Syllabus for Web Design & JavaScript

Name of the Course : MUTIMEDIA TECHNOLOGY Name of the Subject: **Web Design & JavaScript**		
Course Code :		Semester: Fourth
Duration: 15 weeks		**Maximum Marks: 100**
Teaching Scheme :		**Examination Scheme :**
Theory :3 contact hours/week.		***Internal Examination : 30 Marks***
Tutorial : Nil contact hour/week		Class Test : 20 Marks
Practical : Web Design & JavaScript Lab		Teacher's Assessment: 10 Marks
Credit : 3		***End Semester Examination : 70 Marks***
Aim:		
1.	To develop the skill & knowledge in JavaScript-enhanced web page.	
2.	Students will understand the knowhow and can function either as an entrepreneur or can take up jobs in the multimedia and Web site development studio and other information technology sectors.	
Objectives - The student will be able to		
1.	Definition, Evolution and Nature of JavaScript	
2.	Introduction to Jump-Starting JavaScript	
3.	Script Writing Basics;	
4.	Using Names, Objects, and Methods	
5.	Method of Adding Interactivity to a Web Page	
6.	Creating Dynamic Web Pages; Concept of Java Scripting Your Forms	
Pre-Requisite -		
1.	Basicknowledge in HTML tags & skill of creating web pagesshould be known	
2.	Knowledge of basic Computer hardware & softwareis also necessary.	
3.		

Content (Name of Topic)		**Periods**	
Group - A			
Module 1	**The Nature of JavaScript**		
	The Evolution of Scripting Languages, JavaScript -Definition, Programming for Non-Programmers?Comparison between Java, JavaScript & VB Script	6	
Module 2	**Jump Starting JavaScript**		
	Introduction to Objects, Methods, and Events, Events and Program Flow, Jumping Right In,Running Scripts.	6	
Group - B			
Module 3	**Script Writing Basics**		
	Enhancing HTML Documents with JavaScript, The Quintessential Building Blocks, Script Mechanics	6	
Module 4	**Using Names,Objects and Methods**		
	Names and References in JavaScript,Built-in Objects,Home-Built Objects,The Hierarchy of Names,Using Methods,Operators and Variables,Keywords, Functions, Object interaction.	6	

Group - C			
Module 5	**Adding Interactivity to a Web Page**		
	Controlling Script Flow,Storing Tasks within Functions,Using Conditional Statements for Decision Making,if Statements,if-else Conditional Statements,Using the Date Object,for Conditional Statements,while Conditional Statements,break and continue Statements,with Statements,Creating Functions in JavaScript,Declaring a Function,Designing a Simple Function.	6	
Module 6	**Creating Dynamic Web Page**		
	Changing Pages Based on Time and Date, Displaying the Quote of the Day, Using Arrays, Constructing the Quotes Script, Considerations When Accessing External Files, Changing the Background Color through a Random Number, Turning the Color Generator into a Function, Using the Image and Area Objects, Creating an Image Object, Creating an Area Object, Selecting a Guide.	9	
Group - D			
Module 7	**Java Scripting Your Forms**		
	Basic Script Construction, Talking to Your Form Objects, Organizing Your Objects and Scripts,Field-Level Validation, Check Required Fields ,Validate Zip Code, Automated Formatting,Format Phone, Format Money, Automatic Calculation, Calculate Expiration Date, Calculate Amount	6	
	Total	45	

EXAMINATION SCHEME

Internal Examination : Marks - 30 Marks on Class Test : 20
Final Examination : Marks - 70 Teacher's Assessment : 10

Group	Module	Objective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1,2	6	Any Twenty	1	20×1=20
B	3,4	4			
C	5,6	8			
D	7	7			
Group	Module	Subjective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1,2	2	Any Five TakingAt Least One from Each Group	10	5 ×10 =50
B	3,4	2			
C	5,6	2			
D	7	2			

Note 1: Teacher's assessment will be based on performance on given assignments & quizzes.
Note 2: Assignments may be given on all the topics covered on the syllabus.

Text Books		
Name of Authors	Title of the Book	Publisher
Lee Purcell, Mary Jane Mara	The ABCs of JavaScript	BPB Publication
Douglas Crockford	JavaScript: The Good Parts,2nd Edition	O'Reilly
Fritz Schneider,Thomas Powell	JavaScript : The Complete Reference 2nd Edition	Tata McGraw - Hill Education
David Flanagan	JavaScript: Pocket Reference 3rd Edition	O'Reilly
Reference Books		
Danny Goodman Michael Morrison Paul Novitski Tia GustaffRayl	**Javascript** Bible, 7th Edition	Wiley India Pvt Ltd
Kogent Learning Solutions Inc	Web Technologies Black Book: HTML, **JavaScript**, PHP, Java, JSP, XML and AJAX	Dreamtech Press
Ivan Bayross	Web Enabled Commercial Application Development Using HTML, JavaScript, DHTML (With CD) and PHP	BPB Publication

Syllabus
For
Multimedia Technology-I (Audio & Video)

Name of the Course : MUTIMEDIA TECHNOLOGY Name of the Subject: **Multimedia Technology-I (Audio & Video)**	
Course Code :	Semester: Fourth
Duration: 15 weeks	**Maximum Marks: 100**
Teaching Scheme :	**Examination Scheme :**
Theory :3 contact hours/week.	***Internal Examination : 30 Marks***
Tutorial : Nil contact hour/week	Class Test : 20Marks
Practical : Multimedia Technology-I Lab	Teacher's Assessment: 10 Marks
Credit : 3	***End Semester Examination : 70 Marks***

Aim:	
1.	To develop the knowledge & skill in Multimedia Audio & Video Technology
2.	Students will understand the knowhow and can function either as an entrepreneur or can take up jobs in the multimedia, Web site development studio, video studios, post production and edit set-up of film industry.
Objectives - The student will be able to	
1.	Role of sound component in multimedia, Basics of acoustics
2.	Concept of digital sound, its generation and sound editing software
3.	Sound recording and playing
4.	Utility of motion video component in multimedia
5.	Basics of Motion Video, Concept of motion video technology
6.	Video Capture, concept of digital videoand editing
Pre-Requisite -	
1.	Basicknowledge in sound & videoshould be known
2.	Knowledge of basic Computer hardware & softwareis also necessary.
3.	

Content (Name of Topic)		**Periods**	
Group - A			
Module 1	**Importance of Audio Component in Multimedia**		
	Why is audio component important in Multimedia Development? Sound-its definition, How sound is originated?	3	
Module 2	**Basics of Acoustics**		
	Frequency, Amplitude, Period, Waveform, Audible range, Dif. Frequency range -ultrasonic, Infrasonic, Audible range, Dynamic Range of Audible Sound,Sound Storage.	6	
Group - B			
Module 3	**Digital Representation of Sound**		
	Digital Representation of Sound, PCM Conversion technique, sampling rate, resolution and quality of digital sound, sound file format, Digital audio and MIDI format, file size calculation.	6	
Module 4	**Sound Recording and play back**		

	Basics of sound recording, Hardware Requirements (Microphones, Amplifier, Speakers, SoundBlastercard etc.),Types of CD & CD Driver	6	
Group - C			
Module 5	**Importance of Video in Multimedia**		
	Why is video component important in Multimedia Application? Principles of motion video,Definition of Video, How video works.	6	
Module 6	**Basics of Motion Video**		
	Video Formats: Lines, Field, Frame, Raster Scanning-Interlace, Non-interlace, Frame rate, Aspect ratio, Broadcast video standard, Sources of motion picture, Play video on PC, Motion Video Technology- Video Camera, Color Video – Luma& Chroma.	6	
Group - D			
Module 7	**Video Capture and Digital Video**		
	Basics of video capture: i)Best Capture, ii)Just Capture, Capture Card, Concept of Digital Video,Video File Formats, CODECs, Conversion from AVI to MPEG.	6	
Module 8	**Video Editing**		
	Motion Video Editing –Definition, Types of Video Editing- i) Linear Editing , Edit decision list,ii) Non-linear Editing, its basic functions, working with Video Editing Software	6	
	Total	45	

EXAMINATION SCHEME

Internal Examination : Marks - 30 Marks on Class Test : 20
Final Examination : Marks - 70 Teacher's Assessment : 10

Group	Module	Objective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1,2	6	Any Twenty	1	20×1=20
B	3,4	4			
C	5,6	8			
D	7,8	7			
Group	Module	Subjective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1,2	2	Any Five TakingAt Least One from Each Group	10	5 ×10 =50
B	3,4	2			
C	5,6	2			
D	7,8	2			

Note 1: Teacher's assessment will be based on performance on given assignments & quizzes.
Note 2: Assignments may be given on all the topics covered on the syllabus.

Text Books		
Name of Authors	Title of the Book	Publisher
Jose Lozano	Multimedia – Sound & Video	Prentice Hall,1998
John Villamil-Casanova, Louis Molina	Multimedia – An Introduction	Prentice Hall,1995
Gokul. S	Multimedia Magic	BPB Publication, 1995
Tay Baughan	Multimedia making it work	Tata Mcgraw-H
Reference Books		
Judith Jeffcoate	Multimedia in Practice - Technology & Applications	Prentice Hall,1995
AndressHolzinser	Multimedia Basics	Willey India

Syllabus for Video Editing and Compositing

Name of the Course : MUTIMEDIA TECHNOLOGY Name of the Subject: **Video Editing and Compositing**		
Course Code :		Semester: Fourth
Duration: 15 weeks		**Maximum Marks: 100**
Teaching Scheme :		**Examination Scheme :**
Theory:3 contact hours/week.		***Internal Examination : 30 Marks***
Tutorial : 1 contact hour/week		Class Test : 20 Marks
Practical : Video Editing & Compositing Lab		Teacher's Assessment: 10 Marks
Credit : 3		***End Semester Examination : 70 Marks***
Aim:		
1.	To develop the knowledge skill in Video Editing.	
2.	Students will understand the knowhow and can function either as an entrepreneur or can take up jobs in the multimedia, Web site development studio, video studios, post production and edit set-up of film industry.	
Objectives - The student will be able to		
1.	Definition, Evolution and Principles of Editing	
2.	Introduction to Continuity Editing	
3.	Methods of Editing;	
4.	Analog to Digital Conversion, Terms used in Editing	
5.	Concept of Post Production	
6.	Concept of Compositing and video editing tools	
Pre-Requisite -		
1.	Basic knowledge in motion video and editing should be known	
2.	Knowledge of basic Computer hardware & softwareis also necessary.	
3.		

Content (Name of Topic)		**Periods**	
Group - A			
Module 1	**Introduction to Video Editing**		
	What is video editing? Evolution of Editing, Elements of Classical Editing, Principles of Editing	6	
Module 2	**Continuity Editing**		
	Continuity editing, common conventions of continuity-Establishing Shot, Shot Reverse Shot, Eye line Match,180°degree rule,30°degree rule, Cutting an action, Contiguous space, Non-contiguous space.	6	
Group - B			
Module 3	**Methods of Editing**		
	Cross cutting,Action cutting,Jump Cuts,Cut away,Transition,Work Flow- Definition, Function of Editing, Assemble Editing, Insert Editing, Types of editing: i)Linear editing, ii)Non-Linear editing, Methods of Editing- i)Offline Editing, ii)online editing	6	
Module 4	**Analog to Digital Conversion**		

	Basics of Video Capture, Essential components of Video Capture –Frame Rate, Aspect Ratio, Video Size,Video Capture Card,Fire wire (IEEE 1394)	3	
Group - C			
Module 5	**Terms used in Video Editing**		
	Video Scanning-Interlace & Non-interlace, Broadcast Standards. Video Tape Format-Composite video,Component video,CODEC,MPEG, Several MPEG formats,Video file Types	6	
Module 6	**Post Production Basics**		
	Objectives of Post Production, Steps-View Rush, Log Rush, Paper Edit, First Assembly, Rough Cut,Fine Cut, shot flow, shot composition, framing or shot length	6	
Group - D			
Module 7	**Basics of Compositing**		
	Compositing-Definition and other fundamentals, Basic Procedure, Physical Compositing, Background Projection, Matting, Advantages of Digital Mattes, Chroma Key Compositing	6	
Module 8	**Video Editing Tool**		
	Use of NLE tool-Project setting, Creating a New Project, Tools for Editing, Rough Cut Editing, Role of Editor, Graphic animation for Video Production, Method of Editing, Picture in Picture,Title making, Working with Transition, Visual Effects, Colour Correction, Different types of video output	6	
	Total	45	

EXAMINATION SCHEME

Internal Examination : Marks - 30 Marks on Class Test : 20
Final Examination : Marks - 70 Teacher's Assessment : 10

Group	Module	Objective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1,2	6	Any Twenty	1	20×1=20
B	3,4	4			
C	5,6	8			
D	7,8	7			
Group	Module	Subjective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1,2	2	Any Five TakingAt Least One from Each Group	10	5 ×10 =50
B	3,4	2			
C	5,6	2			
D	7,8	2			

Note 1: Teacher's assessment will be based on performance on given assignments & quizzes.
Note 2: Assignments may be given on all the topics covered on the syllabus.

Text Books		
Name of Authors	Title of the Book	Publisher
Sonja Schenk	Digital Non-Linear Desktop Editing	-
Michael Rubin	Nonlinear - A Field Guide to Digital Video and Film Editing	
Ron Brinkmann	The Art and Science of Digital Compositing	
Reference Books		
Matt Kloskowski	Photoshop Compositing Secrets: Unlocking the Key to Perfect Selections and Amazing Photoshop Effects for Totally Realistic Composites	
Lee Lanier	Professional Digital Compositing: Essential Tools and Techniques	

Syllabus for Cel & 2D Animation

Name of the Course : MUTIMEDIA TECHNOLOGY Name of the Subject: **Cel& 2D Animation**		
Course Code :		Semester: Fourth
Duration: 15 weeks		**Maximum Marks: 100**
Teaching Scheme :		**Examination Scheme :**
Theory:3 contact hours/week.		***Internal Examination : 30 Marks***
Tutorial : Nil contact hour/week		Class Test :20 Marks
Practical : Cel& 2D Animation Lab		Teacher's Assessment: 10 Marks
Credit : 3		***End Semester Examination : 70 Marks***
Aim:		
1.	To develop the skill & knowledge in Cel& 2D Animation.	
2.	Students will understand the knowhow and can function either as an entrepreneur or can take up jobs in the multimedia and animation industry, video studios, edit set-up and other sp.effects sectors.	
3.		
Objectives - The student will be able to		
1.	Define the history, application and benefits of animation	
2.	Concept of various animation technique	
3.	Visualize Concept of traditional animation	
4.	Development the method of 2D computer animation	
5.	Various image manipulation technique and concept of animation process work flow	
Pre-Requisite -		
1.	Basic drawing skill, visual storytelling and concept of moving images should be known.	
2.	Knowledge of basic Computer hardware & softwareis also necessary.	
3.		

Content (Name of Topic)		**Periods**	
Group - A			
Module 1	**Introduction to Animation**		
	Definition of Animation - History of Animation –Application of Animation in Graphics-Benefitsof Animation –Application of Animation in Multimedia.	6	
Module 2	**Principles of Animation**		
	The Power and principles of motion - Principles of Animation - Survey of animation styles –Visual storytelling -Visual composition	6	
Group - B			
Module 3	**Animation Techniques**		
	Basic principle – Animation Techniques: i) Cel Animation –ii) Computerised Animation -Role of computer in Graphics & Animation. Basic Types of Animation: Real time and Non-real time animation, 2D Graphics, 3D Graphics	6	
Group - C			

Module 4	**Cel Animation**		
	Concept of traditional cel Animation-key frames-tweens or in between frames-exposure sheet-master artists and junior artists-use of light tables & punching machines-creation of cell animation	9	
Module 5	**2Dimensional Animation**		
	Concept of 2D computer animation – Sprite Animation: Process, Advantages & Disadvantages of Sprite animation – Rendered animation: Rendering-Process and examples of rendered animation	6	
Group - D			
Module 6	**Image Manipulation Technique**		
	Tweening-Warping-Morphing-Walk Cycle- Colour Cycling-Spatial Transformation-Image Translation—Image Rotation-Image Scaling-Key framing-Lofting-Lighting-Revolving-Skin orunskin.	6	
Module 7	**Animation Process Flow Chart.**		
	Conceptualizing – Storyboarding – Identifying key frames – Decision making – Process planning - Animation Development	6	
	Total	45	

EXAMINATION SCHEME

Internal Examination : Marks - 30 Marks on Class Test : 20
Final Examination : Marks - 70 Teacher's Assessment : 10

Group	Module	Objective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1,2	6	Any Twenty	1	20×1=20
B	3	4			
C	4,5	8			
D	6,7	7			
Group	Module	Subjective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1,2	2	Any Five Taking At Least One from Each Group	10	5 ×10 =50
B	3	2			
C	4,5	2			
D	6,7	2			

Note 1: Teacher's assessment will be based on performance on given assignments & quizzes.
Note 2: Assignments may be given on all the topics covered on the syllabus.

Text Books		
Name of Authors	Title of the Book	Publisher
Vikas Gupta	Comdex Multimedia And **Animation** Course Kit	Dreamtech Press
Francis Glebas	Directing the Story: Professional Storytelling and Storyboarding Techniques for Live Action and **Animation**	Focal Press
Kit Laybourne	The **Animation** Book: A Complete Guide to Animated Filmmaking--From Flip-**Books** to Sound Cartoons to 3- D **Animation**	Three Rivers Press (ca) (1998)
Student Aid Publications	Hot Careers in **Animation**& VFX	Student Aid Publications
Reference Books		
Tom Bancroft, Glen Keane	Creating Characters with Personality: For Film, TV, **Animation**, Video Games, and Graphic Novels	Watson-Guptill Publications
Ed Hooks	Acting for Animators	Routledge
Pakhira K Malay	Computer Graphics Multimedia &Animation	Phi Learning Pvt. Ltd
Chris Patmore	The Complete **Animation** Course: The Principles, Practice and Techniques of Successful **Animation**	Barron's Educational Series
David Geary	Core HTML5 Canvas: Graphics, **Animation** and Game Development	Pearson

Syllabus for:Web Design & JavaScript Lab

Name of the Course: Diploma in Multimedia Technology.

Course Code:	**Semester:Fourth** (All Modules should be completed in 4th semester. Evaluation may be done by continuous assessment process and by External Examiner in end semester)
Duration: Seventeen weeks/Semester	**Full Marks:**100
Teaching Scheme:	**Examination Scheme:**
Theory : Nil hrs./week	Continuous Internal Assessment Marks:50
Tutorial : Nil hrs./week	Attendance-10,Lab Notebook-15,Regular Performance-25
Practical: 4 hrs./week	ExternalAssessment Marks:50
Credit :3	Sessional -20,On spot Job-20,Viva Voce-10

Aim: To impart practical knowledge in Web Design &JavaScript related with the study of Multimedia Technology.

Objective: Student will able to

Sl. No	
1	Develop the concept of JavaScript characteristics, common JavaScript programming
2	Be acquainted with Jump-starting JavaScript,Objects,Methods,Events,Program Flow,Jumping Right in,Running Scripts.
3	Develop the concept of Script wring basics.
4	Working with using Names, Objects and Methods
5	Develop the concept of adding interactivity to web pages
6	Working with Dynamic Web Pages
7	Generation of JavaScripting Your Forms.

Pre-Requisite: Nil

Sl.No	
1	Knowledge of basic web page design is necessary.
2	Basic concept of HTML codes should be known.

Contents: Total Periods: 60(15Weeks)+ Internal Assessment(2Weeks) =60(17 Weeks)		Hrs./Unit	Marks
Module : 1	**1.0 Introduction to JavaScript.** 1.1 Origins of JavaScript 1.2 JavaScript Characteristics 1.3 JavaScript and Common Programming Concepts 1.4 Java and JavaScript	04 periods	
Module :2	**2.0 Working with Variables and Data.** 2.1 Communicating with the User. 2.2 Using Data More Than Once: Variables, JavaScript Reserved and Keywords.	04 periods	
Module : 3	**3.0 Functions, Methods, and Events** 3.1 Methods as Functions 3.2 Conditional Operators 3.3 Defining a Function 3.4 Calling a Function 3.5 The confirm() Method 3.6 The confirm() Method and Forms 3.7 User Events and JavaScript Event Handlers	08 periods	

Module : 4	**4.0 Controlling Program Flow** 4.1*The if... else* Statement 4.2 The conditional Statement 4.3 The/or Statement 4.4The *break* Statement. 4.5The *continue* Statement 4.6The Modulus Operator 4.7Using *continue* in a *while* Loop 4.8 The switch case Statement 4.9 The *do...while*	08 periods	
Module : 5	**5.0 The JavaScript Object Model** 5.1 The JavaScript Object Hierarchy Model 5.2 Commonly Used Objects 5.3 The windowObject 5.4 The withStatement. 5.5 The documentObject 5.6 The history object 5.7 The location Object	08 periods	
Module : 6	**6.0 JavaScript Language Objects** 6.1JavaScript Language Objects, 6.2 The string Object, 6.3 Additional *String* Object Methods, 6.4 Evaluating Strings, 6.5 The *Array* Object, 6.6 The *Date* Object, 6.7 Setting and Extracting Time Information, 6.8 The *Math* Object.	08 periods	
Module : 7	**7.0 Developing Interactive Forms** 7.1Form Controls, 7.2 *form* Objects, 7.3 *button Object,* *7.4 checkbox* Object, 7.5 the text and text areaObjects, 7.6 The *radio button* Object, 7.7 The *select* Object.	04 periods	
Module : 8	**8.0 Controlling Frames in JavaScript** 8.1 Frames and Targets, 8.2 Frames in JavaScript, 8.3 Changing Two or More Frames, 8.4 Frames and Variables, 8.5 Targeting Windows	04 periods	
Module : 9	**9.0 Client-Side JavaScript** 9.1 Image Maps, 9.2 Adding Script to an Image Map, 9.3 The *navigator* Object	04 periods	
Module : 10	**10.0 Custom JavaScript Objects** 10.1 Custom Object Case Study, 10.1 Creating a JavaScript Object: The Constructor, 10.2 Creating an Instance of a Custom Object, 10.3 Creating Object Methods, 10.4 Creating Functions for Your Objects.	08 periods	
	Total	**60 periods**	

Text Books:			
Name of Authors	Title of the Book	Edition	Name of the Publishers
Lee Purcell, Mary Jane Mara,	The ABCs of JavaScript		BPB Publication
Ivan Bayross	Web Enabled Commercial Application Development Using HTML, **JavaScript**, DHTML (With CD) and PHP		BPB Publication
Douglas Crockford	JavaScript: The Good Parts	2nd Edition	O'Reilly
Kogent Learning Soln.Inc.	Web Technologies Black Book: HTML, **JavaScript**, PHP, Java, JSP, XML and AJAX		Dreamtech Press
Danny Goodman Michael Morrison Paul Novitski Tia GustaffRayl,	**Javascript** Bible	7th Edition	Wiley India Pvt Ltd
Reference Books:			
Name of Authors	Title of the Book	Edition	Name of the Publisher
Fritz Schneider, Thomas Powell	JavaScript : The Complete Reference	2nd Edition	Tata McGraw - Hill Education
David Flanagan	JavaScript: Pocket Reference	3rd Edition	O'Reilly
SI. No. Question Paper setting tips			
A			
B			

Syllabus for:Multimedia Technology-I(Audio & Video) Lab

Name of the Course: Diploma in Multimedia Technology.

Course Code:	**Semester:Fourth** (All Modules should be completed in 4th semester. Evaluation may be done by continuous assessment process and by External Examiner in end semester)
Duration: Seventeen weeks/Semester	**Full Marks:**100
Teaching Scheme:	**Examination Scheme:**
Theory : Nil hrs./week	Continuous Internal Assessment Marks:50
Tutorial : Nil hrs./week	Attendance-10,Lab Notebook-15,Regular Performance-25
Practical: 4 hrs./week	ExternalAssessment Marks:50
Credit :3	Sessional -20,On spot Job-20,Viva Voce-10

Aim: To impart practical knowledge in Multimedia Technology –I (Audio & Video) related with the study of Multimedia Technology.

Objective: Student will able to

Sl. No	
1	Develop skill in Audio Editing Tool
2	Be acquainted with different View, various Panels, Importing, Recording and Play Back of Sound.
3	Develop the concept of Editing, Loopingand Restoration.
4	Working with Video, Mastering, Finalizing, Exporting and Making CD.
5	Develop skill in Video Editing Tool
6	Be acquainted with Overviews, various Panels,Editing Workflow,Transition,Effect Control, Audio and Titler Basics.
7	Creating Type and Graphic Effects,Advanced Titling and Editing Techniques.
8	Creating Motion Effect or Constructing a Movie

Pre-Requisite: Nil

Sl.No	
1	Knowledge of basic Sound and Video is necessary.
2	Basic concept of PC Operation and OS should be known.

Contents: Total Periods: 60(15Weeks)+ Internal Assessment(2Weeks) =60(17 Weeks)		Hrs./Unit	Marks
Module : 1	**1.0 The Interface.** 1.1 Introduction to Audio Editing Tool 1.2 Multitrack View, Edit View, CD View 1.3 Video Panel, Files Panel, Effects panel, Favorites Panel 1.4 Tools Palette, Audio Mixer Panel	02 periods	
Module :2	**2.0 Importing, Recording and Playback** 2.1 Importing Audio Files, Import/Extract Audio from CD, Import Audio only from Video Files 2.2 Recording, Monitoring, Setting the Input Level 2.3 Recording in Edit and Multitrack View.	02 periods	
Module : 3	**3.0 Editing (Edit View)** 3.1 Introduction, Editing 3.2 Using Effects in Edit View	02 periods	
Module : 4	**4.0 Multitrack View** 4.1Introduction,Working with Sessions,Importing Files	02periods	

	into Multitrack View 4.2 Snapping,Editing Procedures Overview,Trimming, Adjusting Volumes 4.3 Adding Real-time FX from Multitrack View,Setting EQ 4.4Types of Cross fade Curves,Using Mixer,Channel Strip,Effects.		
Module : 5	**5.0 Looping Content** 5.1 Introduction to Looping,Working with Loops 5.2 Find Beats and Mark 5.3 Calculate and Adjust Tempo 5.4 Tempo Matching Settings.	02 periods	
Module : 6	**6.0 Restoration Tools** 6.1Overview, 6.2 Removing noise procedure,Noise reduction, 6.3 Repair transients tool,Lasso tool,Removing specific sound,Marquee tool, 6.4 Removing vocal from existing mixes.	04periods	
Module : 7	**7.0 Working with video** 7.1Importing video files, 7.2 Video thumbnail display option, 7.3 Time stretching audio to fit video, 7.4 Export video.	04 periods	
Module : 8	**8.0 Mastering and finalizing** 8.1 Overview of the mastering process, 8.2 Dynamic processing (Compression/Limiting), 8.3 Multiband compressor, 8.4 Parametric equalizer.	04periods	
Module : 9	**9.0 Exporting, saving files/projects** 9.1 Export audio (Multitrack view), 9.2 Audio file format (mp3, wav), 9.3 Export audio (edit view), 9.4 Batch processing.	04 periods	
Module : 10	**10.0 Making CD** 10.1 CD project view, 10.2 To change the order of files, 10.3 Group waveform normalize, 10.4 Burning CD.	04 periods	
Module : 11	**Video Editing Software** **11.0 Getting Started** 11.1 Overview, Project Panel, Timeline Panel, Monitor Panel, Audio Mixer Panel, Effect Panel, Effect Control Panel, Tools Panel, History Panel, Info Panel, Event Panel 11.2 Title Designer,Premiere Pro Menus,Digital Video Definition,Compression,General Settings 11.3 Video Rendering.	02 periods	
Module : 12	**12.0 Project Panel** 12.1Importing files,Project view,Viewing and adjusting, Creating new element.	02 periods	

Module : 13	**13.0 Timeline Panel** 13.1 Sequences and layout, Time navigation control area, Track header area Track content area, Wing menus, Playback scrolling.	02 periods	
Module : 14	**14.0 Editing workflow** 14.1Editing basics,Editing with the source monitor, Timeline editing,Editing with program monitor, Timeline trimming.	02 periods	
Module : 15	**15.0 Transition basics** 15.1Single track transition basic, The effect panel, Dragging and dropping transition, Effects control panel, Timeline adjustments.	02 periods	
Module : 16	**16.0 Effects control basics** 16.1Standard effects and fixed effects, The effect control panel, Working withkey frames.	02 periods	
Module : 17	**17.0 Audiobasics** 17.1Importing audio files, Understanding audio track, Editing audio on the timeline 17.2 Mapping audio channels, Gaining fading and balancing audio,fading sound, creating a curve fadeline, 17.3 Removing key frames, Applying audio transition, 17.4 Applying audio effect,Clip verses track effects, New features.	02 periods	
Module : 18	**18.0 Titler Basics** 18.1Title Panel overview,Creating an object,Title properties panel,Creating text 18.2 Moving and arranging text and objects,Using templates,Using a title created from a template, 18.3 Rolling and crawling titles, Transforming and Stylizing objects.	02 periods	
Module : 19	**19.0 Creating type and graphic effects** 19.1Creating importing graphics from Adobe Photoshop, Adding effects to the imported images,Working with still images.	02 periods	
Module : 20	**20.0 Advanced Titling;** 20.1**Styles and Templates -** Creating a Style from an object, 20.2 Creating custom text style and saving custom, Template.	04 periods	
Module : 21	**21.0 Advanced Editing Techniques** 21.1Editing Utilities,Cutting and pasting clips,Removing sequence gaps,Unlinking and linking audio and video, 21.2 Creating a rolling edit,Creating a ripple edit,Creating a slide tool,Performing a three point edit,Performing a four point edit 21.3 Multi camera editing : viewing .recording replacing scenes.	04 periods	
Module : 22	**22.0Creating Motion effect** 22.1Setting key frames to create motion effects using effect control panel, 22.2 Editing motion paths,Moving, deleting,copying and pasting key frame points 22.3 Adding key frames to change a motion paths speed	04 periods	

	22.4 Adding effects to motion paths,Changing opacity.		
	Total	**60 periods**	

Text Books:

Name of Authors	Title of the Book	Edition	Name of the Publishers
Jose Lozano	"Multimedia – Sound & Video"	1998	Prentice Hall
John Villamil-Casanova, Louis Molina	"Multimedia – An Introduction"	1995	Prentice Hall
Gokul. S	"Multimedia Magic"	1995	BPB Publication
Tay Baughan/	Multimedia making it work		Tata Mcgraw-Hill
Judith Jeffcoate	Multimedia in Practice-Technology & Applications	1995	Prentice Hall,
AndressHolzinser	Multimedia Basics,	Vol-I	AndressHolzinser

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Syllabus for:Cel& 2D Animation Lab

Name of the Course: Diploma in Multimedia Technology.

Course Code:	**Semester:Fourth** (All Modules should be completed in 4th semester. Evaluation may be done by continuous assessment process and by External Examiner in end semester)
Duration: Seventeen weeks/Semester	**Full Marks:**100
Teaching Scheme:	**Examination Scheme:**
Theory : Nil hrs./week	Continuous Internal Assessment Marks:50
Tutorial : Nil hrs./week	Attendance-10,Lab Notebook-15,Regular Performance-25
Practical: 4 hrs./week	ExternalAssessment Marks:50
Credit :3	Sessional -20,On spot Job-20,Viva Voce-10

Aim: To impart practical knowledge in Cel& 2d Animation related with the study of Multimedia Technology.

Objective: Student will able to

Sl. No	
1	Develop theskills corresponding to the knowledge acquired in the theoretical subject Cel& 2D Animation.
2	Be acquainted with various instruments, mediums and environment required for creating cel&2D animation.
3	Develop the concept of using Animator's Drawing Tool.
4	Working with Rapid Sketching and Drawing.
5	Develop the Animation Character, Anatomy and Body Language
6	Practicing the Process of creating cel animation
7	Introduction to 2 D Computerized Animation Tool(Flash)

Pre-Requisite: Nil

Sl.No	
1	Knowledge of basic sketching and drawingis necessary.
2	Basic concept of computer graphical tools should be known.

Contents: Total Periods: 60(15Weeks)+Internal Assessment(2Weeks) =60(17 Weeks)		Hrs./Unit	Marks
Module : 1	**Acquaintance** with various instruments, mediums and environment required for creating2D cel animation.	06 periods	
Module :2	**Using Animator's Drawing Tools** The Animation Table (light box), Field charts, Line Testing Camera, Peg bar, Punching Machine.	06 periods	
Module : 3	**Rapid Sketching and Drawing** · Drawing for Animation, Exercises and Warm ups on Pegging Sheet, · Quick studies from real life, sequential movement drawing, · caricaturing the action, thumbnails drawing for motion, · The body language, Redefining Drawings.	12 periods	
Module : 4	**Developing an Animation Character** · Incorporating various moods and shades of a character · various gestures and facial expressions of the character	12 periods	
Module : 5	**Anatomy and Body Language** · front, side and back view of the character,	06 periods	

	· Anatomy and Body Language of the character, · Caricaturing the character.		
Module : 6	**Practicing thePrococess of creating cel animation** Storyboards, Voice recording, Animatic, Design and timing, Layout, Animation, Pencil test Backgrounds, Traditional ink-and-paint and camera, Digital ink and paint, Computers and digital video cameras	24 periods	
Module : 7	**Introduction to 2 D Computerized Animation Tool(Flash)**: Workspace overview, Customize the workshop, Using the Stage and Tools panel, About the Timeline, Using Flash panels, Property inspector, Library panel, Movie Explorer, History panel, Colour panel. About Flash files, Create or open a document and set its properties, View a document when multiple documents are open, Working with project, Importing artwork into Flash, Addingmedia to the library, Work with libraries & its items, Working with timeline, Working with scenes, Find and replace command. About vector and bitmap graphics, Flash drawing mode, About overlapping shapes Using Flash drawing and painting tools, Draw with the pencil tolls, Draw straight lines, Reshaping lines and shape outlines, Snapping (object snapping, pixel snapping, snapalignment), Working with colour, strokes and fills. **Animation basics**: Creating motion, Creating key frames, Representations of animation in the Timeline, Frame rates, Frame by frame animation, Onion skinning, Extend still images,Mask layers, Using Timeline effects, Twinned animation, Special effects, Filter: AnimationFilters, Create preset filter libraries, Blend modes in Flash, Working with text, working withsound, Working with video. **Interactivity:** Types of interactivity, Frame Actions, Adding Stop and Play actions, AddingGo To actions, Button Symbols, Adding actions to buttons, Navigation, Action Script. **Testing and Publishing:** Testing options, environment, preparation to publish, publishing a movie, publishing on the web.	30 periods	
	Total	**60 periods**	

Name of Authors	Title of the Book	Name of the Publishers
Kit Laybourne	The **Animation** Book: A Complete Guide to Animated Filmmaking--From Flip-**Books** to Sound Cartoons to 3- D **Animation**	Three Rivers Press (ca) (1998)
Vikas Gupta	Comdex Multimedia And **Animation** Course Kit	Dreamtech Press
Student Aid Publications	Hot Careers in **Animation**& VFX	Student Aid Publications
Ed Hooks	Acting for Animators	Routledge

Tom Bancroft, Glen Keane	Creating Characters with Personality: For Film, TV, **Animation**, Video Games, and Graphic Novels	Watson-Guptill Publications

Reference Books:

Name of Authors	Title of the Book	Name of the Publisher
Chris Patmore	The Complete Animation Course: The Principles, Practice and Techniques of Successful Animation	Barron's Educational Series
Pakhira K Malay	Computer Graphics Multimedia & Animation	Phi Learning Pvt. Ltd

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Syllabus for:Professional Practice II (Video Editing &Compositing)

Name of the Course: Diploma in Multimedia Technology.

Course Code:	**Semester:Fourth** (All Modules should be completed in 4th semester. Evaluation may be done by continuous assessment process and by External Examiner in end semester)
Duration: Seventeen weeks/Semester	**Full Marks:**50
Teaching Scheme:	**Examination Scheme:**
Theory : Nil hrs./week	Continuous Internal Assessment Marks:25
Tutorial : Nil hrs./week	Attendance-05,Lab Notebook-10,Regular Performance- 10
Practical: 3hrs./week	ExternalAssessment Marks:25
Credit :2	Sessional -10,On spot Job-10,Viva Voce-05

Aim: To impart practical knowledge in Video Editing & Compositingrelated with the study of Multimedia Technology.

Objective: Student will able to

Sl. No	
1	Develop skill in Video Editing Tool
2	Be acquainted with project setting, editing Tools, editing techniques, graphic animation, title making and sp. effects.
3	Develop the concept of Video editing and compositting
4	Working with NLE software
5	Develop the skill of animation and compositing techniques
6	Working with Audio for media
7	Generation of final video output.

Pre-Requisite: Nil

Sl.No	
1	Knowledge of basic video assembling and compositing is necessary.
2	Basic concept of PC Operation and OS should be known.

Contents: Total Periods: 45(15Weeks)+ Internal Assessment(2Weeks) = 45(17 Weeks)		Hrs./Unit	Marks
Group-A	**Video Editing Software**		
Module : 1	**1.0 Introduction** 1.1Use of NLE tool-Project setting, 1.2 Creating a New Project, 1.3 Tools for Editing, 1.4 Rough Cut Editing, Role of Editor, 1.5 Graphic animation for Video Production, 1.6 Method of Editing, Picture in Picture, 1.7 Title making, Working with Transition, Visual Effects, 1.8 Colour Correction, Different types of video output.	9 periods	
Group-B	**Video Editing & Compositing Practical**		
Module :2	**2.0 Introduction to Non - Linear Editing** 2.1 Professional hands on training in Non-Linear Video Editing 2.2 Introduces the basic principles of film language and filmmaking.	9 periods	
Module : 3	**3.0 Editing and file formats**	03 periods	

	3.1 Film format and editing equipment 3.2 Practice in Digital capturing 3.3 Video transitions 3.4 Editing of a documentary film 3.5 Editing of an advertising film 3.6 Editing of short fiction and feature film		
Module : 4	**4.0 Compositing** 4.1Layer-based compositing 4.2 Including apply modes and transparency 4.3 key frame-based animation 4.4Nested-compositions and the rendering pipeline 4.5Issues relating to compositing interlaced media	06 periods	
Module : 5	**5.0 Animation and Compositing** 5.1 Proficiency withAdobe After Effects for animation and compositing 5.2 Role of motion graphics in effective information design 5.3 Using Photoshop and Illustrator in the After Effects workflow	09 periods	
Module : 6	**6.0 Audio for Media** 6.1Introduction to Audio 6.2 Editing audio. Cutting. Pasting and merging 6.3 Dynamic and Condenser Microphones 6.4 Microphone positions 6.5 Recording techniques 6.6 Audio Music & Narrative 6.7 Final shoots 6.8 specific rendering and output options	09 periods	
	Total	**45 periods**	

Text Books:

Name of Authors	Title of the Book	Edition	Name of the Publishers
Sonja Schenk	Digital Non-Linear Desktop Editing		
Michael Rubin	Nonlinear - A Field Guide to Digital Video and Film Editing		
Ron Brinkmann	The Art and Science of Digital		
Tay Baughan/	Multimedia making it work		Tata Mcgraw-Hill
Judith Jeffcoate	Multimedia in Practice-Technology & Applications	1995	Prentice Hall,
Matt Kloskowski	Photoshop Compositing Secrets: Unlocking the Key to Perfect Selections and Amazing Photoshop Effects for Totally Realistic Composites	Vol-I	AndressHolzinser
Lee Lanier	Professional Digital Compositing: Essential Tools and Techniques		

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