

M.Sc (MM) 101 - Script writing & Story board designing

First Semester

I. Introduction to Scriptwriting, screenplay and teleplay

Scripts are elements

Basics of Scriptwriting, Use of scriptwriting, Action, Scene Headings, Character Name,

Screenplay Page Breaking, Short Lines/Poetry/Lyrics, Titles or Opening Credits, Screenplay Title Page, Continued and Revisions, Header Text + Do's & Don'ts, Screenplay Related Formats and full knowledge about teleplay script

II. scriptwriting for both short film

Dialogue, Parenthetical, Extension, Shot Transition, Dual-Column Dialogue, Act numbers, Scene Numbers, Cast List, short lines, dialogue paragraphs, Script Styles & Types, Script Length Scene Heading Action Description, Character Name, Dialogue, Parenthetical, Extension, Transition, Shots

III. scriptwriting for feature film

Dialogue split by Action, Emphasis in Action, Abbreviations, Short Lines, Dialogue Paragraphs, Montage & Series of Shots, Supers - Titles, Signs, etc, Phone Calls and Intercuts

Two people talking at the same time

IV. As student develops their own script

Attention will be paid to principles of script analysis, narrative strategy, genre and structure. By the end of the semester, students are expected to have developed a script treatment and flashed out the first act in script form.

V. Introduction to storyboard

Introduction, Multimedia Storyboarding Tools, The Advantages of Storyboarding, Interactive Storyboarding, Using Interactive Storyboarding to Speed-up the Content-writing Phase, Using Interactive Storyboarding to Speed-up Report Document Production

VI. Steps of storyboard writing

Storyboard table, Topic, Timeline, Sketches, color scheme, text attributes, Audio, camera angle, Interaction of buttons and text.

M.Sc (MM) 102 - Desk Top Publishing

First Semester

I. Computer Basics

Introduction: Introduction to computers, parts of computer system, hardware, software, difference between hardware and software, user, data, processor, memory, input devices, output devices. Application of Computers in various fields: Defense, Industry, Management, Sports, Commerce, Internet. Generations of Computers: 1st, 2nd, 3rd, 4th, 5th generation. Basic computer organization: C.P.U, A.L.U, Input and Output Input Devices: Keyboard, Mouse, OMR, OCR, Microphones, Bar Code Reader, Scanner, Light pen, Cameras etc. Output Devices: Monitors (CRT, FST, LCD), Impact and non impact printers (Dot matrix, Inkjet, LaserJet), Plotters. Storage Devices: Hard Disk, Floppy disk, Pen Drive, CD's, DVD's.

II. Operating System

Introduction: Introduction to Operating System, its need and Operating System services; Operating System classification - single user, multi-user, simple batch processing, Multiprogramming, Multitasking, Parallel system, Distributed system, Real time system. Process Management: Process Concept, Process scheduling, Overview of Inter-Process communication, CPU Scheduling: Basic concepts, Scheduling Criteria, Scheduling Algorithms. Memory Management: Logical Versus Physical addresses space, Swapping Partition, paging and segmentation, concepts of Virtual Memory. File Management: File concept, access methods, Directory Structure, file protection. Allocation methods: Contiguous, linked and index allocation. Deadlocks: Deadlock Characteristics, Prevention, Avoidance, Detection and Recovery, critical section, synchronization hardware, semaphores, combined approach to deadlock handling. Security: Authentication, Program Threats, System Threats, and Encryption.

III. Basic Designing Software

Windows Paint, Basics Concept making and Implement on Computer, Colour knowledge, Generating Ideas, Basics About Various Software's in Industry for still image manipulating, knowledge about pixels, measuring units in diff image manipulating software's.

IV. Vector Graphics (Designing, Color Theory , Vector Designing & Editing, Text Formatting)

Interface: working with menus, toolbars, Dockers

Document Setup: Setting Page Size& Orientation, Document Navigation

Rulers & Guidelines: Status Bar

Text: Formatting, Text Layout, Skewing and rotating, Creating drop shadow, Text to Path, Extruding text

Objects: Grouping & locking objects, Combining & breaking apart, Transforming & Shaping, Cutting objects apart, Trim, weld & Intersection of objects

Lines & Curves: Using freehand & Bezier tool, Line properties, Arrowheads
Eraser & artist media tools

Nodes & Paths

Color & Fills: Solid Color, Color Palettes, Eyedropper & Paint bucket, Fountain, Fills, Patterns, Texture Fills, Interactive Mesh Fill

Special effects: Envelopes, Blends, Perspective, Shadow Objects, Power clip Command, Transparency, Distortion, Contour, Lens Docker

Complex Shapes: Polygon & Stars, Spirals

Printing Menu.

V. Raster Graphics (Designing , Color Theory , Raster Designing & Editing, text Formatting

Getting to Know the Work Area, Starting to work in Adobe Photoshop, Colour modes, Colour, Using the tools, Selecting and using a tool from the toolbox.

Using the tool options bar and other palettes, Customizing the workspace, Using Photoshop Help, Using Adobe Bridge, Viewing and editing files in Adobe Bridge, Embedding information for easy identification, Automating routine tasks.

Resolution and image size, Straightening and cropping an image, Making

automatic adjustments, Manually adjusting the tonal range, Replacing colors in an image, Adjusting lightness with the Dodge tool, Adjusting saturation with the Sponge tool.

Retouching and Repairing, Repairing areas with the Clone Stamp tool, Using the Spot Healing Brush tool, Using the Healing Brush and Patch tools, Retouching on a separate layer.

Working with Selections, About selecting and selection tools, Selecting with the Magic Wand tool, Using the Magic Wand with other selection tools, Working with oval and circular selections, Selecting with the lasso tools, Rotating a selection, Selecting with the Magnetic Lasso tool.

Cropping an image and erasing within a selection, Layer Basics, Using the Layers palette, Rearranging layers, Applying a layer style, Flattening and saving files, Masks and Channels, Creating a quick mask, Editing a quick mask, Saving a selection as a mask, Editing a mask, Loading a mask as a selection and applying an adjustment.

Applying effects using a gradient mask, Correcting and Enhancing Digital Photographs, about camera raw, processing camera raw files, correcting digital photographs.

Editing images with a vanishing-point perspective, correcting image distortion, creating a PDF portfolio, Typographic Design.

Advanced Layer Techniques, Advanced Compositing, and Creating Links within an Image, Creating Rollover Web Visuals, and Animating GIF Images for the Web, Producing and Printing Consistent Color, Using the Filters.

VI. Page Making

Document Setup Option

Page Type, Page Style, Page Numbering, Page Measurement

Standard Tool Bar Options

Create New Document with Setting, Open & Store Options, Preferences

Import & Export Objects options, Scanning, Document Setup, Columns Guide Setting, etc.

Formatting Tool Bar Option

Copy Paste Options, Cross Pasting, Multiple Pasting, Insert Objects, Import Images & Text from other Objects etc.

Text Setting Options

Fonts Setting, Control Palette, Paragraph Setting, Text Warping, Master Files, Text Rotating options Alignment Setting, Text Colors.

Rulers & Guide Lines, Print Out Bar

Import Objects, Polygon Setting, Draw & Filling Objects, Alignment Setting of the Images etc.

Books Reference:-

- Adobe PageMaker 7.0 classroom in a Book.
By (Adobe Publisher).

- Adobe Photoshop 7.0 classroom in a Book.
By (Adobe Publisher).

- Ramesh Bangia- Learning Multimedia
Khanna book pub.

- Corel draw 12 - The Official guide
By - Corel Press.
- Ramesh Bangia- Computer Basics
Khanna book pub
- Computer Fundamentals
Author (PK Sinha) by (BPB Publisher)

M.Sc (MM) 103 - Advance Digital Art Photography

First Semester

I. The Exploration Stage

The past and future of Photography (Digital Photography), Types of Cameras, Choosing Cameras, Start Taking Photos, Using buttons and menus.

II. Selection and Treatment

Selecting image size and quality, Image management, Photo editing tools
Color management.

III. Execution , Installation & Presentation

Choosing Exposure modes, how your exposure system works and affects your image.

Installation of different types of Image Editing Software, Slide show programs and background music, E-mail and websites, displaying images
Wallpapers

Digital Photography (Part - 2)

I. Beyond the Basics.

Camera Controls and Creativity

About Digital Photographs

Automatic All the Way

Working of Digital Camera and comparison

Selecting Images Size and Quality (Photoshop)

Definition of shutter speed in detail, delineation of aperture

Using Shutter Speed in detail, definition of aperture

Selecting Exposure Modes

Types of Lenses

II. Photographing people

Photography aesthetics of people

(Male, females, couples, groups & child Photography)

In studio and out door and available light

III. Product Photography

Using Selective Focus

Exposure affects you Images

Controlling Brightness and Contrast

Close up Photography.

IV. Interior and Exteriors

Architectural photography

Industrial shooting (Internal & external)

And use of various wide angle lenses.

Landscape photography, science shorts.

V. Action and Sports Photography

To capture the action, in different ways, to know the game first,
Selecting the equipments according to the game.
(Use of various zoom and tele lenses and tripods)

VI. The Photo Shoot from Start to Finish

Photography on the given theme to selecting subject
To select the equipment the location and finally shooting
Book Ref: Tom Ang: Digital Photography an Introduction
Publisher's Name: Dorling Kindersley Ltd.

M.Sc (MM) 104 - Project

First Semester

Create a Story Board using your Desk Top Publishing Skills.

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 105 - Practical

First Semester

Practical on all subjects of 1st semester.

SEMESTER-II

M.Sc (MM) 201 - 2D Animation

Second Semester

Intro to flash

About 2d animation, Properties Bar, Size and Publish

Symbols and Layers

Library, Insert layer, Motion Guide

Frame and Animation

Frame rate

Making animation

Bells and Whistles

Scripting

Making a Splash

Making interactive buttons

Interactive Adventure

Compiling objects

Bringing movement to the web

Creating and uploading to web

Beyond the Frames

Understanding frames size, Frame rate, Symbol

Frame of Mind

Optimized flash player, about framing

Books Ref:-

Flash MX BIBLE (By BPB Publisher)

M.Sc (MM)202 - 3D Introduction & Advanced (Modeling & Animation)

Second Semester

I. Getting in Control of 3D Space.

Menu commands, File Menu, Edit Menu, Tools menu, Group Menu, view Main Toolbar, Working with View ports and files: Controlling the View ports: Zooming a view, panning a view, rotating a View, Maximizing the active View ports, max Scene files. Saving files, opening files, merging and replacing objects. Importing and exporting files.

II Solid Modeling and the tools of the Trade.

Create menu, Modifiers Menu, Command Panel: Create, Modify, Hierarchy, motion, display, Utilities.

III Color, Texture and surface styles.

The Material Editor, colors and patterns in materials, multiple materials on single objects, lofting the materials, bump mapping, luminance values, maps, mapping coordinates, materials, multi/sub-object materials, procedural maps. Material Editor: sample window, sample sphere, material type, material name, get material, assign material to selection, materials and mapping, importing maps & textures from Photoshop.

IV Tips and tricks for good lighting.

Standard sunlight system, faking bounced light, daylight system, angle of incidence, attenuation, exposure control, photometric lights, radiosity,

standard lights with scan line rendering, photometric lights with radiosity render, skylight with light tracer rendering, sunlight system, day light system, Skylight. Target spot, free spot, target direct, and free direct, omni. Day light with exterior scenes.

V Virtual camera movement.

Camera types, Creating and adjusting cameras, Camera composition, Camera movement, Focal length, Field of view, Cut edit, Fade or dissolve edit, Camera Basics, Target cameras, Free cameras, Adjusting the Field of View, Dolling and zooming, Crabbing and panning, Basic scene editing, Take the time to watch film and television with a more critical eye toward the techniques employed by directors to involve you, the viewer, in the world created by the camera. For still images, you can refer to books and magazines on architecture or product design to develop a feel for how the focal length and the composition of cameras can affect your perception of the scene.

VI Dummy properties

Dummy objects, animating the Rotation of the Dummy Object, Fundamental key frame animation, Repeating animation over time, Hierarchical linking.

VII Animation, multimedia & virtual reality

Fundamental key frame animation, repeating animation over time, Hierarchical linking, Key frame, Parameters Out-of-Range, Setting Animation Keys, Animating the Rotation of the Dummy Object, Creating a Continuously Looping Animation.

VIII Using advanced techniques.

Assigning Constraints on the Motion Panel, Applying an Ease Curve to Control Animation, Multiplier curves, Link constraint, Inverse kinematics, Solver, Applying Multiplier Curves, and Switching Hierarchical Parents.

IX Advanced Modeling

Editable poly, Symmetry modifier, Lathe modifier, Merge, Quad polygon, Settings dialog, NURMS, Editing Using Multiple View ports, Adding Detail to the Model, Tessellate, Deformation, XRef, Using Modifiers to Add Detail to 3D Objects, Merging Files While Retaining a Connection.

X Advanced lighting effect

Placing and adjusting photometric lights, Using exposure control, Adjusting meshing parameters, Controlling color bleed and reflectance, Making materials act as lights, Attenuation, Direct illumination, Indirect illumination, Refine Iterations, Filtering, Reflectance, Placement and Adjustment, Applying Exposure Control, Setting Radiosity Meshing at the Local Level, Controlling Radiosity Using Materials. Applying Advanced Lighting Override Material.

XI Advanced Animation

The Fundamentals of Hierarchical Linking, Animation controllers, Track View Dope Sheet, Ease curves, Controllers, Constraints, Graph editors, Ease curves.

XII Introduction to Character Animation

Modeling in Sub-Ds, Quad polygon, Settings dialog, NURMS, Understanding the Basics, Getting Started with the Tools. Making a character by using low poly.

XIII Modeling Low Polygon Character

A Pig in a Box, Collapsing the box to an Editable Poly object, Selecting the polygons to be deleted, Selecting edges for connection, Connecting edges to

create a new loop, Two more rows of edges, Selecting and extruding the feet, Flattening the feet with Make Planar, Two newly created edge loops, Extruding the neck, Reshaping the neck, Shaping the snout, Model with Mesh Smooth applied, Sharpening the snout, Creating the ears, Shaping the ears with new edges, Eyes and nostrils are created by extruding selected polygons, Helix for the tail, Picking the helix for spline extrusion, Altering the tail's shape, Mesh Smoothed pig from the side, Using Auto Grid to create an eye, Mirroring the eye using the pig's coordinate center, Completed pig.

XIV NURBS Character Animation

Making a dog model by using a nurbs tool.

XV Skin and Flex Modeling

Using the modifiers skin and flex.

XVI Surface Modeling

Using surface modifier making a model, and Applying the surface modifier on it.

XVII Lip Synchronization

Using lip Synchronization tools and implementing on the face and lips.

XVIII Plug INS

Exploring the 3d's max with the new plug-in.

XIX Special Effects

Elements of a Particle System, Several types of particle emitters, from left to right: Blizzard, Super Spray, PCloud, and PF Source, Particle Effects, Flight Path, Fire, Smoke, Final Touches.

XX Animation Film

Use of max in animated films, promos, and the effects that influence the film industry, making a scene using max with a video file practically.

Books Reff: -

- New Riders 3ds max 7 Fundamentals.
- New Riders Inside 3ds max 7.
- 3Ds Max 7 Fundamental (Tech media).
- Modeling a character in 3d's Max - Paul Steed

M.Sc (MM) 203 – AUDIO & VIDEO

Second semester

I. Creating Digital video

Adding all raw shorted shorts and clips all together, and add few finishing touch, even a small technique make an good effect, using some nice software for video editing, making fade in -outs, mixing the sound to video file , using diff angles of shorts for different emotions , happy or sorrow, trimming the video clips as per the audio or story, giving some seconds of blank space at the end of the video, make in concentration that text should not cover the video, lights, Illuminator, silver/ gold reflector, shotgun microphone, wireless microphone. Always use 5 second pre roll and post roll of blank space.

II. Camera types & movements

Sony PD 150 Cameras, miller Fluid-Head Tripods, DV Stead cam, handy cams, web cams, Beta cams, setting the temp grid on the floor, perspective view of cameras, panning the camera movements, zoom in the camera, dolly camera,

and camera using the crane shots, camera shaking for making earthquake effect. Attaching camera on the tripod for the removal of shaking in the clips, giving the proper lightning effect, setting the lights and proper reflection, correct exposer, Framing, Focus, Hand held shorts, Slow berating wile video shooting, shoulder pan, hip pan,

III. Lenses types

Wide angle lens, Fish eye lens, colored lens, blur lens, sharpness lens.

IV. Storytelling through visual means

Making the story board, just using the actions, emotions and happy moment's scene to making the story, can make a comedy video, short film etc to practice on it; can take the reference from some short film, comedy shows.

VCD & Books Reff: -

- Digital Multimedia by (Wiley Dreamtech).
- VTC online cd for five steps of video production.
- Ramesh Bangia- Learning Multimedia
By Khanna book pub.

M.Sc (MM) 204 - Project

Second semester

3d Logo Animation, Architectural Walkthrough and Special effect Shot Length Movie.

Reference: (Must Watch Films)

1. Harry potter.
2. Spiderman.
3. Gladiator.

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 205 - Practical

Second semester

Practical on all subjects of 2nd semester.

SEMESTER-III

M.Sc (MM) 301 - Digital Editing

Third semester

I. The fundamentals of editing

Basics of editing, Pal Video for windows, Pal quick time multimedia QuickTime, Using Project Window, Video Settings, Audio Settings, Compressor, Depth, Frame Size, Frame Rate, Importing still images, Using the monitor window, Viewing safe zones, use of editing and full knowledge about video editing.

II. The fundamentals of transition effects

Creating Transitions, Transition Settings, Image Mask Transition, Applying Transitions, viewing transitions.

III. Finishing & the future

Making movie, finalizing sound and effects, rendering, making video CD.

Ref. Books:-

Adobe Premier pro (Class room in a book)

By: Adobe publisher

M.Sc (MM) 302 - Sound Editing

Third semester

I. Introduction to sound

Sound, Digital sound files, different sound formats, midi & digital audio, creating digital audio files, sound producing, sound extracting, Advantages and disadvantages of midi & digital, choosing between midi and digital audio.

II. Linking files

Sound for the World Wide Web, adding the sound to your multimedia project, production tips, audio recording, keeping track of your sound, testing and evaluation.

III. Record clips & editing

Sound recording, editing digital recording, trimming, splicing and assembly, volume adjustments, format conversion, resampling or downloading, fade-ins and fade -outs, equalization, time stretching, digital signal processing, reverting sound, making midi audio, audio file formats.

IV. Special effects

Adding effect automation enveloping, adding a volume envelop, adding a panning envelop, previewing effect automation, applying effect automation, adjusting envelope, adding envelop points, flipping a envelop points, setting fade properties, cutting, copying, pasting, envelope points, adding mirror and wave hammer, pan to left , pan to right, dry out , wet out , convert mono to stereo, looping .

V. Finalize files

Burning the audio Cd, mp3, making the remix sound track with using all the special FX from the software. Exporting the files in diff formats, save in wav, mp3 etc,

Books reference: - Sound Forge Power by (Firewall media).

M.Sc (MM) 303 – MAYA (Professional Animation)

Third semester

1. The MAYA user Interface

Menus, working area, toolbar, time line, bars

2. Working in 3D space

Views, handling working areas, full Use of mouse & keyboard with views

3. Polygonal Modeling

About polygon, create and reshape polygon, Combining, separating, and splitting, Editing polygons, The Sculpt Geometry Tool, Coloring polygons, Texturing polygons

4. Key frames and Motion Paths

Frames, motion keys, Path, motion paths, Motion path markers

5. Non-Liner Animation

Full knowledge about non-liner animation

6. Forward and Inverse Kinematics

Creating and animating FK & IK

7. Surface Deformations

Deformable geometry

9. Cameras and Lights

Applying Ambient light, directional light, point light, spot light area light, volume light, and camera and changing attributes.

10. Shadders and Texture

Anisotropic, blinn, Lambert, phong, phong e, layered, ramp, shading, surface

11. Rendering Techniques

Render the scene using retracing, Render the scene using Global Illumination, Render a single frame, mental ray.

12. Particles and Dynamics

Emitter, air, drag, gravity, Newton, radial, turbulence, uniform, vortex, volume axis, rigid body, source of field.

13. Modeling

Edit curves, surface modeling, nurbs modeling, and subdiv surfaces.

14. Animation

Animation, deform, Skelton, skin, constrain, characters.

15. Brush based Techniques

Working with brush, understanding brush, use and applying paint effects by using brushes, animating brush stocks, changing attributes.

16. Visual Effects Rendering

Fire effect, smoke effect, fireworks effect, lightning effects, shatter effects, shards to fields, curve flow, surface flow, surface flow procedure,

Render the scene using caustics, Render parts of a scene separately, render multiple scenes, Batch renders from within Maya (UI)

17. Fluid Effects

3D container, 2d container, Pint fluid tool, emitters, collide, resolution, cached

18. MAYA Cloth

Panel, garment, seam, collision, cloth object, constraint, paint cloth properties, cache, simulation

19. MAYA Fur

Creating fur, applying fur, animating fur, changing attributes.

Books reference: -

Learning Maya 7 (foundation), (Unlimited)& (character rigging and animation) - Alias.
Maya 6 Complete Reference - Tata McGraw hill.

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 304 - Project

Third semester

Any 3D Model and 3D animated short length movie.

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 305 - Practical

Third semester

Practical on all subjects of 3rd semester.

Reference: (Must watch movies)

1. Matrix
2. Monster Inc.
3. Casper

SEMESTER-IV

M.Sc (MM) 401 - Cartoon Animation

Fourth semester

- I. Character Developer.
- II. Visualization of Different Views.
- III. How to draw expressions.
- IV. How to achieve Lip synchronization.

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 402 - Digital Animation & Special Effects

Fourth semester

I. Introduction to special Effects

Knowledge about effects, making effects, applying effects

II. Types of special effects

Particle system, masking, keying, color range, text effects, CG effects

III. Synchronization with editing

Tips and tricks for editing, advance knowledge about editing, compositing, Final rendering (output)

Book Ref:

Combustion 4 (By: - Discreet)

M.Sc (MM) 403 - Interactive Media.

Fourth semester

Introducing the Director workspace

The Stage, The Score, The Cast window, The Property inspector, **Setting Stage and movie properties**, Increasing or decreasing your view of the Stage, About Sprites, About Frames, Managing the workspace in Director MX, Window types, Managing panels and panel groups, Cast Members and Cast Windows, Animation, About tweening in Director, Tweening the path of a sprite, Accelerating and decelerating sprites, Tweening other sprite properties, Changing tweening settings, Editing sprite frames, Frame-by-frame animation, Using film loops, Setting film loop properties, Step-recording animation, **About importing bitmaps**, Using animated GIFs, Using the Paint window, Changing selected areas of a bitmap, Flipping, rotating, and applying effects to bitmaps, Using Auto Distort, Changing size, color depth, and color palette for bitmaps, Controlling bitmap images with Lingo, Using gradients, Using patterns, Creating a custom tile, **Using Paint window inks**, Using bitmap filters, Using onion skinning, Drawing vector shapes, Controlling color, Embedding fonts in movies, Using Flash Movies, Sound and Synchronization, Using Video, Navigation and User Interaction, **Writing Scripts with Lingo**, Scripting basics, Performing common tasks, 3D Basics, The 3D Cast Member, 3D Text, and 3D Behaviors, Working with Models and Model Resources, Controlling the 3D

World, Movies in a Window, Making Director Movies Accessible, How Director unloads items from memory, Loading and unloading individual cast members, Managing and Testing Director Projects, Packaging Movies for Distribution, Using Shockwave Player, About streaming movies, About network operations, Setting movie playback options, **Setting Shockwave playback options**, About creating multi-user applications, About streaming with the Score and behaviors, Looping behaviors, Jumping behaviors, Checking whether media elements are loaded with Lingo, Checking whether a cast member or sprite is loaded.

Books Ref:-

Using Director MX

Publisher: Macromedia

M.Sc (MM) 404 - Project

Fourth semester

I. Complete Animation film

II. Product Advertisement

III. Complete Multimedia CD

Reference: (Must watch movies)

1. Shrek

2. The incredible

3. Ice age

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 405 - Practical

Fourth semester

Practical on all subjects of 4th semester

Reference: (Must watch movies)

4. Shrek

5. The incredible

6. Ice age