MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL
(Formerly West Bengal University of Technology)
Syllabus of B.Sc. In VFX Film Making
(Effective from 2023-24 Academic Sessions)

Semester 1
Paper Name: Introduction to Drawing
Paper Code: BVFM 101
Credit Points - 5
Total Contact Hours – 75

Course Objective: The course Is designed to provide an introduction to the fundamental aspects of drawing methodologies. Students will be able to develop a sense of design aesthetics as well as create better processes of design systems. They can understand the form by learning basic shapes, composition and light, perspective figure drawing.

SL No.	Course Outcome	Mapped modules
1	Remembering	M1, M2
2	Understanding the course	M1, M2, M3, M4
3	Applying the general problem	M3, M4
4	Analyze the problems	M3, M4
5	Evaluate the problems after analyzing	M3, M4
6	Create using the evaluation process	M3, M4

Module Number	Content	Total Hours	%age of questions	Covered CO	Covered PO	Blooms Level (If applicable)	Remarks (If any)
M1	Introduction to Basic Drawing	15	25	1	1		
M2	Introduction to Basic Perspective	10	25	2	1		
M3	Basic of Figure Drawing	10	25	3	1		
M4	Composition with Light and Shade	10	25	4	1		
		45	**100**				

Paper Name: Introduction to Drawing
Paper Code: BVFM 101
Total Credit: 3
Total Hours of Lectures: 45 hours

SL No.	Topic/Module	Hours
1	**Module 1- Introduction to Basic Drawing:** • Comprehensive introduction to the essentials of drawing • Points and lines- Types, Direction, Quality, lines and outlines, contours, Lines as value, Shapes, Geometric and Rectilinear, Curvilinear and Biomorphic, Abstract, Positive. • Learn the fundamentals of shape • Mastering the art of drawing shapes and achieving a deeper understanding of all forms. • Composition of the forms and working with light and shade.	15
2	**Module 2- Introduction to Basic Perspective:** • Understanding the basic elements (of perspective & how they work together to create illusion of 3D forms. • The various elements of perspective and composition would enable students to expressively and aesthetically arrange their subjects within the boundaries of a drawing space. • Learn the One-point, Two-point and Three-point perspective principles with practical examples • How to use one & two-point perspective to draw three dimensional objects from your imagination • Have a clear understanding of how to build perspective grids. • Draw objects and environments- interiors and exteriors	10
3	**Module 3-Basic Figure Drawing:** • Deeper understanding of the curves and lines that make up male and female bodies. • Dynamics of freehand sketching • Line of action, apply the line, C-curve, and S-curve to the figures. • Draw great action poses using gesture drawings • Capture and draw gesture pose properly.	10
4	**Module 4- Composition with Light & Shade:** • Rules" of composition • Understanding the concepts of perspective as a tool in visual content creation • Application of the knowledge concerning light and shade, composition, spatial usage, and so on • Observe & Draw realistic light and shadow • Draw Landscape • Draw backgrounds – (Foreground, mid ground & Background) • Pencil Rendering Colour – Still Life • Texturing, Scene Composition (including character) • How to bring your drawings to life with detail and texture.	10

Suggested Reading:
1. Fun with Pencil – Andrew Loomis.
2. Basic figure drawing techniques - Greg Albert
3. Anatomy and Drawing by Victor Perard
4. Andrew Loomis - Figure Drawing for All It's Worth
5. Perspective Made Easy – Ernest R. Norling
6. Learn how to draw - John Hagan

Paper Name: Introduction to Drawing (P)
Paper Code: BVFM 191
Total credit: 2
Total Hours of Lectures: 30 hours

Course Objective: The course Is designed to provide an introduction to the fundamental aspects of drawing methodologies. Students will be able to develop a sense of design aesthetics as well as create better processes of design systems. They can understand the form by learning basic shapes, composition and light, perspective figure drawing.

SL No.	Course Outcome	Mapped modules
1	Remembering	M1, M2
2	Understanding the course	M1, M2, M3, M4
3	Applying the general problem	M3, M4
4	Analyze the problems	M3, M4
5	Evaluate the problems after analyzing	M3, M4
6	Create using the evaluation process	M3, M4

Module Number	Content	Total Hours	%age of questions	Covered CO	Covered PO	Blooms Level (If applicable)	Remarks (If any)
M1	Introduction to Basic Drawing	5	25	1	1		
M2	Introduction to Basic Perspective	5	25	2	1		
M3	Basic of Figure Drawing	10	25	3	1		
M4	Composition with Light and Shade	10	25	4	1		
		30	100				

Paper Name: Introduction to Drawing (P)
Paper Code: BVFM 191

SL No.	Topic/Module	Hours
1	**Module 1- Introduction to Basic Drawing:** • Warm up exercises – drawing circles, spirals, curves. • Drawing lines- Types, Direction, Quality, lines and outlines, contours, Lines as value, Shapes, Geometric and Rectilinear, Curvilinear and Biomorphic, Abstract, Positive. • Learn the fundamentals of shape • Mastering the art of drawing shapes and achieving a deeper understanding of all forms. • Composition of the forms and working with light and shade.	5
2	**Module 2- Introduction to Basic Perspective:** • Creating the basic elements (of perspective & how they work together to create illusion of 3D forms. • Drawing objects like table, chair, bed, vehicles in one & two-point perspective • Draw objects and environments- interiors and exteriors using reference. • Draw objects and environments- interiors and exteriors from imagination	5
3	**Module 3-Basic Figure Drawing:** • Sketching male and female bodies using gesture line freehand sketching • Line of action, apply the line, C-curve, and S-curve to the figures. • Draw great action poses using gesture drawings by applying the line, C curve and S curve to the figures • Capture and draw gesture pose properly.	10
4	**Module 4- Composition with Light & Shade:** • Drawing Landscape • Draw backgrounds – (Foreground, mid ground & Background) • Pencil Rendering Color – Still Life • Texturing, Scene Composition (including character) • How to bring your drawings to life with detail and texture.	10

Suggested Reading:
1. Fun with Pencil – Andrew Loomis.
2. Basic figure drawing techniques - Greg Albert
3. Anatomy and Drawing by Victor Perard
4. Andrew Loomis - Figure Drawing For All It's Worth
5. Perspective Made Easy – Ernest R. Norling
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Paper Name: Introduction to Visual Communication
Paper Code: BVFM 102
Credit Points - 5
Total Contact Hours – 75

Course Objective: The course Is designed to provide an introduction to the fundamental aspects of visual communication and its methodologies. Students will be able to develop a sense of design aesthetics as well as create better processes of design systems. They can understand the implementation and methodologies of design.

SL No.	Course Outcome	Mapped modules
1	Remembering	M1, M2
2	Understanding the course	M1, M2, M3, M4
3	Applying the general problem	M3, M4
4	Analyze the problems	M3, M4
5	Evaluate the problems after analyzing	M3, M4
6	Create using the evaluation process	M3, M4

Module Number	Content	Total Hours	%age of questions	Covered CO	Covered PO	Blooms Level (If applicable)	Remarks (If any)
M1	Introduction to Visual Communication	10	25	1	1		
M2	Understanding Design Theory & Graphic Design	10	25	2	1		
M3	Introduction to Vector Graphics	15	25	3	1		
M4	Introduction to Raster Graphics	10	25	4	1		
		45	**100**				

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Paper Name: Introduction to Visual Communication
Paper Code: BVFM 102
Total Credit: 3
Total Hours of Lectures: 45 hours

SL No.	Topic/Module	Hours
1	**Module 1- Introduction to Visual Communication:** • Need for and the Importance of Human and Visual Communication. Communication an expression, skill and process, Understanding Communication: SMRC-Model • Communication as a process. Message, Meaning, Connotation, Denotation Culture/Codes etc. Levels of communication: Technical, Semantic, and Pragmatic. The semiotic landscape: language and visual communication, narrative representation	10
2	**Module 2- Understanding Design Theory & Graphic Design:** • Fundamentals of Design: Definition. Approaches to Design, Centrality of Design, • Elements of Design: Line, Shape, Space, Color, Texture. Form Etc. • Principles of Design: Symmetry. Rhythm, Contrast, Balance Mass/Scale etc. • Design and Designers (Need, role, process, methodologies etc.) • Understanding Gestalt Principles and Mind Mapping • Raster & Vector Graphics- RGB vs. CMYK • Color theory • Typography	10
3	**Module 3-Introduction to Vector Graphics:** • Introduction to adobe illustrator, work area of illustrator, selecting and aligning, creating and editing shapes, transforming objects, drawing with pen and pencil tools, color and painting, working with type, working with layers, working with perspective drawing, blending colors and shapes, working with brushes, applying effects, applying appearance attributes and graphic styles, working with symbols, combining illustrator with other adobe applications.	15
4	**Module 4- Introduction to Raster Graphics:** • Introduction to Photoshop, basics- workspace, finding and managing creative tools and content. Lines, shapes and objects. Working with layers, linking and embedding objects. Managing projects, color, fills and transparencies, filling objects. Special effects, templates and styles, pages and layout, bitmaps, printing, file formats, customizing and automating.	10

Suggested Software:
1. Adobe Illustrator
2. Adobe Photoshop

Suggested Reading:
1. Communication between cultures - Larry A. Samovar, Richard E. Porter, Edwin R. McDaniel & Carolyn Sexton Roy, Monica Eckman, USA, 2012
2. Introduction to Communication studies - John Fiske & Henry Jenkins 3rd edition, Routledge, Oxon 2011
3. Adobe Photoshop CC Classroom - Andrew Faulkner
4. Adobe Illustrator CC Classroom - Andrew Faulkner

Paper Name: Introduction to Visual Communication (P)
Paper Code: BVFM 192
Total credit: 2
Total Hours of Lectures: 30 hours

Course Objective: The course Is designed to provide an introduction to the fundamental aspects of visual communication and its methodologies. Students will be able to develop a sense of design aesthetics as well as create better processes of design systems. They can understand the implementation and methodologies of design.

SL No.	Course Outcome	Mapped modules
1	Remembering	M1, M2
2	Understanding the course	M1, M2, M3, M4
3	Applying the general problem	M3, M4
4	Analyze the problems	M3, M4
5	Evaluate the problems after analyzing	M3, M4
6	Create using the evaluation process	M3, M4

Module Number	Content	Total Hours	%age of questions	Covered CO	Covered PO	Blooms Level (If applicable)	Remarks (If any)
M1	Introduction to Visual Communication	5	20	1	1		
M2	Understanding Design Theory & Graphic Design	5	20	2	1		
M3	Introduction to Vector Graphics	10	30	3	1		
M4	Introduction to Raster Graphics	10	30	4	1		
		30	100				

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Paper Name: Introduction to Visual Communication
Paper Code: BVFM 192

SL No.	Topic/Module	Hours
1	**Module 1- Introduction to Visual Communication:** • Need for and the Importance of Human and Visual Communication. Communication an expression, skill and process, Understanding Communication: SMRC-Model • Communication as a process. Message, Meaning, Connotation, Denotation Culture/Codes etc. Levels of communication: Technical, Semantic, and Pragmatic. The semiotic landscape: language and visual communication, narrative representation	5
2	**Module 2- Understanding Design Theory & Graphic Design:** • Implementing the theoretical point of view in the practical work and developing the understanding in the real-life project execution.	5
3	**Module 3-Introduction to Vector Graphics:** • Creating Vector Illustrations • Creating logo design • Creating visiting card • Portrait Illustration • Landscape Illustration	10
4	**Module 4- Introduction to Raster Graphics:** • Social Media Advertisement Design • Poster Design (Movie/ Product based) • Invitation card • Corporate identity • Branding based work	10

Suggested Software:
1. Adobe Illustrator
2. Adobe Photoshop

Suggested Reading:
1. Communication between cultures - Larry A. Samovar, Richard E. Porter, Edwin R. McDaniel & Carolyn Sexton Roy, Monica Eckman, USA, 2012
2. Introduction to Communication studies - John Fiske & Henry Jenkins 3rd edition, Routledge, Oxon 2011
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Semester 2
Paper Name: Script to Screen, Understanding Film Technology & Film Language
Paper Code: BVFM 201 & BVFM 291
Credit Points - 3+2
Total Contact Hours – 75

Course Objective: The course Is designed to provide an introduction to the fundamental perspective of story development and script writing. Students will be able to develop a sense of film appreciation from the theoretical as well as practical point of view. They can understand the film making process from scratch to distribution process.

SL No.	Course Outcome	Mapped modules
1	Remembering	M1, M2
2	Understanding the course	M1, M2, M3, M4
3	Applying the general problem	M3, M4
4	Analyze the problems	M3, M4
5	Evaluate the problems after analyzing	M3, M4
6	Create using the evaluation process	M3, M4

Module Number	Content	Total Hours	%age of questions	Covered CO	Covered PO	Blooms Level (If applicable)	Remarks (If any)
M1	Understanding various techniques and crafts involved in live-Action film making, Study on Diff. types of film formats.	10	25	1	1		
M2	Film appreciation, preparing notes, Group discussions on various genes of movies.	15	25	2	1		
M3	Script to Screen Development & Basics of Camera	10	25	3	1		
M4	Film production Process	10	25	4	1		

	1. Pre-Production 2. Production 3. Post-Production						
		45	**100**				

Paper Name: Script to Screen, Understanding Film Technology & Film Language
Paper Code: BVFM 201
Total Credit: 3
Total Hours of Lectures: 45 hours

SL No.	Topic/Module	Hours
1	**Module 1-Understanding various techniques and crafts involved in live film making, Study of film formats. Script writing and designing characters.** Everyone loves art in some way or the other. Some like a painting by a painter and some like a movie which is done by 24 distinct fields of artists together. A movie is not a one man show. Neither the director nor the hero is the only one involved in it. There are 24 crafts involved in making a movie. We will make clear of those 24 crafts that every director needs to know before making a movie. In this module students will develop story of their own. How script is done, characters and background development, location, shot planning and developing story boards for each individual shots before going for shoot. The course will guide all the different crafts involved for filmmaker to develop a film.	10
2	**Module 2- Film Appreciation, preparing notes, Group discussions on various genres of movies:** This course focuses on helping the participants to appreciate cinema by understanding its distinct language, its narrative complexity and the way films control and stimulate our thoughts and feelings. Through various examples from Indian and international cinema, the course will explain how cinema as a visual medium, engages with us in constructing meaning. This module will give knowledge on how to analyse a film. • The Semiotics of Cinema • Genre Theory • Action Cinema • Formalism in Cinema • Auteur Theory	15
3	**Module 3- Script to Screen Development & Basics of Camera Angle & Movements** Understanding the script to screen elements and their implementation during screenplay developments. Understanding different types of camera angle and its purpose in screenplay development. Understanding different camera movements.	10

4	**Module 4- Film production Process:** The course gives strong foundation keys to a successful film shoot. Filmmaking involves a number of complex and discrete stages including an initial story, idea, or commission, through screenwriting, casting, shooting, sound recording and pre-production, editing, and screening the finished product before an audience that may result in a film release and an exhibition. The major steps are as following. • Story Development • Pre-Production • Production • Principle of Photography • Wrap • Post-Production • Distribution	10

Suggested Reading:
1. Five C s of Cinematography by Joseph V. Mascelli
2. Motion Picture Filming Techniques by Joseph V.Ma skelly
3. The Filmmaker's Handbook by Ed Pincus
4. Making Movies by Sidney Lumet
5. From script to Screen by Linda Segre
6. Storyboarding: Turning Script to Motion by Stephanie Torta · Vladimir Minuty

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Paper Name: Script to Screen, Understanding Film Technology & Film Language
Paper Code: BVFM 291
Total credit: 2
Total Hours of Lectures: 30 hours

Course Objective: The course Is designed to provide an introduction to the fundamental perspective of story development and script writing. Students will be able to develop a sense of film appreciation from the theoretical as well as practical point of view. They can understand the film making process from scratch to distribution process.

SL No.	Course Outcome	Mapped modules
1	Remembering	M1, M2
2	Understanding the course	M1, M2, M3, M4
3	Applying the general problem	M3, M4
4	Analyze the problems	M3, M4
5	Evaluate the problems after analyzing	M3, M4
6	Create using the evaluation process	M3, M4

Module Number	Content	Total Hours	%age of questions	Covered CO	Covered PO	Blooms Level (If applicable)	Remarks (If any)
M1	Visualizing concepts and contents	5	25	1	1		
M2	Designing models	5	25	2	1		
M3	Creating the story and development of script	10	25	3	1		
M4	Visualizing & Creating Cinematic Storyboard	10	25	4	1		
		30	100				

Paper Name: Script to Screen, Understanding Film Technology & Film Language (P)
Paper Code: BVFM 291

SL No.	Topic/Module	Hours
1	**Module 1-Visaulizing concepts and contents:** Writing down different concepts and idea to from a story. Students have to develop outline of ideas and develop their own stories.	5
2	**Module 2- Creating the story Script:** Creating script and screenplay with the story.	5
3	**Module 3- Designing Models:** • Designing characters for the story Draw basic characters and character model sheets with expressions, key poses. • Background Design- Environments	10
4	**Module 4-Visaulizing & Creating Cinematic Storyboard:** • Storyboard Design – Creating Visual story using thumbnails • Creating a storyboard • Creating pre-viz	10

Suggested Reading:
1. Five C s of Cinematography by Joseph V. Mascelli
2. Motion Picture Filming Techniques by Joseph V.Ma skelly
3. The Filmmaker's Handbook by Ed Pincus
4. Making Movies by Sidney Lumet
5. From script to Screen by Linda Segre
6. Storyboarding: Turning Script to Motion by Stephanie Torta · Vladimir Minuty

Paper Name: Audio & Video Editing
Paper Code: BVFM 202 & BVFM 292
Credit Points - 3+2
Total Contact Hours – 75

Course Objective: The course Is designed to provide a fundamental aspect of audio and video editing. Students will be able to develop a sense of visual editing aesthetics as well as create better processes for different types of editing. They can understand the importance of audio visual medium.

SL No.	Course Outcome	Mapped modules
1	Remembering	M1, M2
2	Understanding the course	M1, M2, M3, M4
3	Applying the general problem	M3, M4
4	Analyze the problems	M3, M4
5	Evaluate the problems after analyzing	M3, M4
6	Create using the evaluation process	M3, M4

Module Number	Content	Total Hours	%age of questions	Covered CO	Covered PO	Blooms Level (If applicable)	Remarks (If any)
M1	Introduction to Video Editing	10	25	1	1		
M2	Understanding Color Correction Process	15	25	2	1		
M3	Fundamentals of Audio	10	25	3	1		
M4	Importance of Sound in Film	10	25	4	1		
		45	**100**				

Paper Name: Audio & Video Editing
Paper Code: BVFM 202
Total Credit: 3
Total Hours of Lectures: 45 hours

SL No.	Topic/Module	Hours
1	**Module 1- Introduction to Video Editing:** • Understanding the video editing concept • Linear and Non-Linear Mode of Editing • Film Continuity • Concept of Time & Space • Understanding Montage Theory & different types	10
2	**Module 2- Understanding Colour Correction Process:** • Basics of Cinematic Color • Color Psychology • Anderson's perspective of Color • Analogous color, Complimentary color, Monochromatic color in cinema • Color and emotion in cinema	15
3	**Module 3-Fundamentals of Audio:** • Understanding Amplitude • Frequency • Noise and different sound terms • Importance of sound in cinema • DAW or Digital Audio Workstation	10
4	**Module 4- Importance of Sound in Film:** • Understanding audio score in film • Different types of sound in cinema • Silent cinema and sound cinema	10

Suggested Software:
3. Adobe Premiere Pro
4. Adobe Audition

Suggested Reading:
5. Cut to Cut: Editing Your Film & Video – Gael Chandler
6. Color Correction Handbook: Professional Technique for Video and Cinema – Alexis Van Hurkman
7. Audio Production and Critical Listening: Technical Ear Training – Jason Corey
8. The Book on Podcasting -Alexander Laurin

Paper Name: Audio & Video Editing (P)
Paper Code: BVFM 292
Total credit: 2
Total Hours of Lectures: 30 hours

Course Objective: The course Is designed to provide a fundamental aspect of audio and video editing. Students will be able to develop a sense of visual editing aesthetics as well as create better processes for different types of editing. They can understand the importance of audio visual medium.

SL No.	Course Outcome	Mapped modules
1	Remembering	M1, M2
2	Understanding the course	M1, M2, M3, M4
3	Applying the general problem	M3, M4
4	Analyze the problems	M3, M4
5	Evaluate the problems after analyzing	M3, M4
6	Create using the evaluation process	M3, M4

Module Number	Content	Total Hours	%age of questions	Covered CO	Covered PO	Blooms Level (If applicable)	Remarks (If any)
M1	Introduction to Video Editing	5	20	1	1		
M2	Understanding Colour Correction Process	5	20	2	1		
M3	Introduction to Audio Editing	10	30	3	1		
M4	Understanding the process of Podcast Program	10	30	4	1		
		30	100				

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Paper Name: Audio & Video Editing (P)
Paper Code: BVFM 292

SL No.	Topic/Module	Hours
1	**Module 1- Introduction to Video Editing:** • Understanding the concept of multiple workspaces, timeline, • Parallel editing • Multi-Camera Editing • Visual narrative development using continuity	5
2	**Module 2- Understanding Colour Correction Process:** • Understanding color correction process • Lumetri Scope • Color Balance • Introduction to Color Grading • Comparison view • LUT	5
3	**Module 3- Introduction to Audio Editing:** • Basics of audio editing • Noise clearance • Vocal improvements • Advance effects • Production processes	10
4	**Module 4- Understanding the process of Podcast Program:** Students will submit a complete podcasting work.	10

Suggested Software:
1. Adobe Premiere Pro
2. Adobe Audition

Suggested Reading:
1. Cut to Cut: Editing Your Film & Video – Gael Chandler
2. Color Correction Handbook: Professional Technique for Video and Cinema – Alexis Van Hurkman
3. Audio Production and Critical Listening: Technical Ear Training – Jason Corey
4. The Book on Podcasting -Alexander Laurin