties
CO5	Design a VFX and Compositing Project by Combining Various Elements

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module – I What is VFX Film Techniques, History of VFX, Difference between VFX & SFX, Different kinds of VFX Software's: Node based & Layer based .	**8**

Module – II Introduction to VFX used in modern films Blue screen, Motion Tracking, Atmosphere, Rotoscoping, Wire Removal, Masking	**8**
Module – III Animating layers, Transformation techniques, Filters, Pivot Point ,Motion Tracking , Stabilizing a Shot	**8**
Module – IV Use of Lights, Camera & Color Correction Applying Lights & Camera in Compositing, Color Correction, Using Effects, Rendering	**8**
Module – V Different types of digital images & file formats Pixel definition (24 bit & 32 bit) , RGBA Color Mode ,4 Channel format , Different file formats & their utilities , Different output formats & their utilities	**8**

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)

7. Introduction to Financial Planning During Project Design
8. Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

10. Introduction to International Collaboration
11. More Emphasis on Financially Viability of Project
12. Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	1	2	1	2	1	1	1	1	1	1	1	1	1	2	1
CO3	2	2	3	2	3	2	1	1	1	1	1	1	2	2	1
CO4	3	3	3	3	3	2	3	1	1	1	1	1	3	3	2
CO5	3	3	3	3	3	3	3	1	1	1	1	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

Course Code: AM303-R1
Course Title: 2D Digital Animation
Pre-requisite (s): Nil
Credits: 1.5 L:0 T:0 P:3
Class schedule per week: 03
Class: B.Sc. (Animation & Multimedia)
Semester / Level: V / III
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Make the student familiar with the fundamental theories of different medium of 2D Animation Techniques
2.	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.
3.	Learning related hardware, software and other tools for animation techniques
4.	learn industry standard practices in applied creativity
5.	Gaining experience of working in a group

Course Outcomes

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

CO1	Identify and apply the 12 Animation Principles through Digital Animation
CO2	Work on various softwares like Adobe Flash, Adobe Animate CC and Aftereffects CC
CO3	Have an understanding of timing and motion through key-frames, holds and in-betweens
CO4	Demonstrate skills in the use of industry standard tools
CO5	Experience in working within a timetable and schedule

Syllabus

MODULE	No. of Lectures / Hours
MODULE I Introduction to Digital Animation Digital Animation Softwares Compare differences between Paperless Animation and Traditional Animation	8
MODULE II Basic Tools for Digital Animation Use of Camera and Pegs Digital Rough Animation Techniques	8

MODULE III Working on Characters Working on Digital Backgrounds 2D Digital Rigging	8
MODULE IV Ink & Paint Symbol Based Animation using Library Construct multi-layered scene	8
MODULE V Working on Sound & Voice Over Compositing for 2D Digital Animation Assignment	8

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
5. 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): Nil
POs met through Gaps in the syllabus: Nil
Topics beyond syllabus / advanced topics / design: Storyboard Design and Animatic
POs met through topics beyond syllabus / advanced topics / design: 1, 2, 4, 10, 11, 12, 13

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 Course outcome

Mapping of Course Outcomes into Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
CO1	3	2	2	2	3	2	1	1	3	2	2	3	3	1	1
CO2	3	2	2	2	2	1	1	1	2	2	1	2	2	1	1
CO3	3	2	2	2	2	1	1	1	2	1	1	3	3	2	1
CO4	3	2	2	2	3	2	1	2	3	2	1	2	2	2	2
CO5	1	1	1	2	3	2	1	1	3	2	3	3	2	1	2

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understanding the principles of IK and FK
2.	Rigging and Skinning characters
3.	Understand various shortcuts and techniques for animating a 3D object
4.	Animating various 3D attributes
5.	Animate 3D characters & animating Cameras

Course Outcomes

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

CO1	Understanding the principles of IK and FK and apply to characters
CO2	Do Rigging and Skinning of various characters
CO3	Animate simple objects and its attributes using shortcuts
CO4	Animate a 3D character
CO5	Do camera animation

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I Understanding the principles of IK and FK and apply to characters .	**8**
Module – II Rigging and Skinning	**8**
Module – III Animate simple objects and its attributes like color, transparency Animation through deformers and modifiers	**8**

Module – IV 3D Character Animation, walk cycles and Run cycles etc.	**8**
Module – V Camera animation	**8**

Text Book:

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

Reference Book:

1. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
2. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch

Gaps in the Syllabus (to meet Industry/Profession requirements)

1. Working with Motion capture

POs met through Gaps in the Syllabus

1,5,9,12,13

Topics beyond syllabus/Advanced topics/Design

1. Auto rig setup for various animation uses.
2. Motion capture data

POs met through Topics beyond syllabus/Advanced topics/Design

1,5,9,12,13

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

Course Code: MT 133
Course Title: Communication Skills II
Pre-requisite (s): Nil
CO- requisite (s): NIL
Credits: 1.5 L:0 T:0 P:3
Class schedule per week: 03
Class: B.Sc. (Animation & Multimedia)
Level: II (Third Year)
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

A.	To analyze and demonstrate writing and speaking processes through invention, organization, drafting, revision, editing, and presentation.
B.	To understand the importance of specifying audience and purpose and to select appropriate communication choices.
C.	To interpret and appropriately apply modes of expression, i.e., descriptive, expositive, narrative, scientific, and self-expressive, in written, visual, and oral communication
D.	To participate effectively in groups with emphasis on listening, critical and reflective thinking, and responding
E.	To develop the ability to research and write a documented paper and/or to give an oral presentation.

Course Outcomes

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

1	Apply business communication strategies and principles to prepare effective communication for domestic and international business situations.
2	Utilize analytical and problem-solving skills appropriate to business communication
3	Participate in team activities that lead to the development of collaborative work skills.
4	Select appropriate organizational formats and channels used in developing and presenting business messages
5	Communicate via electronic mail, Internet, and other technologies and deliver an effective oral business presentation.

SYLLABUS

Module I: Building a Business Vocabulary Vocabulary related to company culture, Phrasal verbs Board, bottom line, revenues, etc.; Words related to leadership skills: founder, etc.; Types of management; Abbreviations; Meeting related vocabulary; Vocabulary related to submitting tenders; Pricing Dedicated, resources, etc.; Verb–noun collocations; Linking words and phrases Existing, identify, etc.; Brand-building, etc.; Types of advertising Households, etc.; Synonyms for increase and decrease; Solicit, risk-averse, etc.; Phrasal verbs and expressions like go bust, stock price, etc.; Vocabulary from profit-and-loss account; and balance sheet; Theatre vocabulary Break down, running costs, etc; Bank charges, bookkeeping, etc.; Formal expressions; Types of workers; Ways of working; Phrases for negotiating; Benefits, premise, etc.; Adverbial phrases; Acquisitions, year on year, etc.; Adjectives and adverbs of frequency; Discourse markers for short talks.
Module II: Listening at the Workplace Listening to descriptions of company culture; Listening to a talk on leaders and managers; Advice for communicating effectively with colleagues; Listening to a talk on Customer Relationship Management; Listening to a presentation; Listening to a talk on effectiveness of advertising; Listening to a talk on sales activities; Listening to a sales pitch; Listening to a sales forecast; Listening to a business conversation; Listening to people talk about their jobs; Listening to interviews with production managers; Listening to staff complaints and demands; Listening to a talk on risk in business.
Module III: Oral communication at the workplace Describing company culture; Talking about good leaders; Communicating in meetings; Discussing customer–supplier relationships; Presenting information from charts; resenting from a text; Cost-effective advertising; How to advertise software; Using the Internet for advertising; Finding out about work problems; Making a sales pitch; Negotiation, problems and advice; Talk: teleworking, etc.; Talking about your present job; Describing charts; Presentations on productivity; Negotiating an agreement; Describing the company you work for; Useful hints for making presentations; Making a presentation; Discussion on staff retention, market share, etc.
Module IV: Reading for Business Reading internal messages (memo, email, note, notice); Reading a summary of action points; Reading a business forecast; Reading articles on Customer Relationship Management; Reading about how a company prepares tenders; Reading a proposal; Reading extracts on measuring the impact of advertising; Reading a brief sales report; Reading a report on productivity; Reading a memo from a CEO; Reading a business letter
Module V: Business Correspondence: Replying to messages; Writing and replying to a memo, email or notice; A proposal for investigating new markets; A report on advertisers and target audiences; A sales report based on

a chart; Report on a sales event for a product launch; A proposal for sponsoring an arts or sports event; Letter complaining about late payment; Email summarising results of negotiation; Short report on stress and absenteeism; Report on changes to company organization; Memo summarising agreement; Proposal to give your company a more ethical image; Letter to prospective customers; Letter expressing interest in business approach.

Text Books:

T1. Communication Skills IInd edition, Sanjay Kumar PushpLata, Oxford University Press

T2. Business Correspondence and Report Writing,R.C.Sharma, Krishna Mohan.Mcgraw Hill T3.

Communication for Business,Shirley Taylor, V.Chandra, Pearson

T4. Basic Business Communication- .Lesikar I Flatley, McGraw Hill.

T5. Business Communication Today ,Bovee, Thill and Chatterjee, Pearson

Suggested coursebook:

 Business Benchmark Advanced (Student's Book with CD-ROM) ISBN: 9780521743686, Cambridge

University Press

CEFR level: C1

Recommended reading:

 Business Vocabulary in Use Advanced (PB with CD-ROM) ISBN: 9781107604582

 Soft Skills & Employability Skills ISBN: 9781316981320

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

COURSE INFORMATION SHEET

Course Code: AM305-R1
Course Title: Direction for Animation
Pre-requisite(s): Nil
Credits: 2 L: 2 T: 0 P: 0
Class schedule per week: 2
Class: B.Sc. (Animation & Multimedia)
Semester / Level: VI / III
Branch: BAM
Name of the Teacher:

Course Overview: This course will teach you various aspects of directional techniques, and step by step procedure for animation.

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:

CO1	Demonstrate a sound understanding of Directional Techniques of Animation Films
CO2	Demonstrate a sound understanding of Animation Film Making
CO3	Apply fundamental of Animatic skills through the creation of sequential images of storyboarding.
CO4	Apply fundamental processes of visual & technical problems solving through animation and live action shots.
CO5	Design animation short project by applying various mediums, stylizations, and techniques of film making.

Syllabus

Module	No. of Lecture
Module – I 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.	6
Module – II Production Process of 2D, 3D, and Experimental Animation Films- Pre-Production Process, Production Process and Post-Production Process.	6

Selected Case studies, and Study on Animation Directors. Independent Animation Film Makers.	
Module – III 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.	6
Module – IV 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.	6
Module – V 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.	6

Reference 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): Nil

POs met through Gaps in the syllabus: Nil

Topics beyond syllabus / advanced topics / design: Film appreciation & discussion on recent industrial projects

POs met through topics beyond syllabus / advanced topics / design: 1, 2, 4, 5, 6, 9, 10, 11, 12

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

Indirect Assessment

2. Student feedback on Faculty
3. Student feedback on Course outcome

Mapping of Course Outcomes into Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	3	2	2	1	2	2	2	2	2	2	3	3	3	2	2
CO2	3	2	2	2	2	2	2	3	2	2	2	2	3	1	2
CO3	3	3	2	3	2	2	1	1	2	2	2	3	3	2	1
CO4	3	2	2	2	2	1	2	2	2	1	2	2	2	1	1
CO5	2	2	2	2	2	2	1	1	2	2	2	2	2	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

Course Code: AM306
Course Title: Motion Graphics
Pre-requisite(s): Nil
Credits: 2 L: 1 T:0 P:2
Class schedule per week: 03
Class: B.Sc. (Animation & Multimedia)
Semester / Level: VI / III
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understanding the Concept of Animating the Graphics
2.	Understanding the Software Related to Motion Graphics
3.	Understanding Steps Related to Designing Motion Graphics Project

Course Outcomes

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

CO1	Understanding the Concept of Composition
CO2	Understanding Motion
CO3	Mastering the Tools related to Motion Graphics Software
CO4	Learning About Emerging Technologies in this Field
CO5	Creating a Motion Graphics Project

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module – I **Creating Composition for Motion Graphics** Graphics Communication , Defining Composition, Adding Layers, Layer blending, Size of Composition, Resolution & Quality, Safe areas, Ruler & Guide	**8**
Module – II	**8**

Basic Animation 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** Different Blending Techniques, Different Techniques of Creating Masks: Painting & Using Shape Tools	**8**
Module – IV **Use of Lights, Camera & Color Correction** Applying Camera & Lights, Adjusting Camera & Light Settings, Color Correction	**8**
Module – V **Nesting Composition & Pre-Comp** 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	**8**

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)

9. Introduction to Financial Planning During Project Design
10. Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

13. Introduction to International Collaboration
14. More Emphasis on Financially Viability of Project
15. Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO3	2	3	2	2	3	1	2	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	2	2	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	3	3	1	1	1	1	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (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			

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand 3D Dynamics Workflow
2.	Understand Rigid body Dynamics
3.	Understand particle system and its workflow
4.	Cloth Dynamics simulation
5.	Render various 3D Dynamics and Compositions

Course Outcomes

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

CO1	Understand the workflow as well as tools and techniques involved to create 3D Dynamics effect
CO2	Understand dynamics of Soft and Rigid bodies
CO3	Simulations and particle attributes
CO4	Creating Effects using dynamics
CO5	Render to see the final output , Render passes for Compositing

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I Understand 3D Dynamics Workflow, Study of various tools and commands.	**8**
Module – II Understand Rigid body Dynamics and soft bodies, working with rigid bodies	**8**
Module – III Understand particle system and its workflow, particle attributes and its uses	**8**
Module – IV	**8**

Cloth Dynamics simulation, use of fields and forces for simulation	
Module – V Render various 3D Dynamics and Compositions	**8**

Text Book:

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

Reference Book:

1. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
2. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch

Gaps in the Syllabus (to meet Industry/Profession requirements)

1. More emphasis on Hardware for Simulations

POs met through Gaps in the Syllabus

1,4,5,9,12,13

Topics beyond syllabus/Advanced topics/Design

1. GPU
2. Network Rendering

POs met through Topics beyond syllabus/Advanced topics/Design

1,4,5,9,12,13

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

Course Code: AM308-R1
Course Title: DEGREE SHOWCASE PROJECT
Pre-requisite(s): Nil
Credits: 6 L:0 T:0 P:0
Class schedule per week: 00
Class: B.Sc. (Animation & Multimedia)
Semester / Level: VI / III
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	To create a project in their preferred domain under the mentorship and guidance of subject teacher
2.	to enable the student to exercise his/her creative choices in a simulated environment.
3.	to encourage the students to test their own execution methods against their own creative vision.
4.	To expose the students to work within stipulation and deadlines.

Course Outcomes

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

CO1	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.
CO2	It will help students to hone their skills and achieve perfection
CO3	One complete project that the student has executed himself/herself.
CO4	A first major showcase prepared by the student.
CO5	Experience of a full-fledged major project executed personally.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Students will develop a project under the guidance of allotted mentor.	-

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 Outcome (CO) Attainment Assessment Tools and Evaluation Procedure

Direct Assessment

Assessment Tools	% Contribution during CO Assessment
Internal Project Assessment	60
External Assessment Viva Voce / Presentation	40

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used

CD1	Lecture by use of boards/ LCD/ Projectors / OHP Projectors		
CD2	Tutorial / Assignment	CO1, C02	CD1, CD2, CD3
CD3	Seminars	C03	CD1, CD2, CD3
CD4	Mini Projects / Projects	CO1, CO2, C)3, C04, CO5	CD1, CD2, CD3, CD4, CD5
CD5	Laboratory Experiments / Teaching Aids	C05	CD1, CD2, CD5
CD6	Industrial / Guest Lecture	CO1, CO2, C)3, C04, CO5	CD1, CD2, CD3, CD4, CD5
CD7	Industrial Visits / in-plant training	CO1, CO2, C)3, C04, CO5	CD1, CD2, CD3, CD4, CD5
CD8	Self-learning such as use of NPTEL materials and internets	CO1, CO2, C)3, C04, CO5	CD1, CD2, CD3, CD4, CD5
CD9	Simulation		

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PROGRAM ELECTIVES
(SKILL DEVELOPMENT COURSES)

PE(SEC-I)

COURSE INFORMATION SHEET

Course Code: AM 114
Course Title: BASIC DRAWING SKILL
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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	improve compositional sense, Understanding of Negative and positive space, distribution and control on pencil and ink brush.
2.	Understand the position of objects, comparative size of objects and to understand light and shadow.
3.	Understand human Proportion, movements, Gesture and to improve drawing quality.
4.	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:

CO1	Create different kind of basic designs for different purpose. Able to finish with both brush and pen/pencil.
CO2	Draw any kind of objects in front and create volume with light and shadow.
CO3	Draw human figure quickly with proper proportions
CO4	Draw observe and draw leaf and trees in details
CO5	Express oneself through drawings

MODULE	(NO. OF LECTURE HOURS)
MODULE I Basic design with monochrome color distribution: Assignment: 1. Design with basic element like square, Triangle, circle, cube etc. Black and white colour distribution with Pencil and with ink and brush.	8
MODULE II Object Drawing Assignment: 1. Simple object drawing with light and shadow.	8
MODULE III	8

Human Gesture Drawing (Live), Life sketching, (Outdoor)	
MODULE IV Nature study > Landscapes	8
MODULE V Nature Study > Flora Study	8

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, Swapnaa Tamhane, Rashmi Varma

5. The Fundamentals of Drawin,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

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 Course outcome

Mapping of Course Outcomes into Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	2	1	2	1	2	2	2	1	2	3	2	1

CO2	2	2	2	2	1	2	1	2	2	2	1	2	2	1	1
CO3	2	2	2	2	1	2	1	1	2	1	1	3	3	1	1
CO4	2	2	2	2	1	2	2	1	2	2	1	3	3	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

CO1	Students can create different kind of basic designs for different purpose. Able to finish with both brush and pen/pencil.
CO2	Can draw any kind of objects in front and create volume with light and shadow.
CO3	Able to draw human figure quickly with proper proportions
CO4	Able to draw observe and draw leaf and trees in details

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

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			

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COURSE INFORMATION SHEET

Course Code: AM115
Course Title: Presentation 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: I / FI
Branch: BAM
Type: Lecture and Practical
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Develop appropriate presentations for projects and job interviews etc.
2.	Students will learn the 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:

CO1	Understand the importance of presentations
CO2	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
CO3	Ability to compose and express verbally.
CO4	To organise research and compile the findings into bullet points.
CO5	To draw systematic summary in order of importance.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I **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	**5**

Case Studies of Good Presentations	
Module – II MS Office or equivalent freeware like Libre Office (Word and Excel)	**6**
Module – III 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:	**6**
Module – IV Basic video / sound editing: Presentation creation in Power Point or equivalent freeware: Exposure to Free Online Tools or Apps used for presentation design:	**6**
Module – V Project	**5**

Text Book:

1. Presentation Zen: Simple Ideas on Presentation Design and Delivery, Garr Reynolds

Reference Books:

1. How to be a Presentation God: Build, Design, and Deliver Presentations that ...By Scott Schwertly, Publisher: John Wiley and Sons

2. Slideology: The Art and Science of Creating Great Presentations by Nancy Duarte, O'Reilly Media Inc.
3. Lean Presentation Design: How to Create Presentations That Everybody Loves, Maurizio La Cava
4. 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

3, 4, 12

Topics beyond syllabus/Advanced topics/Design

POs met through Topics beyond syllabus/Advanced topics/Design

2, 3, 4, 12

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 Course outcome

Mapping of Course Outcomes into Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	2	1	2	1	2	2	2	1	2	3	2	1
CO2	2	2	2	2	1	2	1	2	2	2	1	2	2	1	1
CO3	2	2	2	2	1	2	1	1	2	1	1	3	3	1	1
CO4	2	2	2	2	1	2	2	1	2	2	1	3	3	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

CO1	Students can create different kind of basic designs for different purpose. Able to finish with both brush and pen/pencil.
CO2	Can draw any kind of objects in front and create volume with light and shadow.
CO3	Able to draw human figure quickly with proper proportions
CO4	Able to draw observe and draw leaf and trees in details

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

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			

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Theoretical concept of photography.
2.	Understanding concept of digital camera.
3.	Introduction to popular hardware and software.
4.	Narrative in photography.
5.	Practical assignments.

Course Outcomes

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

CO1	The student will understand the various physical equipments of photography.
CO2	Comprehensive grasp of concepts.
CO3	Functional use of photography.
CO4	Professional practices and skills.
CO5	Be able to handle professional assignments.

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	(NO. OF LECTURE HOURS)

Module I Introduction to Photography, Photography Basics, Camera features, Working with DSLRs Cameras, Digital imaging revolution, Flash media and storage device	**8**
Module II Advantages and disadvantages of digital photography, Visualizing, shot design, Lens and exposure, Focus and depth of filed	**8**
Module III Creativity with aperture, lens and light, Digital camera and colour balance, Frame and composition, Visual Grammar, Perspective and angles	**8**
Module IV Lighting techniques, Understanding natural and artificial lights, Fashion photography, Nature photography, Street photography, Storytelling through photography	**8**
Module V File Compression, File formats; GIF, JPEG, Tiff, PNG PDF, RAW, etc., Image editing and post processing, Ethics	**8**

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)

1. Only the creative aspects of the photography.
2. Understanding various professional demarcation of the industry.

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1. Reach out to established professionals and studios.

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

Course Code: AM117
Course Title: Game Appreciation
Pre-requisite(s): Nil
Credits: 2 L:2 T:0 P:0
Class schedule per week: 02
Class: B.Sc. (Animation & Multimedia)
Semester / Level: I / I
Branch: BAM
Name of the Teacher:

Course Objectives
This course enables the students to:

1.	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.
2.	Learn History and evolution of digital games. Learn to explore and appreciate digital games in terms of a Game Designer.
3.	Understand the concept of process of Game Development and Game Development parts.
4.	Explore various popular digital games and to analyze them critically.
5.	Share each other's experiences of different games.
6.	Understand the fundamentals of Digital Games starting from games in general then digital games. Students learn about the elements of a game.
7.	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:

CO1	Understand digital games and its elements.
CO2	Students will be able to look at Games as digital medium for story telling
CO3	Students will make up their mind if and which field of Game Production suit them.
CO4	Students will explore and enjoy the story telling capabilities of games.
CO5	Students will learn to critically analyze the digital games.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I **What is Game?** : What is Game, How Game is Different from other modes of entertainment, Elements of a game, Visualizing the Game, Idea generation for games, Balance in a game **History of Games:** History of Game Consoles, History of Games, Discussion about popular games from past **Game Genre:** Various genre of games	**5**
Module – II **Process of Game Development:** Stages of game Development: **Game Production Parts:** Design, Art, Coding etc. **Game Design Document:** What is GDD, Types of GDD, Sample GDD	**5**
Module – III **Game Analysis:** Game Analysis of 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.	**5**
Module – IV **Case Studies of Games** (In context of popularity of game play) **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.)	**5**
Module – V **Game Play Sessions:** **Video Showcase of Popular Games:**	**6**

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)

Introduce the digital interactive entertainment through video games in a fun way
Lesser inclination towards serious nature of digital games

POs met through Gaps in the Syllabus

3, 4, 12

Topics beyond syllabus/Advanced topics/Design

8. Serious Games
9. Storytelling in Digital Games
10. Game Development

POs met through Topics beyond syllabus/Advanced topics/Design

2, 3, 4, 12

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

Indirect Assessment

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used

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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Explaining to Students the concept of Digital Animation
2.	Teaching Various Elements of Digital Animation
3.	To Create a Digital Animation Film

Course Outcomes

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

CO1	Understand the Concept of Digital Animation.
CO2	Master Various Elements of Digital Animation
CO3	Learn Various Platforms Available for Designing Digital Animation
CO4	Understand the Rendering Process.
CO5	Complete an Assignment of Creating a Digital Animation Film

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I Intro to digital animation, Digital keyframe, the concept of TimeLine, Tools such as Adobe animate and after effect.	**8**
Module – II Infographics and Visual effects, using layers and styles	**8**
Module – III Principles of animation and their application Understanding Tweening and Keyframe animation, Examples of both	**8**
Module – IV Character animation stick figure animation, cartoon drawing	**8**

Module – V Arranging Foreground, Middle ground and Background, Sprites and sprite sheet, Creating GIFS, Assignment	**8**

Text Book:

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

Reference Book:

1. Animator Survival Kit By Richard Williams

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

11. Introduction to Financial Planning During Project Design
12. Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

16. Introduction to International Collaboration
17. More Emphasis on Financially Viability of Project
18. Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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

2. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)	Program Specific Outcomes (PSOs)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives
This course enables the students to:

1.	Understand the Concept of Desktop Publishing
2.	Gain introductory knowledge of Various Elements of Desktop Publishing
3.	Understanding the Role of Various Tools of Desktop Publishing
4.	Understand Emerging Technologies in the Field of DTP

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

CO1	Understanding Information Technology
CO2	Learn Operating Mechanism of Various Tools
CO3	Understand Various Software's and Hardware's Related to this Field
CO4	Gain Knowledge About Troubleshooting mechanism
CO5	Design a Project by Combining Various Elements of DTP

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module I **Computer Fundamentals: Hardware** RAM, ROM, Storage Devices (HDD , Flash Drives , DVD) , Input Devices (Mouse , Keyboard , Digital Pens , Touch Screens) , Output Devices (VDU , Printers)	**8**

Module – II **Computer Fundamentals: Operating Systems** Windows based OS, Linux based OS, and Mac based OS, Word Processing Software's, Graphic Designing Software, Drawing and Painting Software.	**8**
Module – III **MS Office Suite** 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.	**8**
Module – IV **Designing Software Adobe Photoshop** Introduction to Adobe Photoshop, Toolbar in Photoshop, Introduction to Software's Interface, Editing Images, Creating Graphics, Creating Logos, Saving Files, Rendering	**8**
Module – V **Designing Software Adobe Illustrator** Introduction to Adobe Illustrator, Toolbar in Illustrator, Introduction to Software's Interface, Creating Shapes, Creating Illustrations, Creating Logos, Saving Files, Rendering	**8**

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)

13. Introduction to Financial Planning During Project Design
14. Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

19. Introduction to International Collaboration
20. More Emphasis on Financially Viability of Project
21. Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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 onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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PE(SEC-II)

COURSE INFORMATION SHEET

Course Code: AM120

Course Title: Basic Writing Skills

Pre-requisite (s): Nil

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

Class schedule per week: 02

Class: B.Sc. (Animation & Multimedia)

Semester / Level: II / I

Branch: BAM

Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand the creative aspects of writing.
2.	Learn basic writing of synopsis, paragraphs and short story.
3.	Understand the concept of writing for different medium.
4.	Learn report writing.
5.	Differentiate writing for print and electronic media.

Course Outcomes

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

CO1.	Understand the process of basic writing.
CO2.	Students will be able to write a story on their own.
CO3.	Improve their vocabulary.
CO4.	Have knowledge of editing in writing.
CO5.	Improve basic knowledge in print media.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I Exploring writing skills for Digital Media , Online editing, designing and publishing, Privacy in digital age	**5**
Module – II	**5**

Collecting Information, Curiosity and Story Ideas, Sources and Online Research, Interview Techniques	
Module – III Constructing Stories, Story Organization	**5**
Module – IV Writing for the News, Convergent Media Writing	**5**
Module – V Exercises	**5**

Reference 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)

1. **Engage more on creative writing and story writing.**

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1. **Extensive reading from the library**

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

Indirect Assessment

1. 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, CD8
CD2	Tutorial / Assignment		C02	CD1, CD2, CD3, CD8
CD3	Seminars		C03	CD1, CD2, CD3, CD8
CD4	Mini Projects / Projects		C04	CD1, CD2, CD3, CD4, 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			

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand the creative aspects related to web designing
2.	Learn the process of website designing and software tools to make websites
3.	Create the content for website like images, graphics, text, audio-video etc.
4.	Develop a website and host it on internet
5.	Learn basics of digital marketing

Course Outcomes

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

CO1	Understand the process of web designing.
CO2	Students will be able to make websites, blogs, social media pages etc and content for such platforms
CO3	Students will make up their mind if and which field of Web Site Design suits them.
CO4	Students will be able to make career in Web Designing / Social Media / Digital Marketing fields.
CO5	Will understand Interactivity in Multimedia

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I **Basics of Internet Technology**: Evolution of Internet, Various Protocols, Types of Websites, Domain Name, Webhosting, FTP **Social Media**: **Basic Concepts of Website Designing and Creative Aspects related to website designing:** Introduction to Computer based tools used for Website Design .	**5**
Module – II **Content Design for a Website or Social Media page:** Creation of Graphics, Animation, Banners for website and social media, Creation, Editing of Videos or Video Presentations for website and social media	**6**

Designing layouts or templates of website in Graphic Design Software **Strategies for Content Creation for Website**	
Module – III **Website Development:** Adobe Dreamweaver or any equivalent software (e.g. Kompozer) to design website, Website development using Free Tools on Internet like Wix, Blogger, Wordpress **Introduction to Programming for Website Design**: HTML, CSS, Basic Flash Action Script	**6**
Module – IV **Website Publication:** Domain Name registration (free or paid), Website Uploading **Testing and Updating**	**6**
Module – V **Project:** Design a website and host it	**5**

Text Book:

1. 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)

4. More emphasis on designing website using software tools

POs met through Gaps in the Syllabus

3, 4, 12

Topics beyond syllabus/Advanced topics/Design

11. Various programming languages other than HTML and CSS
12. Other tools than Adobe Dreamweaver to design websites

POs met through Topics beyond syllabus/Advanced topics/Design

2, 3, 4, 12

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives
This course enables the students to:

1.	Definition and scope of the medium.
2.	Prominent personalities in comic.
3.	To introduce comics production process.
4.	Comics from different nations.
5.	Mini project

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

CO1	An appreciation of the medium of graphic novels.
CO2	Understanding of formats and tools.
CO3	The student will be able to handle chores like Cover design and page management.
CO4	The student will be able to develop a comics script to completed comic pages
CO5	Be able to organize a comic production.

MODULE	(NO. OF LECTURE HOURS)
Module I Introduction to tools- Paper, Pencils, Digital tools, Geographical formats.	**8**
Module II	**8**

Form and perspective, Figure drawing- Collecting references, Using stock photography.	
Module III Action scenes, Foreshortening, Expressions, Designing props, Designing backgrounds.	**8**
Module IV Composition and page design, Thumbnailing, Panel layouts.	**8**
Module V Cover design, Inking, Comic festivals, Preparing a portfolio.	**8**

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)

1. Reading popular comic books and graphics novels.
2. Participating in comic festivals.

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1. Can work as comic book artist in various departments.

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Construct 3D models
2.	Visualization for3D printing
3.	Product proto types in 3D
4.	Product development, design processes and methods
5.	Design product related projects

Course Outcomes

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

CO1	Create High poly detailed 3D models
CO2	Conceptualize the minor details of a product Model
CO3	Beginners will be able to make Industry level 3D models
CO4	Know Advance tools and commands to execute logically
CO5	Work collaboratively on a team to successfully complete a design project

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I . Product Model reference study, Fundamentals of 3D modeling	**8**
Module – II Product Sketch and design, Use basic sketching techniques to communicate ideas Introduction to product design and development Basic process to create a 3D Product	**8**
Module – III	**8**

Understanding concepts, tools and techniques involved in 3D Modeling, Product Modeling concepts.	
Module – IV Product Modeling	**8**
Module – V Product render and composition Plan, implement and present a design project produce realistic images and simple animations of a product	**8**

Text Book:

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

Reference Book:

1. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo (Author)
2. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch

Gaps in the Syllabus (to meet Industry/Profession requirements)

1. More emphasis on 3D printing hardware technology

POs met through Gaps in the Syllabus

1,4,5,9,12,13

Topics beyond syllabus/Advanced topics/Design

1. Various product modeling softwares
2. 3D printing hardware technology

POs met through Topics beyond syllabus/Advanced topics/Design

1,4,5,9,12,13

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand Lighting hardware as it applies to the industry
2.	Theoretical concepts of lighting for video production
3.	Planning lighting arrangements according to requirement
4.	Understanding popular lighting schemes
5.	Practical assignment

Course Outcomes

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

CO1	The student will understand the various physical equipment of lighting
CO2	Comprehensive grasp of lighting theory
CO3	Understanding of popular lighting systems
CO4	Gain experience in handling different lighting equipment
CO5	Experience in working within a timetable and schedule

Topics / Exercises

MODULE	(NO. OF LECTURE HOURS)
Module I	**8**

Lighting instruments and controls, Spot, flood and handheld lights Studio and field lighting instruments and filters, Light Contrast Ratio Physical properties of light, Properties of light sources; intensity, direction, color temperature and size, Soft and hard light	
Module II Techniques of video production lighting, Simple lighting techniques, Creative light techniques, Understanding triangle or 3-point lighting, High key lighting and low-key lighting	**8**
Module III Chroma key lighting, Lighting for various field of view, Various tools of lighting, Indoor and outdoor lighting, shooting in outdoor, indoor and night, Understanding - natural light, flash, reflector	**8**
Module IV Dealing with windows and mixed lighting, Lighting for small & multi-character set ups, Using c-stands, stands, dimmers, cookies & flagging and grids, LED lights with color temperature control, Production planning with lights, Story-telling through lighting	**8**
Module V Practical: Learning how to use a variety of lighting tools	**8**

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)

1.Need more industry exposure.

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1.Work on the interplay of make-up, set design and lighting.

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives
This course enables the students to:

1.	Understand Various Elements of Multimedia
2.	Gain Introductory knowledge About Indian Art
3.	Understand Steps Involved in Designing a Multimedia Project
4.	To Develop Ability to Design a Multimedia Message

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

CO1	History of Indian Art
CO2	Understand Various Aspects of Multimedia Communication Involving Indian Art
CO3	Technical Details Related to Various Elements of Multimedia and Emerging Technologies
CO4	Understand the Role Played by Various Multimedia Platforms
CO5	Design a Multimedia Project by Combining Various Elements of Multimedia and Art

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module – I **Using Multimedia Tools in Indian Art**: Introduction to Indian Art, Ancient Indian Art, Medieval Indian Art, Modern Indian Art, Introduction to Multimedia, Elements of Multimedia, Raster Designing, Vector Designing	**8**

Module – II **Introduction to Multimedia Designing Software** Introduction to Toolbox, Introduction to Interface, Painting Brushes, Drawing Tools, Shape Creation, Illustration Creation, Saving Files, Rendering	**8**
Module – III **Multimedia Designs based on Tanjore Art** Introduction to Tanjore Art, Various Aspects of Tanjore Arts, Creating Tanjore Art with Multimedia Tools, Designing Logos and Posters with Tanjore Art	**8**
Module – IV **Multimedia Designs based on Madhubani Art** Introduction to Madhubani Art, Various Aspects of Madhubani Arts, Creating Madhubani Art with Multimedia Tools, Designing Logos and Posters with Madhubani Art	**8**
Module – V **Introduction to Rajasthani Miniature Art** 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	**8**

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, Smita Shirole Yadhav
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)

15. Introduction to Financial Planning During Project Design
16. Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

22. Introduction to International Collaboration
23. More Emphasis on Financially Viability of Project
24. Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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PE(SEC-III)

COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives
This course enables the students to:

1.	To introduce systematic writing techniques to students.
2.	Defining popular formats like short story, short novels and novels.
3.	Looking at examples of popular fiction.
4.	Free writing and structure writing.
5.	Exercises for writers.

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

CO1	Students will be able to begin writing fiction genres
CO2	Appreciate the difference between different formats of fiction.
CO3	Exposure to great writers.
CO4	Exercise to develop writing skills.
CO5	Complete a short project.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I The use of fiction in human life, Who can write?	

Module II Personality, Talent & Discipline, Structured Writing, Free Writing	
Module III Story ,Novella and Novel, Strength and Weakness of the medium	
Module IV Beginning writing Components of a story, Plots and Scenes	
Module V Characters and Dialogues , Research , Editing and Rewriting, 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)

1. Entry level treatment of the topic.

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1 Expansive reading from the library.

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

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 / Second
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand the skills of Typography & Calligraphy
2.	Understand about various Inks, pens, Paper types used in calligraphy
3.	Know basics of various fonts type
4.	Know various lettering styles
5.	Know layouts and designs

Course Outcomes

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

CO1	The student will learn basic techniques before starting calligraphy writing
CO2	Students will be able to understand the use of different pen types, inks and papers
CO3	Students will be able to write different alphabet types and words
CO4	Students will be able to know various lettering styles
CO5	understand the use of spacing and layouts

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I. Understand the skills of Typography & various Calligraphy styles	**8**
Module – II Understand about various Inks, pens – Pilot parallel pen, Dip pensetc. Paper types used in calligraphy	**8**
Module – III Know basics of various font types – Blackletter, Fraktur, Gothic etc.	**8**
Module – IV Know various calligraphy styles – Gothic, Brush Lettering, flat brush lettering, Pointed pen calligraphy	**8**
Module – V Know layouts and designs	**8**

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)

1. Advanced Calligraphy tools

POs met through Gaps in the Syllabus

1,2,4,5,6,10,11,12

Topics beyond syllabus/Advanced topics/Design

2. Advanced Calligraphy tools
3. Experimental Art and craft tools

POs met through Topics beyond syllabus/Advanced topics/Design

1,2,4,5,6,10,11,12

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 Course outcome

CO1	The student will learn basic techniques before starting calligraphy writing
CO2	Students will be able to understand the use of different pen types, inks and papers
CO3	Students will be able to write different alphabet types and words
CO4	Students will be able to know various lettering styles
CO5	understand the use of spacing and layouts

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	2
CO2	1	1	1	1	2	1	1	1	1	2	1	1	1	1	2
CO3	1	1	1	1	2	1	1	1	1	2	1	1	1	1	2
CO4	1	1	1	1	2	1	1	1	1	2	1	1	1	1	2
CO5	1	1	1	1	2	1	1	1	1	2	1	1	1	1	2

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives
This course enables the students to:

1.	Construct 3D models for Architectural visualization
2.	Design processes and development methods
3.	Develop concepts and visualize
4.	Model, render and do the final composition
5.	Create a walkthrough

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

CO1	Create buildings, shops, cars etc in 3D as per the plan
CO2	Understand ratio and composition of various 3D models in architectural planning
CO3	Understand the concepts and ideas to execute the planning
CO4	Render for the final composition
CO5	Create a walkthrough animation

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I . 3D modeling for different architectures	**8**
Module – II Understand ratio and composition of various 3D models in architectural planning, Understanding the techniques and issues while modeling	**8**
Module – III Understand the concepts and ideas to execute the planning, concept of proxy meshes	**8**

Module – IV Rendering the final composition	**8**
Module – V Create a walkthrough animation	**8**

Text Book:

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

Reference Book:

1. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
2. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch

Gaps in the Syllabus (to meet Industry/Profession requirements)

1. More emphasis on Architectural softwares

POs met through Gaps in the Syllabus

1,4,5,9,12,13

Topics beyond syllabus/Advanced topics/Design

1. Interchange of various 3D software platforms
2. 3D Architectural softwares

POs met through Topics beyond syllabus/Advanced topics/Design

1,4,5,9,12,13

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives
This course enables the students to:

1.	Understanding concept of video editing.
2.	Introduction to popular hardware and software.
3.	Narrative through video editing.
4.	Various video editing styles.
5.	Practical assignments.

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

CO1	The student will understand the various hardware and software of video editing.
CO2	Comprehensive grasp of concepts of video editing.
CO3	Be able to handle raw footage management.
CO4	Professional practices and skills.
CO5	Be able to handle professional assignments.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Role of video editing in production , Types of editing , Major editing principles	**8**

Technique of video editing	
Module II Role of video editor, Editing for the genre: action, dialogue, comedy, documentary etc., Linear and Nonlinear editing ,Switcher and video mixers	**8**
Module III Video and Effects , Aspect ratio and safe areas ,ENG and EFP editing ,Montage editing , Split screen editing technique	**8**
Module IV Understanding post production workflows, Single & multi track editing, Timeline, Project and footage management , Attributes of image	**8**
Module V Color correction , Sound mixing , Un-mixed and mixed master Assignment :-Students will compose a short video production individually.	**8**

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)

1.Overview of the topic.

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1. Observing more directors' style.

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used

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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

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:

CO1	To understand the intricacies of Game Design process
CO2	To critically analyze the existing games' designs
CO3	Design new game ideas for different platforms
CO4	Understand the design stages of Game Development
CO5	Design a Game Design Document or similar document required during pre-production stage of any creative job like advertising, film making, and obviously game development.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I **What is Game Design:** The process of Game Design **Role of Game Designer:** What a game designer does **Contents of a Game Design Document:** Studying sample GDD templates	**5**
Module – II **The Game Idea:** The High Concept Note	**6**

Visualizing the Game: Visualizing the new game ideas	
Module – III Designing Audio: Studying audio in digital games and design or specify audio for your games Game Flow: Flow chart User Interface Design: Buttons and other information	**6**
Module – IV **Technical Design:** Technical considerations of the game **Schedules and Budgets:** Gantt Chart and Budgeting **Special Considerations:** Related to game genre	**6**
Module – V **Sample Game Design Documents** **Game Design Exercises**	**5**

Text Book:

1. Game Design for Teens by Les Pardew, Premier Press

Reference Book:

1. Rules of Play: Game Design Fundamentals by Katie Salen, Eric Zimmerman, (2003), The MIT Press

2. Game Design Foundations by Roger E. Pedersen, Wordware Publishing, Inc. (2003)

3. Game Design Workshop: A Playcentric Approach to Creating Innovative Games, by Fullerton Tracy (2014), RC Press/Taylor & Francis

4. 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)

1. More emphasis on playing games

POs met through Gaps in the Syllabus

2, 10

Topics beyond syllabus/Advanced topics/Design

Advance Game Engine

POs met through Topics beyond syllabus/Advanced topics/Design

1, 4, 5, 12, 13, 14, 15

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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PE(SEC-IV)

COURSE INFORMATION SHEET

Course Code: AM131
Course Title: Science Communication
Pre-requisite(s): Nil
Credits: 2 L:2 T:0 P:0
Class schedule per week: 2
Class: B.Sc. (Animation & Multimedia)
Semester / Level: IV / II
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1	Recognize Science Communication as a serious academic discipline
2	Identify the role that Science Communication plays in the nation building process
3	Discover critical element of Science Communication
4	Recognize Science Communication as a tool for developing the scientific temperament.
5	Discover the major elements of Communication in Science Communication
6	Suggest possible use of inter disciplinary inputs to make the Science Communication more responsive & effective
7	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:

CO1	Realize Science Communication as a major academic discipline
CO2	Recognize the role and responsibility of Animation in the process of Science Communication
CO3	Recognize the role Science Communication plays in the process of development
CO4	Identify elements of interdisciplinary inquiry in Science Communication
CO5	Develop popular science communication materials

SYLLABUS

MODULE	**(NO. OF LECTURE HOURS)**
Module – I Communication: Communication paradigm, Effective Communication, Barriers to Communication, Culture and Communication	**4**
Module – II Science Communication: Definition, Key elements, Application, Outcome	**4**
Module – III	**4**

Participatory Communication: Population Pyramd, Audience appraisal, Types of Participation, Information Dissemination, Mono-logic Communication, Discussion, Di-logic Communication, Reversal of Learning	
Module – IV Application Exercises: Animating & graphically rendering scientific definitions & principles, Condensed Writing & Precise Writing, Exercises, Technical writings & Help files, Language of Science & Creative Language, Rigor & Abstraction	**8**
Module – V Storyboarding	**5**

Reference Books:

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, Dietram Scheufele

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives
This course enables the students to:

1.	Introduction to 3D animation and its concept
2.	Understand various shortcuts and techniques for animating a 3D object
3.	Animate attributes like color, transparency etc.
4.	Animate a 3D character
5.	Do Camera animation

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

CO1	Understand basics as well as advance concepts of 3D animation
CO2	Understanding interface and various shortcuts
CO3	Animate simple objects and its attributes
CO4	Animating 3D characters
CO5	Do camera animation

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I . Understand basics as well as advance concepts of 3D animation Stretch and squash for 3D objects	**8**
Module – II Understand various shortcuts and techniques for animating a 3D object	**8**
Module – III Animate simple objects and its attributes like color, transparency Animation through deformers and modifiers	**8**

Module – IV 3D Character Animation, walk cycles and Run cycles	**8**
Module – V camera animation	**8**

Text Book:

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

Reference Book:

1. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
2. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch

Gaps in the Syllabus (to meet Industry/Profession requirements)
More emphasis on observations and movements

POs met through Gaps in the Syllabus
1,4,5,9,12,13

Topics beyond syllabus/Advanced topics/Design
1. Acting skills
2. Movement studies

POs met through Topics beyond syllabus/Advanced topics/Design
1,4,5,9,12,13

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives
This course enables the students to:

1.	Understand the Concept of Matte Painting
2.	Understand Various Terminologies Related to Matte Painting
3.	Understand the Software's Related to Matte Painting
4.	Understand Steps Involved in Designing a Matte painting Project

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

CO1	Understanding Matte Painting Communication
CO2	Master the Various Techniques Related to Matte Painting
CO3	Understand the Role Played by Matte Painting
CO4	Learn Troubleshooting during Matte Painting
CO5	Design a Matte Painting Project

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module – I **Introduction to Matte Painting Tools** Introduction to Matte Painting, Uses of Matte Painting, Introduction Matte Painting Designing Software's, Image Editing Tools, Digital Painting Tools, `Vector Art Tools	**8**
Module – II **Color Matching & Color Correction**	**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** Creating Custom Brushes, Creating Textures, Adding and Changing Brush Dynamics, Painting and Layer Blending Techniques	**8**
Module – IV **Creating Different Aspects of Matte Painting** Introduction to Set Extension, Creating Foggy/Overcast Lighting, Daytime Lighting, Sunset / Sunrise Lighting	**8**
Module – V **Designing Perspectives** Introduction to Perspective Drawing, Introduction to 1-Point Perspective, Introduction to 2-Point Perspective, Introduction to 3-Point Perspective.	**8**

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)

17. Introduction to Financial Planning During Project Design
18. Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

25. Introduction to International Collaboration
26. More Emphasis on Financially Viability of Project
27. Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives

This course enables the students to:

1	To teach students the basics of sound production.
2	Choose apt equipment for the purpose at hand.
3	Appreciate budget constraints.
4	Compare between different makes of instrument.
5	Understand safety and ergonomic consideration.

Course Outcomes

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

CO1	Students will be able to handle the instruments.
CO2	Will be able to scale hardware requirement for the sound production.
CO3	Be able to complete a one-man project from ideation to final output.
CO4	Be able to implement his creative vision.
CO5	Can be an asset to the sound department of a full fledge production.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Sound Basics , Software and other production tools, Analog & digital audio signal, Frequency, amplitude, decibels etc. , Audio equipment for studio & field production	**8**
Module II	**8**

Types of microphones, Audio controls, mixers , Operational characteristics of microphone , Live and postproduction mixing	
Module III Voice over, narration and dubbing, Indoor, outdoor and studio recording Single & multi track recording, Music recording, Foley recording	**8**
Module IV Understanding standard audio post production workflows, Mono & stereo sound ,File Formats ,Sound effects and transitions , Audio cleaning & editing	**8**
Module V Sound design, Digital audio parameters., Production sound mixing Practical :Learning how to use sound hardware and software for production	**8**

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)

1. More industry relevant assignments.

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1. Should visit a sound studio.

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

Course Code: AM135
Course Title: Advertising Campaign 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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand the creative process of designing and advertising campaign
2.	Understand the Advertising Strategies adapted while designing advertisement campaign
3.	Understanding the concept of advertising and its importance.
4.	Different formats of advertising.
5.	Understanding Marketing, Target & Branding in advertising.

Course Outcomes

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

CO1	Design Advertising Strategies, Campaigns for products or services
CO2	Make career in Advertising or similar creative industry
CO3	Create posters and slogans.
CO4	Create advertisement on social, education & developmental issues
CO5	Come up with Traditional and Electronic advertising.

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module I Understanding advertising campaign process, Research to define target, message and understand society and culture, The role of branding and positioning.	**8**
Module II Creativity for advertising, Copy writing and layout, Advertising campaigns and media, Public relations.	**8**
Module III Traditional Advertising, Out-of-home Advertising, Direct Marketing, Sales Promotion, Electronic and Mobile Media, Guerrilla and Other Forms of Media	**8**

Module IV Case Studies	**8**
Module V Project / Assignment: Design an advertisement campaign or write a research paper under mentorship of teacher.	**8**

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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Detailed Syllabus of B.Sc. A&M

PROGRAM ELECTIVES (PE)

PE I

COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Appreciating screenplay and directors note
2.	Annotated screenplay and still photography.
3.	Camera language and frame cropping
4.	Storyboard sketching
5.	Continuity consideration and composition

Course Outcomes

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

CO1	The student will be able to work in a production environment
CO2	Be able to understand and use screenplay and set design decisions
CO3	Be able to sketch for continuity and sequence
CO4	Understand camera language and editing
CO5	Be able to chose tools for the job at hand and able to draw storyboards from screenplays.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Looking at examples of Storyboards from popular TV serials and Movies, Comparing the storyboards to the final render	**8**

Module II Understanding the screenplay, story and continuity design	**8**
Module III Developing ideas, thumbnailing, comparing compositions	**8**
Module IV Doing short storyboards on formatted paper	**8**
Module V Developing animatics with sound from storyboards, Understanding pacing and complexity of a scenes for storyboarding, Assignment- Doing a longer storyboard OR study a storyboard from module 1	**8**

Text Book:

1. Directing the Story – Francis Glebas, Star Wars Storyboard - the original trilogy – By Lucas Films

2. Framed ink- By Marcos Mateu Mestre

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

Work in live projects

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

Work in production environment

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used

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		

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COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand a documentary film and their different genre.
2.	Present proposal with synopsis and budget.
3.	Understand the technicality and nuance of documentary films.
4.	Fine-tune the art of editing.
5.	Write script and do voice over.

Course Outcomes

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

CO1	Write a documentary script.
CO2	Enhance their research method for documentary films.
CO3	Make documentary film of their own.
CO4	Join production house that produces documentary films.
CO5	Have the A-Z knowledge of documentary film making.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I	**8**

Introduction to documentary and docu-drama, Programme proposal and treatment, Programme categories, Focus on different types of documentaries; wild life, environmental, biographical, social, Etc.	
Module II Key points of film, Research, script writing, Logistics, budgeting, Planning and Scheduling Shot break up, Questionnaire	**8**
Module III Selecting the crew, Location, traveling and permissions, Camera angles; Objective, subjective and point-of-view, Frame Composition & continuity	**8**
Module IV Capture convert and transfer data on computer, Logging the tape, Post production workflows, Timeline, Project and footage management	**8**
Module V Editing modes; Offline & Online, Principles of editing, Graphics, credits, titles and subtitles, Voice over, Unmixed and mixed master	**8**

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)

1. **Extensive review of documentary films.**

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1. **Should make their own documentary films.**

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

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

Course Code: AM333

Course Title: Film and Documentary Script Writing

Pre-requisite (s): Nil

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

Class schedule per week: 2

Class: B.Sc. (Animation & Multimedia)

Semester / Level: V / III

Branch: BAM

Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Differentiate between a novel and script.
2.	Understand basic research before writing a script.
3.	Understand the difference between fiction and documentary script.
4.	Improve vocabulary and use as per your target audience.
5.	Understand the importance of plot points in the script.

Course Outcomes

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

CO1	Write a complete script for documentary film.
CO2	Implement the T.A.S. in script writing.
CO3	Understand the importance of research in script writing.
CO4	Join production house as script/screen writer.
CO5	Convert a story or novel into a script.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I **Introduction to documentary films** What is a Documentary film?	**5**

Difference between Documentary films and other film genre. Understanding the background. Different types of documentary films.	
Module II 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.	**5**
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 final draft.	**5**
Module IV **Practices** Formulating your synopsis. Choosing a topic. Writing the first draft. Final output (script) for a documentary film.	**5**
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.	**5**

Reference Book:

1. 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)

1. **Write more script of their own.**

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

1. **Intern with professional documentary script writer.**

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

Indirect Assessment

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	**Course Delivery Method**	**Course Outcome**	**Course Delivery Method Used**
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		

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PE II

COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives

This course enables the students to:

1.	To introduce industry standard process of designing characters for animation & movies.
2.	Pipeline of studio production
3.	Understanding and using preproduction notes
4.	Procuring and purchasing reference
5.	Organizing character design assets

Course Outcomes

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

CO1	The student will be able to prepare character designs from a screenplay.
CO2	Will be able to work in a production environment
CO3	Will be able to understand and use screenplay, story roughs and back-story notes
CO4	Advise on preparing storyboard and background design
CO5	Can relate, organize and oversee a character design team

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I The role and function of the Character Designer in the production process. Understanding the writers' world and create the character bank.	**8**
Module II Basic shapes and Comparative diagrams, Design explorations, Directors role	**8**
Module III Drawing heroes – central characters and their sheets, Drawing female characters- heroines. Their sheets	**8**
Module IV Drawing support characters, exploring description and refining	**8**
Module V Understanding age- children, teens and adults, Understanding animals and creatures, examples, Exercises on the above modules and introduction to mecha characters	**8**

Text Book:

1. Creating characters with personality- by Tom Bancroft, Character Mentor – by Tom Bancroft

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

To work on live projects

To work on character sets under a director

POs met through Gaps in the syllabus: 13, 14, 15

Topics beyond syllabus / advanced topics / design

Working on production design

Working on storyboarding assignments

POs met through topics beyond syllabus / advanced topics / design : 1, 10, 12

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

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used

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		

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COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives

This course enables the students to:

1.	To introduce urban sketching and rapid sketching as an artform
2.	Understanding the culture of urban sketching
3.	Art style and tools
4.	Capturing the essence of a location
5.	Pioneers in the field

Course Outcomes

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

CO1	The student will be able to understand Urban sketching
CO2	Can participate in urban sketching events or do self practice
CO3	Will be able to chose proper tools for the sketching style
CO4	Will be able to adapt to different locations and situations
CO5	Can document own work and advise on documentation

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I	**8**

Intro to urban sketching, Drawing in a crowd, Outdoor sketching, organizing a sketchbook	
Module II Quick sketching, Mastery VS. spontaneity	**8**
Module III Exploratory drawing, Mini sketching, Simplifying, drawing loose	**8**
Module IV Elements of urban sketching- people, vehicles, trees and shrubs, buildings	**8**
Module V Capturing the place, working fast, editing, Sketch-overs, digital base sketch over, aerial photography sketch over, Studying several popular artists, Collecting and copying	**8**

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)

Need more practice sessions

Need to visit artists and exchange notes

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

Visit to art exhibitions

Prepare and publish own documentation and sketchbook

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

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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:

1.	Understand the art and techniques of writing for Advertising
2.	Learn skills required to write and design Advertising Campaigns
3.	understand different writing formats for advertising.
4.	Enhance the skills of giving tagline.
5.	Upgrades creativity through brainstorming.

Course Outcomes

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

CO1	Write and Design Advertising Campaigns
CO2	Make career in Advertising field
CO3	Improve research skills in the field of advertising campaign.
CO4	Enhance writing technique for new media advertising.
CO5	Should make their own ad campaign.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Understanding Copywriting, What is Copywriting, Benefits of Copywriting Focusing on the customer, Unique Selling Points	**5**
Module II Tone-Tone of Voice , Attitude , Writing like you talk Elements of Copy Writing- Headlines and Slogans, Structure ,Taglines, Metaphors and Similes , Call to Action	**6**
Module III Persuasion- Liking ,Social Proof, Consistency, Authority, Scarcity, Reciprocity Psychological - Aspects of Advertising	**6**

Module IV How to write messages for various Communication purposes	**6**
Module V Case Studies	**5**

Text Book:

1. Paul Lima (2011), Copywriting That Works: Bright Ideas to Help You Inform, Persuade, Motivate and Sell!

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

Indirect Assessment

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	**Program Outcomes (POs)**												**Program Specific Outcomes (PSOs)**		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Develop storytelling skill through Stop Motion Techniques
2.	Understand the Stop Motion Techniques
3.	Learn related hardware, software, Lighting and other technical tools for stop motion techniques
4.	Learn industry standard practices in applied creativity
5.	Gaining experience of working in a group

Course Outcomes

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

CO1	Gain experience in film making process using stop motion techniques
CO2	Show professional competencies in the field of stop-motion animation
CO3	Demonstrate skills in the use of industry standard tools
CO4	Experience in working within a timetable and schedule
CO5	Work on Stop Motion Animation Production

Syllabus

Module & Practical Assignment	**No. of Hours**
1. Developing story- idea, script, treatment, planning shots – basic film grammar/composition of shots the storyboard, Editing – animatics and story reels.	6
2. Coat hangers for armatures – making your own model, character design, working with modelling clays, making puppet.	6
3. The maquette, ball and socket armature, mould making – hard and soft moulds, casting, colouring, costumes/dressing	6
4. Design and building of sets, Interior sets, Exterior sets	6
5. Character Animation	6
6. Filming, Motion control, and Lighting	6
7. Final Compositing & Editing	6
8. Animation Assignments based on the following topics:	6

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): Need to study of industrial stop-motion projects and their case studies.

POs met through Gaps in the syllabus: 2, 4, 8, 9, 10, 11, 12

Topics beyond syllabus / advanced topics / design: Advance tools and softwares of Stop Motion Techniques like Dragon frames, stop-motion pro etc.

POs met through topics beyond syllabus / advanced topics / design: 1, 4, 5, 9, 12

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

Student feedback on Course outcome

Mapping of Course Outcomes into Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	2	3	2	1	2	3	2	2	3	3	1	1
CO2	2	2	2	2	2	2	2	2	2	2	2	2	3	1	1
CO3	2	2	2	3	3	2	1	1	2	1	2	3	2	1	1
CO4	1	1	2	3	2	2	1	2	3	2	3	3	2	2	2
CO5	3	2	2	2	2	2	2	1	3	2	3	3	3	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

Course Code: AM317
Course Title: Writing for Advertising
Pre-requisite(s): Nil
Credits: 2 L:2 T:0 P:0
Class schedule per week: 02
Class: B.Sc. (Animation & Multimedia)
Semester / Level: V / III
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand the art and techniques of writing for Advertising
2.	Learn skills required to write and design Advertising Campaigns
3.	understand different writing formats for advertising.
4.	Enhance the skills of giving tagline.
5.	Upgrades creativity through brainstorming.

Course Outcomes

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

CO1	Write and Design Advertising Campaigns
CO2	Make career in Advertising field
CO3	Improve research skills in the field of advertising campaign.
CO4	Enhance writing technique for new media advertising.
CO5	Should make their own ad campaign.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Understanding Copywriting, What is Copywriting, Benefits of Copywriting Focusing on the customer, Unique Selling Points	**5**
Module II Tone-Tone of Voice , Attitude , Writing like you talk Elements of Copy Writing- Headlines and Slogans, Structure ,Taglines, Metaphors and Similes , Call to Action	**5**
Module III Persuasion- Liking ,Social Proof, Consistency, Authority, Scarcity, Reciprocity	**5**

Psychological - Aspects of Advertising	
Module IV How to write messages for various Communication purposes	**5**
Module V Case Studies	**5**

Text Book:

1. Paul Lima (2011), Copywriting That Works: Bright Ideas to Help You Inform, Persuade, Motivate and Sell!

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

Indirect Assessment

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	**Program Outcomes (POs)**												**Program Specific Outcomes (PSOs)**		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	**Course Delivery Method**	**Course Outcome**	**Course Delivery Method Used**

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		

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COURSE INFORMATION SHEET

Course Code: AM337
Course Title: Fundamentals of Theatre & Acting
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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Recognize Theatre & Acting as serious tools of communication
2.	Identify important milestones in the process of the evolution of theatre
3.	Discover critical elements, conditions & requirements of theatre & acting
4.	Explore how communication plays a role in theatre and acting
5.	Discover factors that make theatre and acting effective and why so
6.	Suggest possible use theatre to make the process of communication more effective & responsive
7.	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:

CO1	Realize theatre & acting as a tool for serious communication
CO2	Respect people's role in the process of communication
CO3	Recognize the role theatre plays in the process of development.
CO4	Identify elements that promote people's participation and acceptance
CO5	Distinguish genres of communication like persuasive communication, advocacy communication, internal communication etc.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Drama Origin of English Drama, Miracle Plays & Morality Plays, Role of Guilds & Church in the Evolution of Drama , Secular Period of Drama, University Wits, Renaissance Drama , Stage during Shakespearean Period	**8**
Module II Story for Drama Narrative: Definition, Narrator, Types of Narratives, Story: Definition, Types of Stories, Plot (Aristotle & Gustav Freytag),	**8**

Drama: Evolution of structure and stage	
Module III Culture The Role of the storyteller, Importance of understanding of rituals, ceremonies, and folk customs, Drama and Language , Script Writing Exercises , Theatre Games, Role Plays & Related Skill Building Activities ,Exposure to Contemporary Drama.	**8**
Module IV Acting Understanding Empathy, Sympathy & Intuition, Emotions & Feelings, Characterization: Round Character, Flat Character, Complex Character, Personality,The demands of performance: Acting for Stage, Acting for Films, Monologue, Soliloquy, Dialogue	**8**
Module V Theater Workshop	**8**

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)

Need More Exposure

POs met through Gaps in the syllabus: 7, 8, 10

Topics beyond syllabus / advanced topics / design

POs met through topics beyond syllabus / advanced topics / design : 12, 13, 14, 15

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

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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PE III

COURSE INFORMATION SHEET

Course Code: AM323
Course Title: CLASSICAL ANIMATION
Pre-requisite(s): Nil
Credits: 2 L: 2 T: 0 P:0
Class schedule per week: 02
Class: B.Sc. (Animation & Multimedia)
Semester / Level: III
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Provide the student with a thorough introduction to the field of Classical animation
2.	Understand Principles of Animation
3.	Assess and critique past and current animation trends
4.	Understand classical animation pipeline step by step
5.	Understand various case studies of classical animation based short animated films

Course Outcomes

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

CO1	Create traditional and computer-generated animation based on current industry trends and practices.
CO2	Define and apply design principles and theories to animation production
CO3	Apply fundamental animation timing skills through the creation of sequential images.
CO4	Demonstrate progress in basic drawing and animation skills through animation assignment.
CO5	Critically analyze creative work and the work of others

Syllabus

Module	**No. of Lecture**
Module I 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.	5
Module II 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.	5
Module III	5

Animating Step by Step - Key Poses, Attitude and Dynamics, Inbetweens, Adding Mouths, Staging, Camera Angles, Working with Characters, Extreme Action, Clean-Up, Drawing for Animators, Drawing Terminology.	
Module IV 2D Animation Basics - Keys, Inbetweens, and Timing, Charts and Inbetween Counting, Straight-Ahead Animation, Slowing-In and Slowing-Out, Working in Thirds, How to Inbetween, 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.	5
Module V **Assignments** Case studies of classical animation based short films, animation appreciation, International Animation Artists, and Discussion on Animation Film Fistevals. Assignment: Students have to create an 11 seconds of classical animation scene using the light box.	5

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 Reducks 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): Nil

POs met through Gaps in the syllabus: Nil

Topics beyond syllabus / advanced topics / design: Inclusion of detail study of Acting for Animation

POs met through topics beyond syllabus / advanced topics / design: 1, 2, 3, 4, 8, 9, 10, 12

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

Indirect Assessment

4. Student feedback on Faculty
5. Student feedback on Course outcome

Mapping of Course Outcomes into Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	1	1	1	2	2	2	1	2	2	1	1
CO2	2	2	2	1	2	2	1	2	2	2	1	3	3	1	1
CO3	3	2	2	1	1	2	1	1	2	2	1	2	2	1	1
CO4	2	2	2	2	2	2	1	2	2	2	2	3	2	1	1
CO5	3	3	2	2	2	2	1	2	2	2	2	2	3	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Study model references and implement ideas accordingly
2.	Understand basic structure of sketch and design
3.	Do 3D sculpting using different 3D tools
4.	Understand various 3D sculpting techniques
5.	Rendering 3D sculpted Models

Course Outcomes

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

CO1	Do 3D sculpting for various 3D models.
CO2	Implement ideas and techniques
CO3	3D sculpting
CO4	Modeling complex 3D objects
CO5	Knowledge of sculpting softwares

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I Study model references and implement ideas accordingly to do the final sculpting.	**8**
Module – II Understand basic structure of sketch and design	**8**
Module – III 3D sculpting using different 3D tools	**8**
Module – IV 3D sculpting techniques and workflow	**8**
Module – V Rendering 3D sculpted Models	**8**

Text Book:

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

Reference Book:

1. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo (Author)
2. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch

Gaps in the Syllabus (to meet Industry/Profession requirements)

1. More emphasis on dedicated modeling softwares

POs met through Gaps in the Syllabus

1,2,5,9,12,13

Topics beyond syllabus/Advanced topics/Design

1. Detailed sculpting
2. Sculpting software

POs met through Topics beyond syllabus/Advanced topics/Design

1,2,5,9,12,13

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	**Course Delivery Method**	**Course Outcome**	**Course Delivery Method Used**
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		

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COURSE INFORMATION SHEET

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 / Third
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Study examples of 3D Motion graphics & Dynamics
2.	Understand concepts of 3D Motion graphics & Dynamics
3.	Creating 3D motion Graphics
4.	Working on Various Platforms for Motion Graphics
5.	Rendering Motion Graphics and Compositions

Course Outcomes

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

CO1	Create simple motion graphics
CO2	Incorporate motion graphics and dynamics
CO3	Create complex 3D motion graphics
CO4	Understand the workflow as well as tools and techniques involved to create a 3D motion Graphics
CO5	Understand various methods to produce final output

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I . Study of 3D Motion graphics & Dynamics examples	**8**
Module – II Concepts of 3D Motion graphics & Dynamics	**8**
Module – III	**8**

Creating 3D motion Graphics	
Module – IV Working on Various Platforms for Motion Graphics, Use of 3D Dynamics for Motion Graphics	**8**
Module – V Rendering Motion Graphics and Compositions	**8**

Text Book:

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

Reference Book:

1. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
2. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch

Gaps in the Syllabus (to meet Industry/Profession requirements)

1. Study motion graphics of famous artists

POs met through Gaps in the Syllabus

1,4,5,9,12,13

Topics beyond syllabus/Advanced topics/Design

1. Case studies
2. New technologies

POs met through Topics beyond syllabus/Advanced topics/Design

1,4,5,9,12,13

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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PE IV

COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives
This course enables the students to:

1.	Understand the Concept of Mass Communication
2.	Gain Introductory Knowledge About Magazines
3.	Understand the Designing Process of Magazines
4.	Understand the Various Steps in Designing a Magazine

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

CO1	Magazine as a tool of Mass Communication
CO2	Learn About Various Platforms Available for Publishing Magazines
CO3	Understand Various Software's Related to Magazine Designing
CO4	Learn Various Designing Guidelines for Magazines
CO5	Design a Magazine

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module – I **Introduction About Magazine** What is a Magazine, Graphic Communication Model ,Structure of a Magazine, Ownership of a Magazine, Magazine Design Case Study	**8**

Module – II **Introduction to Multimedia Tools for Magazine Design** Tools Used for Magazine Design, Introduction to Design Interface, Toolbar, Different Size of Canvas , File and Format for Scanning , Rendering and Printing of Magazine	**8**
Module – III **Magazine Design -** Magazine Branding, Color Theory, Typography, Grids and Layouts, Paper Quality and Thickness, Different Types of Printing Techniques (Offset and Digital)	**8**
Module – IV **Introduction to Digital Magazine** What is a Digital Magazine, Role of Internet, Multimedia Elements Used in Digital Magazine, Role of Social Media in News Distribution, Fake News	**8**
Module – V **Different Categories of Magazines** : Political magazines, Currents Affairs Magazine, Economic Journals, Entertainment Magazines, Designing Creation for Different Categories, Variation in Color Theory	**8**

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)

19. Introduction to Financial Planning During Project Design
20. Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

1. Introduction to International Collaboration
2. More Emphasis on Financially Viability of Project
3. Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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 onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	To develop the multimedia content for apps and compile them together as an app
2.	Learn software tools to develop multimedia content to make Apps
3.	Get Introduced to User Interface Design
4.	To become conversant with several popular electronic gadgets and their development environment (design aspect only)
5.	Understanding art assets as it applies to new media

Course Outcomes

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

CO1	Create Multimedia Content for Apps and compile them together as an App
CO2	Learn to host App on App Stores
CO3	Develop art assets that is mobile friendly
CO4	will be comfortable in Development environment of mobile platforms
CO5	The student will be able to adapt his/her existing skill set

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I **UI design basics** Intro to Design and protype Designing a simple Mobile app	**8**
Module – II **Platforms to know**- Android and Ios **Task analysis-** Planning and choosing software. **Adobe XD workspace:** brief introduction	**8**
Module – III **Typography and colors considerations** **Empty state and Empty state Illustrations**- Introduction to beginners. **Input states and Input**- Examples	**8**

Module – IV **Designing the main screen-** Creating lists and displaying Info	**8**
Module – V **Prototyping and Sharing work,** **Adapting to different screens.** Class Demonstration	**8**

Text Book:

1. Jump Start Adobe XD 1st Edition by Daniel Schwarz

Reference Book:

1. Skill share lectures on 'UI Design Basics: Design and Prototype Your First Mobile App'

2. Adobe XD cc classroom in a book - 2019 edition By Brian wood

Gaps in the Syllabus (to meet Industry/Profession requirements)

More emphasis on creative part of app design

POs met through Gaps in the Syllabus

1, 3, 5

Topics beyond syllabus/Advanced topics/Design

Development kits by various developers can be discussed

POs met through Topics beyond syllabus/Advanced topics/Design

8, 10

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

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives

This course enables the students to:

1.	To make the learner comfortable with painting and coloring on the desktop
2.	Be aware of the industry standard tools and practises
3.	Digital tools for Art Vs Design
4.	Exercises for beginners
5.	Mini-project on digital painting

Course Outcomes

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

CO1	The student will be able to work in professional painting projects on the desktop
CO2	Have knowledge of industry standard tools and practises
CO3	Understand design and Art in digital platforms
CO4	Complete beginner level exercises
CO5	Be ready to undertake further digital painting projects

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Digital painting tools, Strength and weakness, Software and platforms	**8**
Module II Brushes, types of brushes, Making new brushes	**8**
Module III Layers, Layer styles, Masks, Hue saturation and other options	**8**
Module IV Simple brush coloring and Dynamic brushes	**8**
Module V	**8**

Paintovers and kitbashing, Examples of popular digital painting- study of examples.	

Text Books-

1. Beginners guide to digital painting in photoshop -By 3DTOTAL publishing, various
2. Digital painting for the complete beginner - Carlyn Beccia

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

3. Student feedback on Faculty
4. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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PE V

COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives

This course enables the students to:

1	Learning the theory behind effects animation
2	Animating VFx in 2D

Course Outcomes

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

CO1	Do Vfx / SFx (Visual / Special Effects) animation in 2D format
CO2	Will be able to plan Vfx for all media
CO3	Will be able to storyboard and thumbnail effects
CO4	Will complete exercises in 2d vfx
CO5	Will understand vfx in loops and non-looped style

Syllabus:

MODULE	(NO. OF LECTURE HOURS)
Module – I History of SFx Animation	**8**
Module – II	**8**

Drawing for Sfx, Studying Natural Behaviors	
Module – III Liquids and their motions Droplets and Waves	**8**
Module – IV Fire Smoke Explosions Swirls Tornados	**8**
Module – V Props, Starfield and Misc. Items	**8**

Text Book:

Elemental Magic Volume 1, Joseph Gilland

Reference Book:

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 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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

Course Code: AM325

Course Title: Production Design

Pre-requisite (s): Nil

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

Class schedule per week: 02

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI / III

Branch: BAM

Name of the Teacher:

Course Objectives

This course enables the students to:

1	To enable the student to understand narrative and subject of a screenplay.
2	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:

CO1	The student will have a deep understanding of the responsibility of a cinematographer.
CO2	The student will be able to work in a larger production project or in large production crew
CO3	Will be able to understand story requirements
CO4	Will be able to understand director's decisions
CO5	will be able to advise art department and cinematography

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I Careful examination of the screenplay, storyboard, story etc.	**5**
Module – II Location scouting, Still photography,	**5**

Annotated script	
Module – III Script breakdown Budget allocation	**5**
Module – IV Static art and Dynamic art Makeup Set design Costume	**5**
Module – V Lighting, camera Shot flow Camera handling Editing	**5**

Text Book:

1. Shot by shot - By Steven Katz,
2. Five Cs of cinematography - by Joseph v Mascelli

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

1.Need to implement the principles.

2. Should participates in competition.

POs met through Gaps in the syllabus: 8,11

Topics beyond syllabus / advanced topics / design

Should intern in an agency.

POs met through topics beyond syllabus / advanced topics / design: 8,1,2

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

Indirect Assessment

1. Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

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 / Third
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Analyze and study various 3D composition for cameras
2.	Understand 2D and 3D camera Tracking
3.	Know Fundamentals of 3D Tracking
4.	Create VFX Compositions
5.	Render various 3D Compositions

Course Outcomes

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

CO1	3D composition for cameras
CO2	Camera tracking techniques
CO3	Problem solving techniques for better 3D tracking data
CO4	VFX and Compositing
CO5	Understand the workflow as well as tools and techniques involved to create VFX Compositions using the concept of 3D Camera tracking

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I. Analyse and study various 3D composition for cameras, camera tracking concept study	**8**
Module – II 2D and 3D camera Tracking	**8**
Module – III Fundamentals of 3D Tracking	**8**
Module – IV VFx Compositions and its implimentation	**8**
Module – V Render various 3D Compositions	**8**

Text Book:

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

Reference Book:

1. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
2. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch

Gaps in the Syllabus (to meet Industry/Profession requirements)

1. More emphasis on camera tracking techniques

POs met through Gaps in the Syllabus

1,4,5,9,12,13

Topics beyond syllabus/Advanced topics/Design

1. Various tracking softwares
2. Extracting quality tracking data

POs met through Topics beyond syllabus/Advanced topics/Design

1,4,5,9,12,13

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)	Program Specific

													Outcomes (PSOs)		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	**Course Delivery Method**	**Course Outcome**	**Course Delivery Method Used**
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		

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PE VI

COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand the Concept of Storytelling through Multimedia
2.	Gain Knowledge of Various Elements of Multimedia
3.	Understand Steps Involved in Creating a Multimedia Story
4.	Do's and Don'ts of a Multimedia Based Story

Course Outcomes

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

CO1	Understanding Storytelling
CO2	Learning to Use Various Elements of Multimedia in Story Building
CO3	Learning Technical Details of Software's Needed to Create Multimedia Based Story
CO4	Learning About Various Multimedia Platforms where Such Stories Can be Published
CO5	Design a Multimedia Based Story project

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module – I **Telling a Story Using Multimedia Elements** What is a Story, Different Components of a Story, Researching for the Story, Internet as a Medium for Storytelling, Creating a Script from Story	**8**

Module – II **Elements of Multimedia Storytelling** Graphic Communication Model, Introduction to Multimedia, Understanding Different Elements of Multimedia, Use of Multimedia Elements in Storytelling, Using Different Categories of Authoring Tools	**8**
Module – III **Editing Elements of Multimedia** Image Editing Software, Word Processing Software, Video Editing Software, Audio Editing Software	**8**
Module – IV **Storyboarding** Introduction to Storyboarding, Perspective Drawing, Drawing from a Script, Animatic Basic	**8**
Module – V **Designing Interface for Multimedia Story** What is Interface, Principles of Designing, Essential Requirement for Multimedia Story, Linear Vs Non-Linear Interaction	**8**

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
1. Mass Communication in India by Keval J. Kumar
2. Adobe Photoshop CC Classroom
3. 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)

21. Introduction to Financial Planning During Project Design

22. Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

1. Introduction to International Collaboration

2. More Emphasis on Financially Viability of Project

3. Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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 Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

Course Code: AM312

Course Title: Graphic Novel

Pre-requisite (s): Nil

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

Class schedule per week: 4

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI / III

Branch: BAM

Name of the Teacher:

Course Objectives

This course enables the students to:

1.	To teach appreciation for graphic novels.
2.	To teach skills needed to produce graphic novels.
3.	Using story, pictures and words
4.	Crafting stories for this medium
5.	Graphic novel project

Course Outcomes

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

CO1	The student will be able to appreciate graphic fiction
CO2	The student will be able to write and draw for graphic novels.
CO3	Will be able to choose tools with respect to requirement
CO4	Will complete one mini project of graphic novel.
CO5	Will be able to leverage words and pictures to convey drama.

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module I Understanding graphic novels, Difference between comics and graphic novels.	**8**
Module II Appreciating Pioneers in the fiels- Will Eisner, Frank Miller, Appreciating Scott McCloud, Introduction only	**8**
Module III Writing for graphic novels, Story and structure	**8**
Module IV	**8**

Outlining the graphic novel – creating scenes, starting to draw rough, The writer's drawings	
Module V Page design, Panel layout	**8**

Text Books:

1. Graphic storytelling and visual narrative -By Will Eisner,
2. Understanding comics – By Scott McCloud

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

Exposure to real live projects

More reference materials

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

The student can participate in comic and graphic novel events

The student can carve stories for visual continuity

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

Indirect Assessment

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

Course Code: AM316
Course Title: Participatory Communication
Pre-requisite(s): Nil
Credits: 2 L: 2 T:0 P:0
Class schedule per week: 2
Class: B.Sc. (Animation & Multimedia)
Semester / Level: VI / III
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1	Recognize the critical role that participatory communication plays in nation building
2	Recognize the important role and responsibility that the receiver / audience play in communication paradigm
3	Recognize the importance of a feedback means in communication

Course Outcomes

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

CO1	Successfully assess the audience / receiver
CO2	Successfully engage with the audience / receiver of communication
CO3	Successfully ensure the active participation of the audience
CO4	Successfully design effective communication modules
CO5	Develop skills for outreach management

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module – I Communication: Definition & Paradigm Effective Communication Barriers to Communication	**6**
Module – II Effective Communication: Message, Message / Content Creation, Visualization, coding & Decoding, Audience	**6**

Receiver- definition & understanding the receiver/ audiences, Audience appraisal with special reference to the social and economic background	
Module – III Definition, Role of Environment in Culture, Formation & Evolution of Social Groups, Transmission of Culture, Taboos	**5**
Module – IV Media Definition, Folk Media, Mass Media, Emerging Media, Democracy and Media, Outreach, Role of Communication	**5**
Module – V Reversal of Learning Types of Participation-passive participation, active participation, empowered participation	**5**

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

Indirect Assessment

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

Course Code: AM318
Course Title: Media Studies
Pre-requisite(s): Nil
Credits: 2 L: 2 T:0 P:0
Class schedule per week: 02
Class: B.Sc. (Animation & Multimedia)
Semester / Level: VI / III
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1	Recognize Media as a critical agent for change
2	Recognize the importance of Media in nation building process
3	Value ethics in Media
4	Appreciate the rule of media in nurturing democracy
5	Recognize the role of media in the communication of serious social messages

Course Outcomes

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

CO1	Recognize Media as tool for communication
CO2	Recognize the creative components of media
CO3	Create Media content
CO4	Develop skills for communication need assessment
CO5	Develop skills for communication based assesment

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module – I Definition Need for Media Evolution of Media	**5**
Module – II Types of Media Folk Media Mass Media	**5**

Emerging Media	
Module – III 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	**5**
Module – IV Communication & Media: Communication Needs Assessment, Communication Based Assessment Emerging Media & Society	**5**
Module – V Media and Ethics Fundamentals of Advertising Survey, Sampling and Media	**5**

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

Indirect Assessment

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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PE VII

COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives
This course enables the students to:

1	Use Blender software for 3D Modeling, Animation and Game Development
2	Explore 3D Game Engine Blender and Game Development using Game Engine

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

CO1	Understand the process of 3D Game Development using Game Engine
CO2	Explore Blender Freeware for Game Development
CO3	Explore Blender Freeware for 3D Game Props Design
CO4	Explore Blender Freeware for 3D Level Design
CO5	Explore Blender Freeware Game Engine's Node Based Programming

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I Blender User Interface	**8**
Module – II Modeling in Blender	**8**
Module – III Material in Blender	**8**
Module – IV Animation in Blender	**8**
Module – V Game Project in Blender	**8**

Text Books:
1. Blender 3D Basics, Fisher Gordon (2012), Packet Publishing

2. Blender Game Engine: Beginner's Guide, Bacone Victor Kuller (2012), Packt Publishing

Reference Books:

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 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

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1															
CO2															
CO3															

CO4															
CO5															

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	**Course Delivery Method**	**Course Outcome**	**Course Delivery Method Used**
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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Design a Game Level using any prevalent Game Engine software
2.	Learn required software tools to make game levels
3.	Understand the process designing interactive multimedia applications

Course Outcomes

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

CO1	Understand how to use Game Engines
CO2	Create 3D game levels using Game Engines
CO3	Importing 3D Game Art in Game Engines
CO4	Exploring the potential of various Game Engines
CO5	Creating the Game Art for games

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I **Game Engine User Interface**	**8**
Module – II Making a navigable Game Level using basic geometry tools Make a Terrain	**8**
Module – III Explore the Libraries of Game Assets	**8**
Module – IV **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**	**8**
Module – V **Project Development**	**8**

Text Book:
1. Help Resources from Game Engine Software Developer

Reference Books:
1. 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

2. Unity 3D and Play Maker essentials: game development from concept to publishing, Miles, Jere (2016), Taylor & Francis, A K Peters/CRC Press

3. 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

4. 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)

1.Need to learn more game engines and game development techniques

POs met through Gaps in the syllabus: 5, 9, 10

Topics beyond syllabus / advanced topics / design

Should explore more games

POs met through topics beyond syllabus / advanced topics / design: 6,12

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

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives
This course enables the students to:

1	Understand the process of Game Design and how to document it
2	Design Game Design Documents and other creative elements for Games

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

CO1	Contribute in a Game Development as an artist and game designer
CO2	Work in Multimedia Projects as a Designer and work in Pre-production Field
CO3	Understanding the design process of Game Development
CO4	Developing skills of documenting the reports like Game Design Document
CO5	Understanding the games with the perspective of design

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module – I Brief History of Video Games Game Genres Understanding Game Production Pipeline	**8**
Module – II Idea Generation Writing the Story / Writing for Games Basics of Game Design Document Writing	**8**
Module – III Character Camera Controls Game Art (Asset) Creation	**8**
Module – IV User Interface Game Design Document Templates Case Studies - Game Design Documents and Creative Aspects of Digital Games	**8**

Module – V Exposure to Game Engine Software for Game Development Features of Game Engine	**8**

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

Game Design for Teens by Les Pardew, Premier Press

2. Game Art: Art from 40 Video Games and Interviews with Their Creators, Matt Sainsbury

Video Game Art, Nic Kelman

3. Drawing Basics and Video Game Art: Classic to Cutting-Edge Art, Chris Solarski

4. Game Art: Creation, Direction, and Careers, Riccard Linde

5. Works of Game: On the Aesthetics of Games and Art, John Sharp

6. How to Become a Video Game Artist: The Insider's Guide to Landing a ..., Sam R. Kennedy

7. Interactive Stories and Video Game Art: A Storytelling Framework for Game Design, Chris Solarski

8. The Art of Game Design: A Book of Lenses, Second Edition, Jesse Schell

9. Artcade: The Book of Classic Arcade Game Artwork, Tim Nicholls,Neil Grayson

10. 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

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

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	Course Delivery Method	Course Outcome	Course Delivery Method Used
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		

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COURSE INFORMATION SHEET

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
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand the Concept of UI and UX
2.	Understanding Principles of Designing a UI/UX
3.	Understanding Software Used in this Process
4.	Understanding the Role Played by UI-UX in Modern Times

Course Outcomes

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

CO1	Mastering Designing Principles of UI/UX
CO2	Learning UI/UX Software's Used in Designing Such platforms
CO3	Learning About the Emerging Technologies Related to this Field
CO4	Design a UI/UX Project based on Various Learnt Technologies
CO5	Design a Graphic Story book, Template of Website and App or Video

Syllabus

MODULE	(NO. OF LECTURE HOURS)
Module – I Introduction to UI and UX Designing Introduction to UI and UX Designing, Task Centered Designing, Brainstorming, Choosing the Users, Design Principles, Critique of the Design	**8**
Module – II Elements of User Interface	**8**

User Experience Design, Goals of User Interface, Customer Profile Design, Structure of UI, Elements of User Interface	
Module – III Information Architecture Brand Goals, Auditing Designs of Competitors, Review User Needs, Functionality and Usability of Design, Typography, Studying Contemporary Designs	**8**
Module – IV User Story Deeper Analysis, Prioritizing the User Goals, User Experience Overview, Brand Attributes, Site Taxonomy (Desktop and Mobile), Feature Prioritization	**8**
Module – V Multimedia Tools for Designing UI & UX Introduction to Designing Tools, Shape Creation Tools, Color Correction Tools, Interface Designing Principles.	**8**

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. 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)

23. Introduction to Financial Planning During Project Design
24. Introduction to Intellectual Property Rights (IPR)

POs met through Gaps in the syllabus

8,11

Topics beyond syllabus / advanced topics / design

28. Introduction to International Collaboration
29. More Emphasis on Financially Viability of Project
30. Exposure to Newer Multimedia Technologies

POs met through topics beyond syllabus / advanced topics / design

8,11,12

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 onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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PE VIII

COURSE INFORMATION SHEET

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

Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Understand the scope and definition of art direction
2.	Adapt various art forms for camera
3.	Can understand how the director works with the writer and producer
4.	Decide the look and feel of a project
5.	Understand cinematography

Course Outcomes

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

CO1	Work under a director of a larger project
CO2	Can advise the make-up artists and set designers
CO3	Can do location scouting and selection
CO4	Can understand editing and camera maneuvers
CO5	Can be a senior creative professional to a large crew

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I Overview of Pre-Production, Program Ideas, Theme, Production Models and Treatment , Research , Budgeting	**8**
Module – II Story boarding, Scene break down, Rehearsals, Planning and Scheduling	**8**
Module – III Set and Costume Design, Props ,Technical Requirements ,Experimental Set Design , Miniatures	**8**

Module – IV Set Plan and Positioning , Shot break up, Visualization & Sequencing	**8**
Module – V Camera Angles and Movements, Blocking and Staging , Movement and Transition	**8**

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)

Exposure to Live projects

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

Should work in real production

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 onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1
CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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			

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COURSE INFORMATION SHEET

Course Code: AM313

Course Title: Layout Design

Pre-requisite (s): Nil

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

Class schedule per week: 02

Class: B.Sc. (Animation & Multimedia)

Semester / Level: VI / III

Branch: BAM

Name of the Teacher:

Course Objectives

This course enables the students to:

1.	To teach layout design for a larger production studio
2.	understand production process, location scouting and annotate screenplay
3.	Perspective for camera work
4.	Drawing for backgrounds
5.	Background Project

Course Outcomes

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

CO1	The student will be able to draw layout and design backgrounds for animation and live action projects
CO2	Will be able to advise screenplay updation, location scouting
CO3	Will be able to help 3D department and art director
CO4	Will complete one short project
CO5	Will study some documented examples

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I Understanding the production process, Role and function of layout in preproduction and production	**6**
Module – II Script breakdown, Annotated screenplay, thumbnails, budget allocation	**6**
Module – III Rough drawings, overhead plans, camera placements	**6**
Module – IV	**6**

Creating 3d models, perspective, tricks and shortcuts	
Module – V Composition, path of action, cinematic consideration, Grids and guides, camera movement arrows, types of pan, Assignment, critical study of a master's work sample	**6**

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)

Exposure to live projects

More reference material for study

POs met through Gaps in the syllabus

Topics beyond syllabus / advanced topics / design

Should work as an intern in art department

Should complete an art design project himself

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

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
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CO3	2	2	2	2	2	1	1	1	1	1	1	1	2	1	2
CO4	3	3	3	3	3	1	1	1	1	1	1	1	3	2	3
CO5	3	3	3	3	3	2	2	1	2	1	2	1	3	3	3

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

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
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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			

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COURSE INFORMATION SHEET

Course Code: AM321
Course Title: Product Designing & Visualization
Pre-requisite(s): Nil
Credits: 2 L:2 T:0 P:0
Class schedule per week: 04
Class: B.Sc. (Animation & Multimedia)
Semester / Level: VI / III
Branch: BAM
Name of the Teacher:

Course Objectives

This course enables the students to:

1.	Study and analyze Various Product Designs
2.	Sketch basic Product design Concepts
3.	Create product design in 2D
4.	Create product design in 3D
5.	Rendering Product for final composition

Course Outcomes

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

CO1	Design product proto types
CO2	Better Understanding of good and bad design
CO3	Product design layout
CO4	Create 3D products
CO5	Render the final 3D product

SYLLABUS

MODULE	(NO. OF LECTURE HOURS)
Module – I Product Model design reference study	**8**
Module – II Product Sketch and design concepts using basic sketching techniques, Introduction to product design tools and its workflow	**8**
Module – III Product design concepts in 2D	**8**
Module – IV Basic process and implementation of various tools and commands to create a 3D Product	**8**
Module – V Rendering Product for final composition	**8**

Text Book:

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

Reference Book:

1. Autodesk 3ds Max 2018 A Comprehensive Guide by Sham Tickoo
2. Autodesk Maya 2018 Basics Guide Paperback by Kelly Murdoch

Gaps in the Syllabus (to meet Industry/Profession requirements)
More emphasis on analyzing and visualization

POs met through Gaps in the Syllabus
1,4,5,9,12,13

Topics beyond syllabus/Advanced topics/Design
1. Various product modeling software
2. 3D printing hardware technology

POs met through Topics beyond syllabus/Advanced topics/Design
1,4,5,9,12,13

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

Student feedback on Course outcome

Mapping of Course Outcomes onto Program Outcomes

Course Outcome	Program Outcomes (POs)	Program Specific Outcomes (PSOs)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO2	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO3	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO4	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1
CO5	2	2	2	1	3	1	1	1	2	1	1	1	1	1	1

Correlation Levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

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

Mapping Between COs and Course Delivery (CD) methods

CD Code	**Course Delivery Method**	**Course Outcome**	**Course Delivery Method Used**
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		

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