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# Raja Mansingh Tomar

Music & Arts University,

Gwalior, Madhya Pradesh

## Certificate Animation


Scheme / Practical / Syllabus


2020 - 2021

## Certificate One Year (ANIMATION) - SCHEME

Paper	Time (In Hours)	Ext. Marks	Int. Marks	Total
<b>THEORY (SUBJECT)</b>				
1. History of Animation (Part – 1)	03	70	30	100
<b>PRACTICAL</b>				
1. Photo Editing / Digital Drawing (Part – 1)	03	70	30	100
2. 3D Animation (Part – 1)	12	70	30	100
<b>TOTAL</b>				<b>300</b>

  
 Dr. S. K. Mathew  
 H.O.D. Applied Arts &  
 Animation  
 RMT University, Gwl

  
 Dr. Addlin Abraham  
 H.O.D. of Painting  
 Sri Gurn Tegh Bahadur  
 Khalsa College, Jabalpur

  
 Dr. Gauri Shankar Chauhan  
 Assistant Professor Fine Arts &  
 Music Department  
 DDU Gorakhpur University,  
 Gorakhpur

  
 Dr. Sonali Jain  
 Principal  
 Rahini College of Art & Design,  
 Mhow, Indore

  
 Student of  
 RMT

## Certificate One Year (ANIMATION) - PRACTICAL

### 1. PHOTO EDITING / DIGITAL DRAWING

Introduction & history of Drawing, types of drawing, Line, type of lines, Tone, Texture, Space, tools, Polygon, Eye level, 2D & 3D Drawing, Elementary perspective, Study from man-made objects, Study of human forms, light and shades, Principles of design, definition of raster graphics, understanding pixel and resolution. Application of Adobe Photoshop, Basic selection tools, color correction, edit Photoshop, trick photos

(Minimum 10 works / Sheets on each subject)

### 2. 3D ANIMATION

(MODELING) About the Software, tools, Shortcuts, Surface Modeling, Polygon Modeling

(TEXTURING) Texturing and Uses of texturing, basic color, Basic of assign materials, UV unwrapping, UV mapping, Create textures in Photoshop.

(LIGHTING & RENDERING) About Lighting & Rendering, Types of Lighting, Software & Mental ray rendering & lighting

(ANIMATION) Principle of Animation, Types of Animation

(Minimum 10 works / Sheets on each subject)

- Work done in the class during the college / University hours shall be accepted for submission.
- Student shall have to submit one sessionals of each subject to the university / college.

### SUGGESTED READING

1. Animation from Pencils to Pixels: Classical Techniques for the Digital Animator by Tony White
2. Color by Betty Edwards
3. Animate to Harmony: The Independent Animator's Guide to Toon Boom by Adam Philips
4. Animation Survival Kit by Richard Williams
5. Carton Animation by Preston Blair
6. Animal Anatomy for Artists: The Element of Form by Goldfinger
7. The Animation Book: A Complete Guide to Animated Filmmaking--From Flipbooks to Sound Cartoons to 3-D Animation by Kit Laybourne
8. Adobe Photoshop Bible by Lina Damae Dayley

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# Certificate One Year (ANIMATION) - THEORY - History of Animation - Paper - I

## Introduction of drawing & Sketching

Introduction & history, types of drawing, Free drawing, geometrical drawing, representational drawings, contour drawing, gesture, drawing, nature drawing, object drawing, Observation of a scene, object & environment. Line, type of lines, straight, curved, converging, dotted, zigzag, soft and hard lines, Definition of colors, classification of colors: - primary colors & secondary colors, Tone: - Light tone, middle tone, dark tone, shadow & Depth, Texture, Space, Introduction to the equipment (tools), Polygon:- Circle, square, rectangle, triangle, cylinder, Line Drawing, object study, Eye level, Angle view: - Front & Back view, Top & Bottom view, Side view (Right & Left), 2D & 3D Drawing

## Drawing from Objects

Elementary perspective: - H.L - V.P, 1 point, 2 point, 3 point perspective, Object Drawing: - Drawing form, geometric forms, Study from man-made objects, Projections

## Human anatomy

Study of human forms, general forms and gesture, drawing from cast & figure - light and shades, basic properties, Balance - standing still or motion - perspective.

## Introduction and Importance of Story Boarding

The art of story boarding, Story development, Character designing and development, Script Writing, Types of Script, Camera Angle, Timing / Spacing, Dialog Delivery - audio and video, Ideas of Visual concept

## Adobe Photoshop (Basic)

Principles of design, role of image in animation, definition of raster graphics, understanding pixel and resolution, file format & operation, Application of Adobe Photoshop in raster graphics design, size of the canvas as per requirement - print / 2D Animation

Basic selection tools, layers, dodge and burn tools, brushes, filters, channel, color correction, color modes, layer mask, raster mask, vector mask, compositions, edit Photoshop, trick photos, mate painting, digital paintings.

## Autodesk Maya (Modeling)

About the Maya Software, Maya tools, Maya Shortcuts, Surface Modeling, Primitives guruji, cowboy hat, pocket watch, Objective modeling, Background modeling, Polygon Modeling, Objective Modeling, Background Modeling, Organic Modeling

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### Texturing

Texturing and Uses of texturing, Basic color on object, Lambert, blin, Phong & Phong E. Basic of assign materials, UV unwrapping, UV mapping, Create textures in Photoshop, assign texture on objects, on B.G. Models, organic & inorganic models.

### Lighting & Rendering

About Lighting & Rendering, Types of Lighting, Describe all types of Light - Ambient Light, Point Light, Area Light, Directional Light, and Volume light, Maya Software & Mental ray rendering & lighting, Physical sun and sky, Image based lighting

### Animation

Principle of Animation, Types of Animation, Ball animation, Walk cycle, walk animation



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13 July 2020

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