



Deccan Education Society's

**Fergusson College (Autonomous)
Pune**

Learning Outcomes-Based Curriculum

for 3 / 4 years B. Sc. Programme

as per guidelines of

NEP-2020

for

F. Y. B. Sc. (Animation)

With effect from Academic Year

2023-2024

Program Outcomes (POs) for B. Sc. Animation	
PO1	<p>Academic Competence:</p> <ul style="list-style-type: none"> (i) Create competence in the fields of Computer Graphics assets creation, Visual Effects, Gaming and Graphic designing. (ii) Understand the ongoing changing trends and keep them updated with the latest technology. (iii) Produce creative and technical skills in various domains of Animation, Gaming, VFX and multimedia. This will enable them to be employed globally.
PO2	<p>Personal and Professional Competence:</p> <ul style="list-style-type: none"> (i) Use critical thinking skills and problem-solving strategies for overall development of the professional growth in the fields like Animation, VFX, gaming, and graphics. (ii) Carry out industry orientated new technologies and new trends in animation, VFX & graphics. (iii) Create ample opportunities to work effectively to emerge as an acceptable team leader by working on team projects & assignments.
PO3	<p>Research Competence:</p> <ul style="list-style-type: none"> (i) Apply technical knowledge and methodologies from animation softwares in order to conduct research and demonstrate appropriate skill to seek solutions to problems that emerge in various fields of 3d animation & VFX simulations
PO4	<p>Entrepreneurial and Social competence:</p> <ul style="list-style-type: none"> (i) Develop Entrepreneurial capabilities considering animation industry works mainly on freelancing and individual creativity. (ii) Build adequate knowledge, skill, dedication and work ethics required for accomplishment of the assigned task and strengthen social competency skills. (iii) Able to demonstrate their acquired knowledge for the growth of social and ethical values in outdoor activities, such as service learning, internships and field work. (iv) Maintain and develop ethics of Media, Animation & Gaming Industry as these industries plays vital role in today's generations

Program Specific Outcomes (PSOs) for F. Y. B. Sc. Animation	
PSO No.	Program Specific Outcomes (PSOs) Upon completion of this programme the student will be able to
PSO1	Academic competence: <ul style="list-style-type: none"> (i) Create competence in the fields of Computer Graphics assets creation, Visual Effects, Gaming and Graphic designing. (ii) Understand the ongoing changing trends and keep them updated with the latest technology. (iii) Produce creative and technical skills in various domains of Animation, Gaming, VFX and multimedia. This will enable them to be employed globally.
PSO2	Personal and Professional Competence: <ul style="list-style-type: none"> (i) Use critical thinking skills and problem-solving strategies for overall development of the professional growth in the fields like Animation, VFX, gaming, and graphics. (ii) Carry out industry orientated new technologies and new trends in animation, VFX & graphics. (iii) Create ample opportunities to work effectively to emerge as an acceptable team leader by working on team projects & assignments.
PSO3	Research Competence: <ul style="list-style-type: none"> (i) Apply technical knowledge and methodologies from animation softwares in order to conduct research and demonstrate appropriate skill to seek solutions to problems that emerge in various fields of 3d animation & VFX simulations
PSO4	Entrepreneurial and Social competence: <ul style="list-style-type: none"> (i) Develop Entrepreneurial capabilities considering the animation industry works mainly on freelancing and individual creativity. (ii) Build adequate knowledge, skill, dedication and work ethics required for accomplishment of the assigned task and strengthen social competency skills. (iii) Able to demonstrate their acquired knowledge for the growth of social and ethical values in outdoor activities, such as service learning, internships and field work. (iv) Maintain and develop ethics of Media, Animation & Gaming Industry as these industries play a vital role in today's generations.

Fergusson College (Autonomous), Pune
Proposed First Year Curriculum as per NEP 2020

Department of Animation
Structure for Major / Minor

Semester	Paper	Paper Code	Paper Title	Credits
I	Major	ANI-101	Basics of Animation	4
		ANI-100	Animation Practical - 1	2
	Minor	BVM-111	Visual Communication	2
		BVM-112	Media & Communication Practical 1	2
		BVA-111	Illustrator	2
		BVA-112	BVoc Animation Practical -1	2
	OE-1	ANI-120	Industrial Drawing	2
	OE-2	ANI-121	Basics of Animation	2
	SEC	ANI-140	Character Design	2
II	Major	ANI-151	Stop Motion Animation	4
		ANI-150	Animation Practical -2	2
	Minor	BVM-161	Script Writing	2
		BVM-162	Media & Communication Practical - 2	2
		BVA-161	Indesign	2
		BVA-162	BVoc Animation Practical - 2	2
	OE-3	ANI-170	Fundamentals of Design	2
	OE-4	ANI-171	Basics of Animation 2	2

F. Y. B. Sc. Animation Semester I

ANI-101	Basics of Animation (Major-Theory)	Number of Credits: 04
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Describe the evolution of animation and its history.	1
CO2	Discuss the art of movement and analyze creative work of artist.	2
CO3	Examine various processes of animation techniques that are developed with various equipments.	3
CO4	Compare and contrast various traditional animation techniques.	4
CO5	Explain various concepts of digital art.	5
CO6	Illustrate the usage of various tools for graphic software.	6

Unit No.	Title of Unit and Contents	No. of Lectures
1	EARLY ANIMATION 1. Pre-History 2. Persistence of Vision 3. History of stop motion	10
2	EARLY STUDIOS AND ANIMATION PIONEERS 1. Walt Disney 2. Max Fleischer 3. Tex Avery 4. Warner bros	10
3	EARLY APPROACHES TO MOTION IN ART 1. Animation Before Films 2. The Magic Latern 3. Thaumatrope 4. Phenakistoscope 5. Zeotrope 6. Flip Book	10
4	ANIMATION TECHNIQUES 1. Stop Motion 2. Puppet 3. Cut-out 4. Clay Etc	10
5	HISTORY OF INDIAN ANIMATION, INDUSTRIES AND STUDIOS 1. Growth of Indian Industry and Studio 2. Animation art in India	10

6	Introduction to Photoshop <ol style="list-style-type: none">1. Photoshop interface2. Basic Tools3. Black and White to color4. Matte Painting	10
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Learning Resources

1. “Cartoon Animation”, Preston Blair, Walter T. Foster, Apple Press, Limited, Eighth Edition, ISBN 1560100842
2. “History of Animation”: Facts and Figures, Bredson, Philips Cardiff, Pearson Publications, 1

F. Y. B. Sc. Animation Semester I

ANI-100	Animation Practical - 1 (Major-Practical)	Number of Credits: 02
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Describe the production pipeline of animation.	1
CO2	Discuss the art and style carried in 2D Animation.	2
CO3	Determine various animation techniques with basic principles of animation.	3
CO4	Apply action analysis and observations to animated drawings.	4
CO5	Analyze basic animation movements for characters or objects.	5
CO6	Create drawings that represent actions and emotions.	6

Unit No.	Title of Unit and Contents	No. of hours
I	Introduction to 2D classical animation.	5
II	2D classical animation pipeline. 1.1 Pre-Production 1.2 Production 1.3 Post - Production	15
III	12 principles of animation. 1 Squash and stretch 2 Anticipation 3 Staging 4 Straight-ahead action and pose-to-pose 5 Follow through and overlapping action 6 Slow in and slow out 7 Arc 8 Secondary action 9 Timing 10 Exaggeration 11 Solid drawing 12 Appeal	12
IV	Introduction to Light box	10
V	Classical Animation Practical- 1.1 Bouncing Ball 1.2 Jumping Sack 1.3 Pendulum Animation 1.4 Bird Fly 1.5 Wave Principle 1.6 Walk Cycle 1.7 Smears in animation	18

Reference Books	<ol style="list-style-type: none"> 1. The Animator's Survival kit (Richard Williams) 2. Disney Animation: The Illusion of Life 3. Acting for Animators 4. Cartoon Animation 5. Timing for Animation
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F. Y. B. Sc. Animation Semester I

BVM-111	Visual Communication (Minor –Theory)	Number of Credits: 02
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Describe basics of Communication.	1
CO2	Explain theory of Visual Communication.	2
CO3	Apply rules of communication theory.	3
CO4	Analyze various camera angles and shots.	4
CO5	Determine the importance of visuals in media.	5
CO6	Create a design or storyboards for the films.	6

Unit No.	Title of Unit and Contents	No. of Lectures
1	Introduction to Visual Communication 1. Visual language 2. Visual grammar- perception, composition, grouping and organization, balance, ratio and proportion, rule of thirds, light, color harmony and contrast 3. Classification of shots 4. Principles of visual grammar 5. Film, video, e books, art, modern ways	8
2	Socio cultural history of Visual Communication 1. History of visual communication 2. Visual literacy 3. How to read visuals 4. Impact of Visual Communication on People	5
3	Symbolic communication 1. Symbolism 2. Indian Context	3
4	Presentation Methods of Visual Communication 1. Forms of visual communication 2. Approaches to visual communication 3. Design principles 4. Design processes	8
5	Visual analytics and models 1. Color theory 2. Visual analysis (motion, static) 3. Visual aids and advance technique	6

Reference Books	Learning Resources <ul style="list-style-type: none"> • Visual Communication: Images with Messages by Paul Martin • Visual Communication: Integrating Media, Art, and Science By Rick Williams, Julianne Newton
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F. Y. B. Sc. Animation Semester I

BVM-112	MEDIA & COMMUNICATION PRACTICAL 1 (Minor –Practical)	Number of Credits: 02
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Recall history of Photography	1
CO2	Explain camera functioning	2
CO3	Operate camera and its accessories	3
CO4	Compare lighting techniques and types of lenses	4
CO5	Review color theory	5
CO6	Generate photographs using the given techniques	6

Unit No.	Title of Unit and Contents	No. of hours
I	What is Photography? - Meaning of Photography. - Genres in Photography - Photography as a Medium. - Need of the Photos in the targeted work area.	3
II	Formation of a Digital Image - Digital image (Pixel) - Technical Qualities of a Photograph	7
III	History of Images in Short - How the Photographs were made in the 18th Century. - Evolvement of Photography as a 'Medium' - Meaning making process in photography	4
IV	DSLR (Handling techniques) - Knowing the equipment and its functionality - What is an Exposure - Functions and effects of Aperture, Shutter, ISO	6
V	Composition in Photography - Aesthetic qualities of an image - Composition rules and design principles	5
VI	Image reading and appreciation - Screening of images and discussions over the same. How to read the Photographic image (With / Without Context)	5

VII	Light in Photography / Videography - Light as a subject (Properties of Light) - Light controls (Quality, Intensity, Colour, Direction, Position) - Continuous light Vs. Flash light (Introduction and the differences) - Concept of Key / Fill / BG Light - Inverse square Law in Lighting	8
VIII	Videography (Introduction) - Still frame vs Continuous frames - Kuleshov effect (Intro) - FPS (understanding and application) - Basic camera settings for videography	5
IX	Grammar of the film - Pre / Production and the Post production Phase of a Film - Frame / shot / scene / sequence / story (succession) - Shot sizes and their meaning - Camera movements (Basic to complex) - Analyzing the films / Short Films and identifying the meaning making process	8
X	Colour Theory Basics - Understanding the Colour wheel (Artistic vs Digital) - Observing the psychological impacts of the colours - Concept of the 'Colour Palette' - Colours and the storytelling (Mood)	4
XI	Introduction to the Continuity - What is continuity - 30 Degree rule - 180 Degree rule	3
XII	Data Handling (Basics) - Copying vs Back Up - Importance of Back up - Data management for the projects.	2

Learning Resources:

1. Fundamentals of Photography Book by Tom Ang.
2. Cinematography: Theory and Practice: Image Making for Cinematographers and Directors, by Blain Brown.
3. The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age: 2013 Edition.
Guide to Postproduction for TV and Film: Managing the Process by Barbara Clark

F. Y. B. Sc. Animation Semester I

BVA-111	Illustrator (Minor- Theory)	Number of Credits: 02
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Recall theoretical knowledge of print and digital media.	1
CO2	Explain various concepts of digital art.	2
CO3	Illustrate the usage of various tools for vector graphic software.	3
CO4	Identify various points of vector design styles & raster designing.	4
CO5	Compare Concept Art and Fantasy Art while converting from paper to digital format.	5
CO6	Create art related to print media and vector based using digital platforms.	6

Practical No.	Title
1	Logo Design
2	Typography
3	Visiting Card Design
4	Brochure design
5	Cover page design
6	Cartoon Character design
7	Cartoon Character design
8	Landscape Design
9	Character Design
10	Character Design

F. Y. B. Sc. Animation Semester I

BVA-112	B. VOC. ANIMATION PRACTICAL -1 (Minor- Practical)	Number of Credits: 02
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Recall history of Photography	1
CO2	Explain camera functioning	2
CO3	Operate camera and its accessories	3
CO4	Compare lighting techniques and types of lenses	4
CO5	Review color theory	5
CO6	Generate photographs using the given techniques	6

Unit No.	Title of Unit and Contents	No. of hours
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3. The Filmmaker’s Handbook: A Comprehensive Guide for the Digital Age: 2013 Edition.
4. Guide to Postproduction for TV and Film: Managing the Process by Barbara Clar

F. Y. B. Sc. Animation Semester I

ANI-120	Industrial Drawing (OE-1)	Number of Credits: 02
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Recall the basics of drawing and material handling.	1
CO2	Illustrate the importance of elements of designs	2
CO3	Demonstrate the usage of 1-2 point perspective in drawing	3
CO4	Identify, analyze color theory and color harmony in drawing and sketching.	4
CO5	Review different type of art forms.	5
CO6	Demonstrate renders with appropriate style and proportions.	6

Unit No.	Title of Unit and Contents	No. of Lectures
1	Introduction to drawing	4
2	Color pallet & wheel	4
3	1 – point perspective	6
4	2-point perspectiv	6
5	Basic rendering	6
6	Basic anatomy	4

F. Y. B. Sc. (ANIMATION) SEMESTER – I

F. Y. B. Sc. (ANIMATION) SEMESTER – I		
ANI-121	Basics of Animation (OE - 2)	Number of Credits: 02
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Describe the evolution of animation and its history.	1
CO2	Discuss the art of movement and analyze creative work of artist.	2
CO3	Examine various processes of animation techniques that are developed with various equipment.	3
CO4	Compare and contrast various traditional animation techniques.	4
CO5	Explain various concepts of digital art.	5
CO6	Illustrate the usage of various tools for graphic software.	6

Unit No.	Title of Unit and Contents	No. of Lectures
1	History of Animation	4
2	Early animations	4
3	Early approaches to motion in art	6
4	Animation Techniques	6
5	History of Indian Animation	6
6	Principles of Animations	4

Learning Resources

1. "Cartoon Animation", Preston Blair, Walter T. Foster, Apple Press, Limited, Eighth Edition, ISBN 1560100842
2. "History of Animation": Facts and Figures, Bredson, Philips Cardiff, Pearson Publications, 1972

F. Y. B. Sc. (ANIMATION) SEMESTER – I

ANI-140	Character Design (ANI-140) (SEC)	Number of Credits: 02
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Recall the basics of drawing and sketching	1
CO2	Illustrate the importance of character designing	2
CO3	Demonstrate the usage of expressions in character design	3
CO4	Identify, analyze types of characters and their styles	4
CO5	Review different type of concept arts in context of characters	5
CO6	Create Character Bible, Model Sheets for a newly designed character.	6

Unit No.	Title of Unit and Contents	No. of hours
I	Introduction to Character design for animation.	5
II	Character design for different industries.	5
III	Introduction to Caricaturing. 1.1 Human Face Proportions 1.2 Exaggeration 1.3 Caricaturing faces from photo references Creating multiple variations for one face	7
IV	Exaggerating poses	3
V	Principles of Character Design 1.1 Proportions 1.2 Exaggeration 1.3 Basic shapes (Circle, Square, Triangle) 1.4 Volume 1.5 Body Construction 1.6 Silhouette 1.7 Contrast 1.8 Rhythm 1.9 Color	10

Learning Resources:

Reference Books	<ol style="list-style-type: none"> 1. The Animator's Survival kit (Richard Williams) 2. Disney Animation: The Illusion of Life 3. Acting for Animators 4. Cartoon Animation 5. Timing for Animation
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F. Y. B. Sc. (ANIMATION) SEMESTER - II

ANI-151	Stop Motion Animation (Major-Theory)	Number of Credits: 04
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Describe the working of stop motion industry.	1
CO2	Explain the process of handling materials for clay modelling and cut out animation.	2
CO3	Classify armature and miniature modelling.	3
CO4	Differentiate techniques between cut-out animation and clay-animation.	4
CO5	Review the techniques of tool handling.	5
CO6	Create an animated clip by using the cut out and clay animation techniques.	6

Unit No.	Title of Unit and Contents	No. of hours
I	Introduction to Stop Motion Animation.	5
II	Stop Motion Animation Production pipeline. 1.1 Pre-Production 1.2 Production 1.3 Post - Production	5
III	Types of Stop Motion Animation 1.1 Puppet animation 1.2 Cutout Animation	5
IV	History of Stop Motion Animation	3
V	Supplies for Stop Motion Animation	2
VI	Puppet Animation 1 Types of Clays 1.1 Water Based Clay 1.2 Oil Based Clay 2 Armatures 1.1 Wire Armature 1.2 Ball-Socket Armature 3 Character Design for Stop Motion Animation 4 Molds Mold making techniques & its importance. 5 Foam Latex Material 6 Latex buildup Puppets 7 Clay Puppets	15

VII	Introduction to Cutout Animation 1 History of Cutout animation 2 Style of cutout animation 3 Pipeline For cutout animation	15
VIII	Group Project (Clay Animation / Cutout Animation) 1 Preproduction 2 Animation 3 Final Project Presentations and Viva	10

Learning Resources:

Reference Books	1 The Art of Stop-Motion Animation (Ken A. Priebe)
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F. Y. B. Sc. (ANIMATION) SEMESTER - II

ANI-150	Animation Practical -2 (ANI-150) (Major-Practical)	Number of Credits: 02
Course Outcomes (COs)		Bloom's cognitive level
On completion of the course, the students will be able to:		
CO1	Recall the basics of drawing and sketching	1
CO2	Illustrate the importance of character designing	2
CO3	Demonstrate the usage of expressions in character design	3
CO4	Identify, analyze types of characters and their styles	4
CO5	Review different type of concept arts in context of characters	5
CO6	Create Character Bible, Model Sheets for a newly designed character	6

Unit No.	Title of Unit and Contents	No. of hours
I	Creating Characters from basic shapes	10
II	Character design Process	10
III	Character designing from live Action characters	5
IV	Character designing demo- 1 Brainstorming / Conceptualizing character's description 2 Creating basic body construction through rough sketches 3 Creating multiple options for the same character 4 Finalising the design	10
V	Introduction to character Model Sheets	5
VI	Creating a Character Model Sheet 1 Three Fourth angle 2 Front Angle 3 Side / Profile Angle 4 Back Angle 5 Back Three Fourth Angle	10
VII	Photoshop 1 Introduction to digital sketching 2 Tracing traditional sketches / designs in Photoshop	10

F.Y. B.Sc. Semester II

BVM-161	SCRIPT WRITING (Minor - Theory)	Number of Credits: 02
Course Outcomes (COs)		Bloom's cognitive level
On completion of the course, the students will be able to:		
CO1	Student should understand the importance of script in the process of pre production.	1
CO2	To make the student enable to think from script writing point of view.	2
CO3	Student should learn about script writing style and to analyze any Audio Visual content Script.	3
CO4	To enable the pre production phase from ideas into script.	4

Unit No.	Title of Unit and Contents	No. of Lectures
1	Introduction to Storytelling 1.1 What is Storytelling 1.2 Types of Storytelling 1.3 Pre- Production Process	4
2	Narrative Techniques 2.1 What is narration? 2.2 Narrative Structure 2.3 Narrative treatment of the space & time	4
3	Development of Script 3.1 Idea and Concept Development 3.2 Character Development (Internal& External Features, Wants vs Needs, Obstacles, Stakes & Character Arc) 3.3 Character Psychology 3.4 Three act Structure 3.5 Visual treatment to a script	4
4	Script Formats and their style 4.1 Scene heading 4.2 Parenthesis 4.3 Description 4.4 Scene Transition 4.5 Basic Idea of Shooting Script 4.6 Screenplay Structure (Screenplay Template)	6
5	Elements of Script 5.1 Story premise 5.2 Theme 5.3 Plot 5.4 Style and tone 5.5 Structure of Scenes/ Chronology	6
6	The basic of dramaturgy 6.1 The Nature of Conflict 6.2 Types of conflicts	
7	Differeny Genre of script 7.1 Genre include action, children, comedy, crime, drama, family, history, horror, romance, science fiction, teens and thriller 7.2 How to write a Synopsis	4

F. Y. B. Sc. (ANIMATION) SEMESTER - II		
(BVM-162)	MEDIA & COMMUNICATION PRACTICAL (Minor – Practical)	Number of Credits: 02
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Recall basics of Camera	1
CO2	Explain lighting & cinematography techniques	2
CO3	Execute video shoots with lighting setups	3
CO4	Compare different cameras with lenses	4
CO5	Review post production techniques & stages	5
CO6	Compose video footages to create final outputs	6

Unit No.	Title of Unit and Contents	No. of hours
I	History of Revolution of camera - Pinhole camera (<i>Basic construction and Diagrams for reference</i>) - Box Camera (<i>Basic construction and Diagrams for reference</i>) - Parallax error - Need for the Invention of a SLR - How SLRs removed the parallax error.	4
II	DSLR (Handling techniques) - DSLR (<i>Definition, diagram and functioning of the various parts of DSLR</i>) - Advantages and Disadvantages of DSLR. - Knowing the equipment controls (<i>Buttons, Switches and modes dials on a DSLR</i>) - What is an Exposure - Functions of Aperture, Shutter, ISO - equivalent exposures - setting a White Balance for the images - Effects of the exposure controls on an image (<i>DOF / Movement / Grains in the images.</i>)	6
III	Aesthetics of images - Aesthetic qualities of an image (<i>Framing and Composition</i>) - Composition rules (<i>Rule of thirds, Golden points, Balance, Shapes, Leading Lines etc.</i>)	4
IV	Formats and Lenses - Camera Formats (<i>Small, Medium, Large</i>) - Types of lenses (<i>Wide / Normal / Tele</i>) - What is Perspective ? - Perspective distortion (Spherical distortion types) - Crop factor	6

V	Colour theory / Colour psychology - What is Colour wheel? - Colour harmonies and their application. - Colour psychology and the meaning association. - Application of colours in our work of art.	5
VI	Introduction to Video - Difference between a still image and a video. (Digital Image Formation) - FPS - Pre production, Production and Post Production process (Intro)	2
VII	Basic Grammar of a Video. - Frame / Shot / Scene / Sequence / Story - Camera Angles - Types of Shots	3

REFERENCE BOOKS -

1. Langford's Advanced Photography - the Guide for aspiring Photographers
2. The camera by Ansel Adams
3. 5 C's of Cinematography
4. If it is purple, Someone is gonna die (by Patti Bellantoni)

REFERENCE Youtube channels -

1. <https://www.youtube.com/@PIXELVILAGE>
2. <https://www.youtube.com/@theartofphotography>
3. <https://www.youtube.com/@StudioBinder>

F. Y. B. Sc. (ANIMATION) SEMESTER - II

BVA-161	INDESIGN (Minor – Theory)	Number of Credits: 02
Course Outcomes (COs)		Bloom's cognitive level
On completion of the course, the students will be able to:		
CO1	Recall theoretical knowledge of print and digital media.	1
CO2	Explain various concepts of digital art & Print Media	2
CO3	Illustrate the usage of various tools for vector graphic software.	3
CO4	Identify various points of vector design styles	4
CO5	Compare Concept Art and Fantasy Art while converting from paper to digital format.	5
CO6	Create art related to print media and vector based using digital platforms.	6

Unit No.	Title of Unit and Contents	No. of Lectures
1	Introduction to Work Area a) Arranging palettes b) Customizing workspace c) Palette menus d) Navigation and magnification e) layers	6
2	Documents and Frames a) Starting new documents and page size b) Master pages, footers, placeholder master c) Applying master and overriding master c) Editing master pages d) Modifying and resizing text frames e) Wrapping graphics f) Creating and duplicating frames	6
3	Typography a) Vertical spacing b) Baseline grid b) Space above and below paragraph c) Font and type style a) Paragraph alignment b) Special font features and drop cap	6
4	Working with Colors a) Adding color to swatch palette b) Applying color to objects c) Dash stroke d) Gradient e) Tint f) Spot color	6

5	<p>Vector Graphics</p> <ul style="list-style-type: none">a) Document gridsb) Applying color to path c) Pencil toolc) Pen toold) Drawing curve and straight segments <p>Reference Book:</p> <ul style="list-style-type: none">1. Save a cat by Blake Synder2. A directors method for Film & Television by Ron Richards	6
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F. Y. B. Sc. (ANIMATION) SEMESTER - II

BVA-162	B.VOC. ANIMATION PRACTICAL - 2 (Minor – Practical)	Number of Credits: 02
Course Outcomes (COs)		Bloom's cognitive level
On completion of the course, the students will be able to:		
CO1	Recall basics of Camera	1
CO2	Explain lighting & cinematography techniques	2
CO3	Execute video shoots with lighting setups	3
CO4	Compare different cameras with lenses	4
CO5	Review post production techniques & stages	5
CO6	Compose video footages to create final outputs	6

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I	History of Revolution of camera - Pinhole camera (<i>Basic construction and Diagrams for reference</i>) - Box Camera (<i>Basic construction and Diagrams for reference</i>) - Parallax error - Need for the Invention of a SLR - How SLRs removed the parallax error.	4
II	DSLR (Handling techniques) - DSLR (<i>Definition, diagram and functioning of the various parts of DSLR</i>) - Advantages and Disadvantages of DSLR. - Knowing the equipment controls (<i>Buttons, Switches and modes dials on a DSLR</i>) - What is an Exposure - Functions of Aperture, Shutter, ISO - equivalent exposures - setting a White Balance for the images - Effects of the exposure controls on an image (<i>DOF / Movement / Grains in the images.</i>)	6
III	Aesthetics of images - Aesthetic qualities of an image (<i>Framing and Composition</i>) - Composition rules (<i>Rule of thirds, Golden points, Balance, Shapes, Leading Lines etc.</i>)	4
IV	Formats and Lenses - Camera Formats (<i>Small, Medium, Large</i>) - Types of lenses (<i>Wide / Normal / Tele</i>) - What is Perspective ? - Perspective distortion (Spherical distortion types)	6
	Crop factor	

V	Colour theory / Colour psychology - What is Colour wheel? - Colour harmonies and their application. - Colour psychology and the meaning association. - Application of colours in our work of art.	5
VI	Introduction to Video - Difference between a still image and a video. (Digital Image Formation) - FPS - Pre production, Production and Post Production process (Intro)	2
	Basic Grammar of a Video. - Frame / Shot / Scene / Sequence / Story - Camera Angles - Types of Shots	3

Learning Resources:

REFERENCE Books -

5. Langford's Advanced Photography - the Guide for aspiring Photographers
6. The camera by Ansel Adams
7. 5 C's of Cinematography
8. If it is purple, Someone is gonna die (by Patti Bellantoni)

REFERENCE Youtube channels -

4. <https://www.youtube.com/@PIXELVILLAGE>
5. <https://www.youtube.com/@theartofphotography>
6. <https://www.youtube.com/@StudioBinder>

F. Y. B. Sc. (ANIMATION) SEMESTER – II

ANI-170	FUNDAMENTALS OF DESIGN (OE - 3)	Number of Credits: 02
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Recall the basics of drawing and material handling.	1
CO2	Illustrate the importance of elements of designs	2
CO3	Demonstrate the usage of 1-2 point perspective in drawing	3
CO4	Identify, analyze color theory and color harmony in drawing and sketching.	4
CO5	Review different type of art forms.	5
CO6	Demonstrate renders with appropriate style and proportions.	6

Unit No.	Title of Unit and Contents	No. of Lectures
1	Visual Literacy a. Types of image b. Colour modes c. Dimensions of imagery d. Power of visuals e. Visual illusions f. Importance of visual literacy	6
2	Elements of design a. Colour b. Shape c. Space d. Texture e. Form f. Implementation of all elements of design	6
3	Principles of design a. Unity b. Balance c. Similarity and contrast	6
4	Colours and layouts a) Value b) Colour wheel c) Colour harmony d) Layout – magazine and website e) Importance of layout	6
5	Unit 5 – Graphic design a. What is a graphic design b. Guidelines to make a good graphic design c. Factors affecting and point to remember d. Graphic design techniques e. How to catch viewer's attention f. How to create good graphic design concept	6

F. Y. B. Sc. (ANIMATION) SEMESTER - II

ANI-171	BASICS OF ANIMATION – 2 (OE-4)	Number of Credits: 02
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's cognitive level
CO1	Describe the evolution of animation and its history.	1
CO2	Discuss the art of movement and analyze creative work of artist.	2
CO3	Examine various processes of animation techniques that are developed with various equipments.	3
CO4	Compare and contrast various traditional animation techniques.	4
CO5	Explain various concepts of digital art.	5
CO6	Illustrate the usage of various tools for graphic software.	6

Unit No.	Title of Unit and Contents	No. of Lectures
1	2D Animation a) Digital Animation b) Classical Animation c) Vector Animation	6
2	3D Animation a) Modelling b) Texturing c) Rigging d) Animation e) Lighting f) FX	6
3	Stop Motion Animation a) Clay Animation b) Cutout Animation	6
4	Gaming a) Classification of Games b) Generations of Games c) Game process	6
5	VFX a) Early VFX b) Modern VFX c) Rotoscopy d) Chroma Removal e) Tracking	6