UNIVERSITY OF MYSORE

REGULATIONS

AND SYLLABUS

FOR

POST GRADUATE DIPLOMA IN MULTIMEDIA TECHNOLOGY (PGDMT)

EFFECTIVE FROM THE ACADEMIC YEAR

2021-2022

UNIVERSITY OF MYSORE

GUIDELINES AND REGULATIONS LEADING TO POST GRADUATE DIPLOMA IN MULTIMEDIA TECHNOLOGY (PGDMT)

(Effective from academic year 2021 -22)

The programme Post Graduate Diploma in Multimedia Technology (PGDMT) is one-year duration consisting of two semesters in the Faculty of Science and Technology with a provision to study on full-time basis. The course shall be governed by the following regulations:

1. **ELIGIBILITY FOR ADMISSION**
   1.1. A candidate who has passed any Bachelor's degree from a recognized University is eligible for admission to the first Semester of the programme.
   1.2. The selection of eligible candidates for admission to course shall be based on merit–cum-reservation policy of the Government of Karnataka from time to time.

2. **INTAKE**
   2.1. The University fixes the intake for the admission to the programme.

3. **COURSE OF STUDY**
   3.1. The course of study for the Post Graduate Diploma in Multimedia Technology (PGDMT) is a period of one year consisting of two semesters. Each semester shall be of sixteen weeks duration. The academic calendar shall be as notified by the university from time to time. However, a candidate can take a maximum of two years for completion of the programme, as per double the duration of the programme as mentioned in the norms of University of Mysore.
   3.2. There shall be five papers of theory with practical in the first semester. There shall be four papers with practical's and one project work in the second semester. The hours of instruction shall be two hours/week for each theory paper and four hours (two hours duration Two times a week) for each practical's paper.

3.3. Every course offered will have three components associated with the teaching-learning process of the course, namely (i) Lecture – L (ii) Tutorial- T (iii) Practicals - P, where L stands Lecture session. T stands Tutorial session consisting participatory discussion / self-study/ deskwork/ brief seminar presentations by students and such other novel methods that make a student to absorb and assimilate more effectively the contents delivered in the Lecture classes. P stands Practice session and it consists of Hands on experience / Laboratory Experiments / Field Studies / Case studies that equip students to acquire the much required skill component.

4. MEDIUM OF INSTRUCTION

4.1. The medium of instruction shall be English.

5. ATTENDANCE

5.1. Only those students, who have at least 75% attendance in a course, shall be permitted to take main examinations.

5.2. The Head of the Department / Institute shall notify the list of all students who have less than 75% attendance in each course by the beginning of the 8th and 16th week. A copy of the same should be sent to the Registrar (Evaluation) of the University. Registrations of such students for those courses shall be treated as cancelled. If the course is a core course, the student should re-register for the course when it is offered next.

5.3. The student who fails to complete the course in the manner stated in 5.1 above shall enroll himself/herself in the coming two years. However the admission is subject to the availability of the seats.

6. CONDUCT

6.1. Every student is required to observe discipline and decorum both inside and outside the campus in accordance with the instructions sued by the University of Mysore / Government of Karnataka time to time. If the conduct/behavior of the student is not found to be satisfactory, action will be initiated as per the University regulations.

7. INTERNAL / CONTINUOUS ASSESSMENT

7.1. The internal assessment marks in each theory paper shall be awarded by the concerned course teacher based on (i) two class tests, each of one hour duration, conducted by him/ her during the semester, (ii) one Assignment and (iii) one seminar. Average of the two tests, assignment and seminar to be considered as the final internal assessment marks.

Internal Assessment	20 marks
Test 1	15 marks
Test 2	15 marks
Assignment	5 marks
Seminar	5 marks

8. SCHEME OF EXAMINATION

8.1. There shall be a University examination at the end of each semester.

8.2. The duration of theory and practical examination shall be of Two hours duration.

8.3. The duration and maximum marks and minimum marks for pass in each of the Theory and practical shall be as given below:

For each Paper	Marks Allocation						Total	
	IA		Theory		Practical			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
	20	7	50	18	30	11	100	40

1.1. In the Practical examination each student should execute one question out of the 10/12 practical questions approved in the syllabus.

1.2. Change of program during lab examinations is not permitted because all the Programmes are given from the predefined list from the syllabus only.

*In case of practical examination, the following scheme shall be followed:

Writing procedure – 05 marks, Execution -12 marks, Viva-voce – 8 marks, and Record-05 marks

**In case of Project, the following scheme shall be followed:

Project Demonstration/execution: 30 marks, Viva-voce: 20 marks, Dissertation: 30 marks

1.3. Project work can be done with two or three candidates. Candidate shall submit two copies of the project report along with CD/DVD on project work during second semester for evaluation. The project viva shall be conducted by one internal examiner and one external examiner approved by the Registrar (Evaluation).

2. DECLARATION OF RESULTS AND CLASSIFICATION OF SUCCESSFUL CANDIDATES

2.1. The candidate who obtains a minimum of 35% of marks in each of the theory and practical examination and a minimum of 40% of marks of theory/practical/Project examination and Internal Assessment marks put together shall be declared to have passed in the respective paper. The candidate is declared to have passed the semester if he/she passes in all the papers. The candidate who fails to get such a minimum marks in any paper(s) shall repeat the theory / practical examination of that paper. The Internal Assessment marks once awarded is final and there is no provision for improvement. Minimum Credits for getting the Diploma: 20 credits from 2 semesters.

2.2. The Grades shall be declared on the basis of aggregate marks obtained by the candidate, who has successfully completed both the semesters of the course.

2.3. The classification of credits of successful candidates shall be as under:

Sl. No.	Marks secured in each course	Grade
1.	Marks secured in the paper is 90% and above	A
2.	Marks secured in the paper is 80% and above but less than 90%	B
3.	Marks secured in the is 70% and above but less than 80%	C
4.	Marks secured in the paper is 60% and above but less than 70%	D
5.	Marks secured in the paper is 50% and above but less than 60%	E
6.	Marks secured in the paper is 40% and above but less than 50%	F
7.	Marks secured in the paper is less than 40%	Dropped

PROGRAMME STRUCTURE

FIRST SEMESTER

SL. NO	PAPERS	TITLE OF THE PAPER	CREDIT PATTERN			CREDITS
			L	T	P	
1	PGDMT -1.1	Digital Image Editing	2	0	2	4
2	PGDMT -1.2	Computer Graphics	2	0	2	4
3	PGDMT -1.3	2D Animation	2	0	2	4
4	PGDMT -1.4	3D Modelling and Animation	2	0	2	4
5	PGDMT -1.5	Audio Production Tools And Techniques	2	0	2	4

SECOND SEMESTER

SL. NO	PAPERS	TITLE OF THE PAPER	CREDIT PATTERN			CREDITS
			L	T	P	
1	PGDMT -2.1	Video Production Tools and Techniques	2	0	2	4
2	PGDMT -2.2	Advanced Web Designing Using Dreamweaver	2	0	2	4
3	PGDMT -2.3	Advanced Animation: Rigging and Animation	2	0	2	4
4	PGDMT -2.4	Visual Effects	2	0	2	4
5	PGDMT -2.5	PROJECT	0	1	3	4

DETAILED SYLLABUS OF THE PROGRAMME POST GRADUATE DIPLOMA IN MULTIMEDIA TECHNOLOGY (PGDMT)

FIRST SEMESTER

PGDMT 1.1: DIGITAL IMAGE EDITING

UNIT-1

Introduction to Photoshop: Creating a New File, Definition of Resolution, Pixel Selections, Color Mode, Bitmap Color Mode, Gray Scale Color Mode, RGB Color Mode, CMYK Color Mode, LabColor Mode. Bit mode (8bit, 16bit, 32bit and 64bit). Background content, Understanding Color Profile, Aspect ratio. Foreground & background, Changing Foreground and Background colors,

UNIT-2

Photoshop Tools: Move Tool, Marquees tool, Lasso tool, Magic Wand, Crop Tool, Eyedropper, Healing Brush, Paintbrush and Pencil, Clone Stamp,Using Brushes, Selecting the Brush Shape, History Brush, Eraser Tool, Paint Can and Gradient Tools, Blur, Sharpen, and Smudge Tools, Burn, Dodge, and Sponge Tools, Pen Tool and types, Adding and Removing Anchor points, Type Tool and Types, Path Tool, Shape Tool and types, 3D Tools, Hand Tool, Zoom Tool.

UNIT-3

Understanding Layers and Color Balance: What are Palettes, Layers, Adjustments, Color Channels, Color Picker, Color Swatches, uses of History option, Text tool bar, Menus, File, Edit, Image, Layer, Select, Filter, View, Window. Color Correction, Color Balance, Shadows, Mid-tones and Highlights, Levels, Curves, Feathering a Selections.

UNIT-4

Fundamentals of Effects: Introduction of layers, Creating & editing New layers, Adding a background image, Creating Layer Mask, Vector Masks, Adjustment Layers, Adding Fills and Gradients, Filling with paint bucket tools, Filling type with grading Fills, Applying Filters, Blur Filters, Render Filters, Sharpen Filters, Sketch Filters, Texture Filters, Lighting effects Other Special Filters, Printing your document, Save your file, Save file as a JPEG, TIFF, GIF, PNG.

Suggested Readings:

1. Anil Madan, *PMP - Technical Manager—RSG Media Systems | LinkedIn*. (n.d.).
2. Barstow Bruce & Martin Tony(2003). *Photoshop 7—Theultimate reference*. Wiley Dreamtech India Pvt Ltd
3. Faulkner, A., Gyncild, B., & Sparre, B. K. (2015). *Adobe Photoshop CC classroom in a book*. Peachpit Press.
4. Gyncild, B. (2012). *Adobe Photoshop CS6: classroom in a book*. Peachpit.
5. Gyncild, B. (2012). *Adobe Photoshop CS6: classroom in a book*. Peachpit.
6. Hillman, D. (1998). *Multimedia technology and applications*. Albany, NY: Delmar.
7. Mukherjee, D. P. (1998). *Fundamentals of computer graphics and multimedia*. PHI Learning Pvt. Ltd.
8. Steinmetz, R., & Nahrstedt, K. (2013). *Multimedia systems. Springer Science & Business Media*.

Practicals Based on Digital Image Editing Software: Adobe Photoshop

SL. No	Practicals
1	Creating Passport and Stamp size Photograph for competitive exams
2	Creating Simple text effects
3	Creating Image restoration
4	Converting white and Black photo into color photo
5	Digital scenery creation
6	Image manipulation in Photoshop
7	Creating story board
8	Creating website layout
9	Logo Design for an Automobile Company
10	Designing Business card

PGDMT 1. 2: COMPUTER GRAPHICS

UNIT-1

Introduction to CorelDraw : Introducing CorelDRAW, Vector Graphics & Bitmaps, The CorelDraw Screen, Docker Windows, Changing Magnification Levels, Viewing Modes, Undoing Mistakes, Changing Program Defaults. Creating a New Document, Saving a File, Opening an Existing File, Importing a File, Exporting a File, Switching Between Open Documents, Closing a File.Setting Up the Project, Setting Page Layout, Setting Page Size & Orientation, Inserting Additional Pages, Renaming Pages, Setting the Page Background, Setting Global Page Options, Creating a Customized Page Type.

UNIT-2

Drawing and Modifying Shapes: Drawing & Modifying Rectangles, Drawing & Modifying Ellipses, Drawing Polygons, Stars, Grids & Spirals, Drawing Other Basic Shapes, The Smart Drawing Tool, The Shape Tool, The Smudge Brush, The Roughen Brush, The Knife Tool, The Eraser Tool, The Free Transform Tool, The Virtual Segment Delete Tool, The Freehand Tool, The Bezier Tool, The Artistic Media Tool, The Pen Tool, The Poly line Tool, The 3 Point Curve Tool, The Connector Tool, The Dimension Tool, The Interactive Blend Tool, The Interactive Contour Tool , The Interactive Distortion Tool, The Interactive Drop Shadow Tool , The Interactive Envelope Tool, The Interactive Extrude Tool, The Interactive Transparency Tool, The Interactive Mesh Tool.

UNIT-3

Manipulating Objects, About Selections, Selection Modes, Selecting Objects, Moving Objects, Resizing Objects, Copying Objects, Deleting Objects, Rotating & Skewing Objects, Mirroring Objects. Arranging Objects, Changing the Stacking Order, Aligning Objects, Distributing Objects, Grouping Objects, Combining Objects, Shaping Objects, Positioning Objects. Changing Object Attributes, Editing Lines, Arrows, & Object Borders, Applying a Uniform Color Fill, Applying a Gradient Fill, Applying a Pattern Fill, Applying a Texture Fill, Applying a PostScript Fill, Applying a Mesh Fill, Copying Object Attributes, The Eyedropper & Paint bucket, Applying No Fill.

UNIT-4

Working With Text, Creating Artistic Text, Creating Paragraph Text, Formatting Text, Aligning Text, Editing Individual Characters, Creating Outline Text, Setting Spacing Parameters, Setting Tabs, Setting Indents, Creating Columns, Using Bullets, Using Drop Caps, Importing Text, Using the Writing Tools, Changing the Default Fonts, Using Text to Path. Colour Management Tools, Colour Models & Colour spaces, Preset Colour Palettes, Custom Colour Palettes, The Colour Viewer, The Uniform Fill Dialog Box. Using Layers, About Layers, Layer Visibility, Editing Layers, Renaming Layers, Reordering Layers.
Applying Effects: Introduction to power of Blends, Distortion, Contour Effects, Envelopes, Lens effects, Transparency, Creating Depth Effects, Power Clips, Creating Pictures for the Web, Printing.

Suggested Readings:

1. Bain, S. (2004). *CorelDRAW 12: the official guide*. Dreamtech Press.
2. Bouton, G. D. (2014). *CorelDRAW X7: The Official Guide* (11thed.). McGraw-Hill Education.
3. Maidasani, D. (2010). *CorelDRAW X4* (1sted.). Laxmi Publications.
4. Wilson, A. (2020). CorelDRAW Graphics Suite 2020

Practical's based on Computer Graphics: Software: Corel Draw

Sl. No	Practical's List
1	Symbols and icons
2	Visiting Card
3	2D/3D Logo Design
4	Geometric Line Art
5	Pamphlet Design
6	Brochure Design
7	Flat Character Designing
8	Text effects, Neon texts
9	Product Package Design
10	Calendar Designing

PGDMT-1.3: 2D ANIMATION

UNIT- 1

Introducing the Flash Interface, Adding Elements to the Stage, Duplicating Library Items, Introducing Keyframes, the Transform Tool &Tweening Creating Animations, Adding Audio, Swapping Symbols & Testing a Movie Using Graphic Symbols, Combining Animations into One Project, Creating & Arranging Buttons, Adding &Labeling Action Keyframes, Adding Behaviors to Buttons, Using the Publish Preview Command.

FlashFundamentals: Navigating the Stage Area, Accessing, & Organizing Panels Saving, Exporting & Testing Selecting a Flash Player Version for a New Project, Introducing Layers, Creating New Layers & Moving Items Between Layers, Customizing Keyboard Shortcuts & Locking Layers, Using Outline Mode, Layer Folders &Properties.

UNIT- 2

Drawing with Vectors : Comparing Vectors & Bitmaps, working with the Pen Tool, drawing a Heart Shape with the Pen Tool, Where to Put Points & How Far to Drag Handles Practicing Your Vector Drawing Skills, Flash Natural Drawing Tools Setting Up the Drawing Preferences. Exploring the Pencil Tool Options, Using the Line & Paint Bucket Tools Distinguishing Between Strokes & Fills.Modifying Vectors Using the Selection Tool, Snapping & Modifying Curves with the Selection Tool, Altering Drawings with the Selection Options, Using the Brush & Paint Bucket Tools to Fill Painting Using the Various Brush Modes.Working with a Stylus & a Tablet.Drawing with the Rectangle Tool, drawing with the Oval Tool, drawing with the PolyStar Tool, working with the Eye Dropper Tool, working with the Ink Bottle Tool, Working with the Eraser Tool.

UNIT- 3

Advanced Vector Drawing : Intersecting Shapes within a Single Layer, Using the Selection Tool, Creating Complex Shapes with Intersecting Lines, Combining Tools to Create Detailed Curves, Vector Drawing Techniques, Grouping Vector Shapes, creating& Arranging Groups Object-Based Drawing, Setting Colors in Flash. Introducing Advanced Color Selection, working with the Color Mixer, Creating Transparency & Sampling Colors, Using the Color Swatches Palette, Applying & Stylizing Strokes Adjusting Cap, Join & Other Stroke Properties, Applying & Transforming Gradients, Saving & Locking Gradients, choosing a Gradient Overflow, Adding Transparency to a Gradient. **Shape Tweening, Motion Tweening.**

UNIT- 4

Bitmaps in Flash : Importing Files to the Stage & Library File Compression Settings, Size Report & Use Count Compressing Individual Files, Importing an Image with a Transparent Background, Using Trace Bitmap to Change a Background to Vectors, Changing a Foreground Item to Vectors, Using the Optimize Curves Command, Grouping an Image & Using the Transform Tools Performing Transformations Numerically, Working with the Free Transform Options. Working with Bitmap Fills inside a Vector Shape. Using the Break Apart Command & the Magic Wand Tool.

Introduction to the Timeline: Introducing Frame-Based Animation, The Timeline Window, Understanding Keyframes, Animating Your Elements Using Keyframes, Practicing Your Animation Techniques, Using Onion Skin View, Facial Animation, Replacement Animation, Rotoscoping.

Using Text in Flash: Auto-Sizing, Auto-Wrapping, & Selecting Text Changing a Font, Picking a Color, & Checking Spelling Using Rulers, Guides, Grids, & Snapping Aligning, Distributing & Spacing Text Working with Device Fonts Editing Files with Missing Fonts, Anti-Aliasing Text for Better Quality & Readability, Paragraph & Character Formatting Using Text as a Design Element. Text on a Path, Guide Layers & the Transform Panel Symbol.Introducing Symbols, Creating & Reusing a Symbol Editing a Symbol in Place.Editing a Symbol in the Library, Modifying an Instance of a Symbol, Nesting Elements inside a Symbol, Adjusting the Color& Opacity of a Symbol. Deconstructing & Reordering Symbol Parts Taking Advantage of Logically Ordered Layers, Organizing the Library,Looking at Symbols as a Movie inside of a Movie.

Suggested Readings:

1. *40+ Adobe Flash ideas | flash, flash animation, adobe animate*. (n.d.). Pinterest.
2. *Adobe Animate CC - latest version free download*. (n.d.). Downloadastro.
3. Adobe Systems, & Adobe Creative Team. (2007). Adobe Flash CS3 professional. Peachpit Press.
4. Apps, G. P. (2019). *Adobe Animate CC 2018 Setup Flash & 2D Animation*. GetPCApps.Com.
5. Crowder, D. (2006). *Web Design With HTML/Flash/Javascript& E- Commerce Bible*. WileyIndia.
6. David, M. (2003). *Flash MX 3D graphics bible*. John Wiley & Sons, Inc..
7. *Flash Professional Online Training Courses | LinkedIn Learning, formerly Lynda.com*. (n.d.). LinkedIn.
8. *Free Adobe Flash Tutorial—Adobe Flash CS5.5 for Beginners*. (n.d.). Udemy.
9. Reinhardt, R., & Dowd, S. (2007). *Adobe flash CS3 professional bible (With CD)*. John Wiley & Sons.

Practical's based on 2D Animation: Software: Adobe Flash

Sl. No.	Practicals
1	Bouncing ball
2	Walk cycle
3	Creating buttons
4	Text animation
5	Creating Image gallery
6	Web banner animation
7	Creating web advertisements
8	Creating interactive website
9	Creating snow
10	Creating Fire animation

PGDMT 1.4: 3D MODELING AND ANIMATION

UNIT- 1

3D MODELLING : Introduction to various 3D modelling, working with symmetry, Editing components in orthographic view, editing components in perspective view, Poly editing techniques- Extruding, Bridging, Adding polygon to mesh, Split polygon faces, edge loops,

Mirror copying a mesh, Creasing and hardening edges on mesh, Sculpt a polygon mesh Poly Normal, Edge & bevel, Separating & combining geometry, NURBS, sub-D's.

UNIT -2

3D MODELLING TECHNIQUES : Using 2D reference sketches to model, , Image Planes, Sculpting, Retoplogy and poly modelling workflow, Polygon primitives, Modelling in shaded mode, Model symmetry, Drawing a polygon, Quads, Tris and nGons, Low Poly/High Poly modelling, Exporting the models from scene to scene for facilitating faster production flow

UNIT-3

TEXTURING : Introduction to texturing, Unfolding/Unwrapping UV mesh, Smoothing and relaxing a mesh, Interactively, fixing problem areas, Applying textures, Introduction to Maya Hypershade, Texturing, Materials, Normal mapping.

UNIT-4

ANIMATION AND RENDERING: Principles of animation, Keyframe Animation, Nonlinear Animation, GRAPH EDITOR, Introduction to Walks through, mental ray render, Mayav Hardware Renderer, Vector Renderer Settings, Arnold Renderer

Suggested Readings:

1. *15 Best Maya Books From Beginner To Advanced*. (2017, June 7).
2. Derakhshani, D. (2015). *Introducing Autodesk Maya 2016*. Indianapolis, IN: Autodesk Official Press.
3. Germano, Jana (2017). *Creating Environments in Maya.* And/Or Press Inc
4. King, R. (2014). *3D Animation for the Raw Beginner Using Maya* (1st ed.). Chapman and Hall/CRC.
5. *Maya Help: Basics*. (n.d.).
6. *Maya Help: Motion Graphics*. (n.d.).
7. *Maya Tutorials | Maya | Autodesk Knowledge Network*. (n.d.).
8. Meade, T., &Arima, S. (2007). *Maya 8: The Complete Reference* (1st ed.). McGraw-Hill/TAB Electronics.

9. Osborn, K. (2015). *Cartoon Character Animation with Maya: Mastering the Art of Exaggerated Animation*. Fairchild Books.
10. Patmore, C. (2003). *The complete animation course: the principles, practice and techniques of successful animation*. Barrons Educational Series Incorporated.

11. Roy, K. (2013). *How to Cheat in Maya 2014: Tools and Techniques for Character Animation* (1st ed.). Routledge.
12. Watkins, A. (2006). *Introduction to 3D Graphics & Animation Using Maya* (Graphics Series). Charles River Media, Inc..

Practical's based on 3D Modeling and Animation : Software: Autodesk Maya

Sl. No.	Practicals
Polygon Modelling	
1.	Coffee cup
2.	Skateboard
3.	Create a scene
4.	Apple
5.	Teapot
6. Exercise	Lantern
7. Exercise	Model of a castle
8. Exercise	Candle stand with table
NURBS Modeling	
9.	Cowboyhat
10.	Model ofachair
11. Exercise	Model ofaship
UV Mapping	
12.	texture a wooden box
13. Exercise	model of the hut
14. Exercise	interior of a house
Shading and Texturing	
15.	Ocean Shader
16.	Polygoncubeandapplythe texture ofanoldhouse
17.	Model of a bulband then apply multiple texturestoit
18.	Model ofahouse and apply texture
19. Exercise	Studytablewithobjects
Lighting	
20.	Candle
21.	PhysicalSunandSky effect applied to a scene
Animation	
22.	Path animation-NURBScurveandthesphere
23.	Bouncingball animation
24. Exercise	Pencil jumpingoutof thepencilstand
25. Exercise	Street scene/desert scene
26. Exercise	3d modelling character

PGDMT-1.5: AUDIO PRODUCTION TOOLS AND TECHNIQUES

UNIT-1

Introduction to Sound: Introduction to sound**,** Analog and Digital audio technology Digital sound files, different sound formats, what is Digital Audio & Overview of digital audio midi & digital audio, creating digital audio files, sound producing, sound extracting, Advantages and disadvantages of midi & digital, choosing between midi and digital audio. Sampling rate and pulse code modulation,

UNIT-2

Audio recording Processing: Audio recording, keeping track of your sound, testing and evaluation. 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,

UNIT-3

Fundamentals of Special Effects: 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

UNIT-4

Finalizing Audio files: Linking files, Sound for the World Wide Web, adding the sound to your multimedia project, production tips, finalize files, Compression and decompression of audio file, Burning the audio Cd, mp3, making the remix sound track with using all the special FX from the software, Folly studio, Exporting the files in diff formats, save in wav, mp3 etc,

Suggested Readings:

1. Atkins, I. K. (1983). *Source Music in Motion Pictures*. Fairleigh Dickinson Univ Pr.
2. Bernstein, C. (2000). *Film music and everything else!: Music, creativity and culture as seen by a Hollywood film composer*. Beverly Hills Calif.: Turnstyle Music Publ.
3. Foley, B. (2016). *Hugo &Rose*. St. Martin's Griffin.
4. KarelReisz, Gavin Millar. (2009). *Technique of Film Editing (2nd ed.).* Routledge
5. Savage, S. (2011). *The art of digital audio recording: A practical guide for home and studio*. Oxford University Press.
6. Self, D. (2010). *Small Signal Audio Design* (1st ed.). Focal Press.
7. Team, A. C. (2012). *Adobe Audition CS6 Classroom in a Book*. Adobe.

Practical's based on Digital Audio and Sound Recording Software: Gold wave

SL. No	Practicals
1	Creating New Narration.
2	Mixing Voice and Music.
3	Creating Songs Mixing Console
4	Creating Karaoke sounds
5	Noise Reducing
6	Applying Pan left and pan right
7	Creating Robot voice
8	Lip Synchronization
9	Creating a delay and eco effects
10	Exporting Audio files

SECOND SEMESTER

PGDMT 2.1: VIDEO PRODUCTION TOOLS AND TECHNIQUES

UNIT-1

Basics of Video Editing : Creating and configuring a new project, Display Format video, audio, Timecode, Frame rate, Capturing Format, Video, Audio, What is DV, HDV, DV-NTSC DV-PAL DV-SECAM, Standard and Widescreen format, uses of DVCPROHD, uses of Video tracks and Audio Tracks, Inserting and rearranging in the timeline, Importing files Images, Video and audio, Understanding images sizes, Using the Scale to Frame Size command, creating bins, Organizing and sorting clips, Creating sub clips ,Restoring offline clips, Creating and organizing sequences, uses of sequences, Dragging clips to the timeline, Trimming and rearranging in the timeline, Adding video and audio tracks.

UNIT-2

Fundamentals of Tools and Video Effects: Track Select Tool, Ripple Edit, Rolling Edit Tool, Rate Stretch Tool, Razor Tool, Slip Edit, Slide Edit, Hand Tool, Adding Video Transition- 3D Motion, Dissolve, Iris, Map, Page peel, Slide Special Effects, Stretch, Wipe, Zoom. Adding Video Effects-Adjustment, Blur and Sharp, Channel, Color Correction, Distort, Generate, Image Control, Keying, Noise and Gaian, Perspective, Stylize, Time, Transform, Utility. Adding audio transitions -Cross Fade, audio fade in and Fade out, Adding Audio Effects-Balance, Band pass, Base, Channel Volume, Fill left, Fill Right, Delay, Dynamics, Equalizer, Flanger. Preset Effects, Uses of Control Panel.

UNIT-3

Creating Titles and Exporting video Files : Creating and modifying titles, creating title with objects, Creating Default Still Title, Creating Default Rolling Title, Creating Default Crawling Title, Uses of Template, adding transitions and Video Effects to the titles, Creating Bars and Tones, Creating Black Video, Creating Color Matte, Creating Universal Counting Leader Creating Transparent Video and Its uses, Uses of Speed and Duration, Uses of Frame Hold Option, Exporting to stills Images Export to audio files, Export to video files- AVI, MPEG-1,2,4. FLV, SWF and Mobile Devices.Burning to CD or DVD.

UNIT-4

Basics of video making and Film Making: Basic art of filmmaking using currently available digital software/hardware tools. Overview of preproduction planning- program ideas, production models, Preproduction, Production and Post-Production activities – preparing a budget, presenting the proposal, Writing the script, Director's roles, procedures and Video editor, Visualization & sequencing, Shooting, Aesthetics of Editing, Video Editing-types. EDL Preparations, Editing Techniques- Continuity-Sequence-Dynamic.Linear and Non-Linear Editing.A-B roll & its advantage, Method of Video Effects and Video Transition, Chromo-Keying. Re- recording Video. Voice-over, Sync sound, audio mixing, Role of audio & effects, Mix and composite, Finding Music. Special effect. (Sound, Visual, Graphics and Animation), Titles, Film Screening, FT (Fit for Telecast) certificate, Certificate Approving, Marketing-getting sponsors. Publicity, Film Releasing.

Suggested Readings:

1. Adobe Systems (Ed.). (2013). *Adobe Premiere Pro CS6: The official training workbook from Adobe Systems*. Adobe Press.
2. Bolante, A. (2003). *Premiere 6.5 for Windows and Macintosh*. Peachpit Press.
3. Droblas, A., & Greenberg, S. (2007). *Adobe Premiere Pro Cs3 Bible* (With CD). John Wiley & Sons.
4. *Jarle'sDeadpool Handheld Camera Presets—PremierePro.net*. (n.d.).
5. *Langford, S. (2013). Digital audio editing: correcting and enhancing audio in Pro Tools, Logic Pro, Cubase, and Studio One. CRC Press.*
6. mysoftwarefree01. (2019). *Adobe Premiere Pro CC 2019* Free Download. *My Software Free*. https://mysoftwarefree.com/adobe-premiere-pro-cc-2019-free-download/
7. *Premier_And_Sound_Forge.pdf*.   (n.d.).
8. *Premiere Pro tutorials*. (n.d.).
9. Starks, J. L., Fehl, A., Hoisington, C., & Minnick, J. (2012). *Adobe Creative Suite 6: Introductory*. Cengage Learning.
10. Tickoo, S., &Malhotra, S. (2013). *Exploring Adobe Premiere Pro CS6*. Dreamtech Press.

Practicals based on Digital Movie Production Software**: Adobe Premier Pro**

SL. No	Practicals
1	Create a Story or Them using Images.
2	Trimming a given Clips and apply video transition effects.
3	Create a video console
4	Create a Video Montage
5	Create a Video Trailer
6	Applying Video effects given clips
7	Creating a Multi-camera display
8	Editing a green/blue matte video footage with key effects.
9	Creating a Default still and rolling titles
10	Creating sub titles

PGDMT 2.2: ADVANCED WEB DESIGNING USING DREAMWEAVER

UNIT-1

Defining a Web Site. Creating a Web Site. Creating a Basic Web Page and Page Properties. Building a Web Site.The Site Panel and Templates. Adding Content to Web Pages. Creating HTML documents. Adding structure tags to content. Design Parameters. Purpose and Scope of Using websites.

UNIT -2

List Formats and Graphic File Types. Inserting a Table and Adjusting Table Properties. Using Graphics in Table Cells and Nested Tables. Using Table Layout View. Creating and Using a Repeating Region Template.

UNIT -3

Working with Links. Creating Internal and External Hyperlinks. Creating an Image Map and Anchors. Enhancing Navigation in a Site.Framesets. Reusable Navigation Bars. Managing and Uploading a Web Site. The Site Map. Overview of Popular websites. Overview of Government websites.

UNIT–4

Dream Weaver Interface: choosing a workspace, document window & toolbars, the document window, the launcher, the insert panel & tool sets, the document toolbar, the property inspector, dock able floating panels, using contextual menus, Basics.

Defining the site, creating and saving documents, inserting images with assets panel, adding text; aligning page elements, modifying page properties, creating links with text and images, adding keyword & description meta tags, preview in browser, define a secondary browser **Linking,** link with point to file, linking to new source files, browse for file and link history, anchor links email links, file links, image maps. **Typography**, html text formatting, font lists, text alignment, html lists, color schemes, text in tables, flash text, character objects **Tables,** insert and modify a table fixed width tables, relative width tables, hybrid table, insert tabular data, sort table data **Rollovers**, simple rollovers - insert rollover, simple rollover - swap image behavior, multiple-event rollovers, flash buttons.

Suggested Readings:

1. Adobe Systems (Ed.). (2013). *Adobe Premiere Pro CS6: The official training workbook from Adobe Systems*. Adobe Press.
2. Bolante, A. (2003). *Premiere 6.5 for Windows and Macintosh*. Peachpit Press.
3. Droblas, A., & Greenberg, S. (2007). *Adobe Premiere Pro Cs3 Bible* (With CD). John Wiley & Sons.
4. *Jarle'sDeadpool Handheld Camera Presets—PremierePro.net*. (n.d.).
5. *Langford, S. (2013). Digital audio editing: correcting and enhancing audio in Pro Tools, Logic Pro, Cubase, and Studio One.* CRC Press.
6. mysoftwarefree01. (2019). *Adobe Premiere Pro CC 2019* Free Download. *My Software Free*. https://mysoftwarefree.com/adobe-premiere-pro-cc-2019-free-download/
7. *Premier_And_Sound_Forge.pdf.* (n.d.).
8. *Premiere Pro tutorials*. (n.d.).
9. Starks, J. L., Fehl, A., Hoisington, C., & Minnick, J. (2012). *Adobe Creative Suite 6: Introductory*. Cengage Learning.

10. Tickoo, S., &Malhotra, S. (2013). *Exploring Adobe Premiere Pro CS6*. Dreamtech Press.

Practicals based on Advanced Web Designing Using DreamweaverSoftware: Adobe Dreamweaver

SL. No.	Practicals
1	Creating a New Site Using Dreamweaver
2	Creating new template page from Dreamweaver
3	Inserting an image (from local hard disk).
4	Creating web page flash Buttons
5	Creating web page with background color
6	Using Dreamweaver Creating web page with texts, paragraph and its attributes.
7	Using Dreamweaver Creating web page with ordered, unordered list. Nested list.
8	Using Dreamweaver Creating web page with tables. Nested Tables,
9	creating any Bike showroom website Using Dreamweaver
10	creating any intuition website Using Dreamweaver

PGDMT- 2.3: ADVANCED ANIMATION: RIGGING AND ANIMATION

UNIT-1

Introduction to Animation : Introduction to animation, Heritage of Animation, Dawn of Digital Animation, Digital effects of 3D Animation, Rotoscope to Motion Capture, Becoming an Animator, Becoming an Actor, becoming a Storyteller, Becoming a Creative Practitioner, Applications of Animation- Entertainment, Advertisement, Education, Medical Practise and Engineering.

UNIT-2

Principles of Animation: Basic Principles in animation, Squash and stretch, Anticipation, Staging, Straight ahead and pose to pose, Follow through and overlapping action, Slow in and slow out, Arcs, Secondary action, Timing, Exaggeration, Solid drawing, Appeal, Mass and weight, Character acting, Volume, Line of action, Path of action, Walk cycles-animal and human.

UNIT-3

Tools of Animation: Tools of Animation The use of Live Action in Animation: Humans and Animals-Quick Studies from real life, Sequential movement drawing, Caricaturing the Action, Thumbnails, Drama and psychological effect, Motion Studies, Drawing for motion, The Body language, Facial expressions and Lip sync, Introduction to traditional and digital

equipment- The animator's drawing tools, The animation table (light box, Field charts, Exercises and warm ups on pegging sheet, Line tests, The exposure sheet ("X" sheet)

UNIT-4

Production Pipeline: 3D Animation Pipeline Preproduction- Idea, Story, R&D, Script to screenplay, Storyboards. Production-Layout, 3D Model, Texturing(Surfacing), Rigging/setup, Animation, 3D Visual effects, Lighting and Rendering and Post production–Colour Correction, Audio Video Editing, Final Output.

Suggested Readings:

1. *Adobe Dreamweaver CC 2020 20.1 Free Download*. (2020, May 28).
2. Adobe Dreamweaver CC 2020 Free Download. (2019, October 26). *IGet into PC*. https://igetintopc.com/adobe-dreamweaver-cc-2020-free-download/
3. *Adobe Dreamweaver—Latest version free download*. (n.d.). Downloadastro.
4. Canemaker, J. (1982). *Treasures of Disney animation art*. Artabras.
5. *Download Adobe Dreamweaver CC 2020 20.0.0.15196 (Free) for Windows*. (n.d.).
6. Goldberg, E. (2008). *Character Animation Crash Course!*.Silman-James Press.
7. Maivald, J. J. (2013). *Adobe Dreamweaver CC: classroom in a book*. Pearson Education.
8. Laybourne, K., Canemaker, J., & Griffin, G. (1998). *The animation book: a complete guide to animated filmmaking--from flip-books to sound cartoons to 3-D animation*. New York: Three Rivers Press.
9. Patmore, C. (2003). *The complete animation course: the principles, practice and techniques of successful animation*. Barrons Educational Series Incorporated.
10. Thomas, F., & Johnston, O. (1995). *The illusion of life: Disney animation*. New York: Hyperion.
11. White, T. (1988). *The animators workbook: Step-by-step techniques of drawn animation*. New York: Watson Guptill Publications.
12. Whitaker, H., Halas, J., &Sito, T. (2009). *Timing for Animation*. Elsevier/Focal Press.
13. Williams, R. (2009). *The Animator's Survival Kit: A Manual of Methods, Principles and Formulas for Classical, Computer, Games, Stop Motion and Internet Animators* (3rd ed.). Faber.
14. Williams, R. (2012). *The animator's survival kit: a manual of methods, principles and formulas for classical, computer, games, stop motion and internet animators*. Macmillan.

Practical's based on Advanced Animation: Animation and Rigging : Software: Autodesk Maya

SL. N0.	Practicals List
1	Flipbook
2	Blendshapes
3	Cartoon character rigging
4	Human Rigging –Hands
5	Human Rigging – Leg
6	Human Rigging – Torso
7	Simple pendulum
8	Bouncing Ball (Soft and Hard)
9	Vanilla Walk Cycle
10	Run Cycle

PGDMT 2.4: VISUAL EFFECTS

UNIT-1

Introduction to Adobe After Effects : Introduction, User interface, Creating and using compositions, time line, Looping animation, editing motion path, Creating the arrivals Bound Effects, Importing Footage and Editing, Data Management, Key-framing and Tweening, Workflow, Exporting and File Formats, Masks, Layer Modes, Basic Effects, Special effect Techniques.

UNIT-2

Compositions, Importing project assets, Adding layers to timeline, Adding text layer, Setting keyframes, Previewing Animations, Motion Paths and Interpolation, Animating and moving anchor points, Effect and presets, Creating and moving shape layer, advance effects, Motion blur, Parenting, Precompositions, Adding Precomp to main compositions Non-destructive Workflow, Time stretching and remapping.

UNIT-3

Introduction to Rotoscopy and Techniques, drawing mask using pen tool, Editing Mask, Complex shape masking, Rotoscopy for color correction, Transferring Mask, Animating Mask, controlling edge and opacity of Mask, Keyframe data, Complex rotoscope techniques, integrating rotoscope footage with background plate, Chroma key, controlling spills using depspill Bias and screen replace.

UNIT-4

3D Layers, Masks, Null objects, controlling camera with null object, Graph editor, tracking in after effects, One-point tracking, two-point tracking, four-point tracking, Video stabilization, adding length to compositions, Color correction, Audio in after effects, Rendering in After effects, Introduction to 3rd Party effects/simulations

Suggested Readings:

1. Brinkmann, R. (2008). *The art and science of digital compositing: Techniques for visual effects, animation and motion graphics*. Morgan Kaufmann.
2. Foster, J. (2014). *The green screen handbook: real-world production techniques*. CRC Press.
3. Jeffrey, O., & Susan, Z. (2010). *The VES Handbook of Visual Effects*.
4. Mattingly, D. B. (2011). *The Digital Matte Painting Handbook*. John Wiley & Sons.
5. Okun, J. A., & Susan Zwerman, V. E. S. (Eds.). (2020). *The VES handbook of visual effects: industry standard VFX practices and procedures*. Routledge.

Practicals based on Visual Effects :Software: Adobe After Effects

Sl. No.	Practicals
1	Deinterlace video and color correction
2	Camera shake
3	Color Keying
4	Basic Sky replacement
5	Gun blow effects
6	Video title animation/Motion graphics
7	Rotoscopy
8	3D Camera tracking
9	Burning match stick animation
10	Compositing 3D object to live background environments

PGDMT 2.5: PROJECT WORK

NOTE: Project work can be done with two or three candidates.

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