

**Diploma
in
Animation and Web Designing**

SYLLABUS



North Maharashtra University, Jalgaon
Post Box. No. 80
Umavi Nagar, Jalgaon-425 001

Diploma in Animation and Web Designing

Course Structure

Year	Course Code	Course Title	Marks	Credit Point
Semester-I	DAW-101	Fundamental of Web Designing-I	100	04
	DAW-102	Introduction to Computer Graphics and 2D Animation	100	04
	DAW-103	Introduction to MAYA-I	100	04
	DAW-LAB-I	Lab course on Corel Draw, Dream Weaver	100	04
	DAW-LAB-II	Lab on Flash, Photoshop and MAYA-I	100	04
Semester-II	DAW-201	Fundamental of Web Designing-II	100	04
	DAW-202	Introduction to MAYA-II and Advanced Tools.	100	04
	DAW-203	Full Semester in house Project Work	100	04
	DAW-LAB-III	Lab on Web Designing -II	100	04
	DAW-LAB-IV	Lab on MAYA-II and Advanced Tools.	100	04
Total Credits				40

DAW-101: Fundamental of Web Designing-I

Overview of Web Design Concepts

[6]

Web Technology, The Nature of the Web, Web Design Concepts, New Technologies, Evaluating Your HTML Skills,

Web Page Layout and Elements

[6]

Web Users and Site Design, Effective Web Page Layout, Color and Web Design, Fonts and Web Design.

Web Site Usability Testing

[6]

The Importance of Audience Usability, Web Usability Testing.

Navigation Concepts

[6]

Why Is Navigation Critical? Browsers and Navigation, Primary and Secondary Navigation, Navigation Hierarchy Site Structure, URLs and File Names, Guided Navigation, Navigation Action Plan.

Web Graphics

[6]

Pre-Assessment Questions Web Site Images Digital Imaging Concepts, Bitmap vs. Vector, Graphics, Graphic Applications, Image File Formats Creating Images, Image Optimization

Multimedia and the Web

[6]

Multimedia and Web Sites, Current Multimedia Capabilities, Animation and the Web, Audio and the Web, Video and the Web, Goals of a Multimedia Site, Multimedia Site Design Basics, User Interaction Selecting Multimedia Elements, Copyright Infringement.

Web Technology

[6]

HTML Standards, Tables, Frames, Metadata and CSS. (Introduction and practical implementation issues)Introduction to FrontPage and Dreamweaver.

Overview of Dream weaver

[18]

Overview of Dream weaver, Adding content to site,Formatting with CSS, Inserting Objects, Links, Frameset and layout.

Books

- 1] Designing for the Web, Nielsen, J. , New Riders Publishing, (2000).
- 2] Responsive Web Design with HTML5 and CSS3, Ben Frain, ISBN : 1849693188

DAW-102: Introduction to Graphics Designing and 2D Animation

Introduction to Computer Graphics:

[15]

Overview of Computer Graphics, Computer Graphics Application and Software, Description of some graphics devices, Input Devices for Operator Interaction, Active and Passive Graphics Devices, Display Technologies, Raster Refresh (Raster-Scan) Graphics Displays, Raster Scan Basics, Video Basics, The Video Controller, Random-Scan Display Processor, LCD displays.

Principles of Animation**[15]**

Animation History Animation Theory, Computers for Animation, Sound and Camera, representation Techniques for Animation

Overview of Corel Draw and Photoshop**[15]**

Basics of CorelDraw, Drawing, Text Image, Layout,

Introduction to Flash

Introduction to Flash, Tools & Graphics, Creating Flash Elements, Tweened Animation, 2D Animation Effects, Action Script, Other Features, Flash Web Templates

Principles of Multimedia**[15]**

Animation Principles, Animation Design, Animation Processes and Styling, Animation Scripting and techniques, Life Drawing Anatomy and Drawing,

Reference Books

1] D. Hearn and M. Pauline Baker, Computer Graphics (C Version), Pearson Education, 2nd Edition.

DAW-103: Introduction to MAYA-I**MAYA Basics****[10]**

Navigation, Changing Interface, Creating Primitives and Text, Transforming Objects and Components. Basic tools, menu and Windows Editor.

Interface overview**[10]**

Selecting, Viewing the scene, Transforming objects, Nodes and attributes, File management, Scene management, Using FBX for file translation, Preferences and customization.

Managing Scenes, Files and Projects**[10]**

Organize Files into Projects, Import and export files, Pipeline Caching, Assets, File Referencing Scene Assembly

Modeling and Rigging**[10]**

NURBS Curves and Surfaces, Polygons, Skeleton and Rigging, Parenting and Binding to a skeleton

Rendering**[10]**

About rendering and renderers, Camera Setup, Network rendering Quality, render speed, diagnostics Tessellation and Approximation, Visualize and render images Rendering Reference, mental ray Rendering, Rendering Utilities

Overview of Photoshop**[10]**

Basics of Photoshop, The Work Area, Selection Layers, Basic Image Correction, Retouching Tools, Filters, Text & Other Vector Shapes

Reference Books:-

1] The Annotated VRML 97, Reference Manual Rikk Carey Gavin Bell

DAW LAB-I: Lab course on Corel Draw, Photo Shop

1. Practical assignments on DAW-101
2. Creating a web page using Dream Viewer
3. Create a website using Dream Viewer
4. Create a Logo in CorelDraw
5. Prepare a Visiting Card in CorelDraw
6. Prepare a education advertise in CorelDraw
7. Prepare Greeting in CorelDraw
8. Prepare a banner in CorelDraw

DAW LAB-II: Lab course on Flash, Dream Weaver and MAYA-I

1. Practical assignments on DAW-102&DAW-103.
2. Create a homepage background using Photoshop
3. Prepare a product of Shampoo bottle from help of image in Photoshop
4. Create a masking for photo frame using Photoshop
5. Prepare a jumping ball using Flash
6. Create a animated car with background using Flash
7. Prepare a duplicate image using tracing using Flash
8. Prepare a moving Fan using Flash
9. Prepare different shapes using MAYA
10. Prepare Different Objects(Table Lamp, Bottle)using MAYA

Semester-II

DAW-201: Fundamental of Web Designing-II

Introduction to JavaScript

[15]

Browser compatible script, Scripting Tag Script file version, JS function, JS for loop JS Special text, Guidelines, JS objects, JS validation, JS Animation, JS image maps, JS cookies, JS timing, JS create object,

Introduction to VRML

[15]

Introduction, Key Concepts, Node Reference, Field and Event Reference, Conformance and Minimum Support Requirements, Appendix A, VRML Grammar Definition,

PHP

[15]

Introduction to PHP, Installation & Configuration, PHP syntax, variables and constants, Operators, Control structures, Strings, Array, Functions, Built-in Function Libraries, HTML Forms with PHP, Data Validation, File Handling, Cookies & Session objects, Object Oriented Programming with PHP.

MYSQL

[15]

Introduction to MySQL database management, Data Types, DML, DDL, Aggregate functions, Data Time functions, How to develop PHP/MySQL applications.

References:

1. Beginning PHP5 Publisher: Wrox Press Inc; ISBN: 0-7645-5783-1
2. Head First PHP and MySQL- Oreilly Publication
3. PHP for Beginners By Ivan Bayross , S. Shaha , Shroff Publications.
4. PHP and MySQL Web Development (3rd Edition)- Luke Welling, Laura Thomson
5. PHP for the Web: Visual QuickStart Guide, 4/e - Larry Ullman, Pearson Education
6. PHP: The Complete Reference – Steven Holzner
7. Learning PHP and MySQL, O'Reilly publication
8. PHP and MySQL, O'Reilly publication
9. PHP for Beginners, SPD publication

DAW-202: Introduction to MAYA-II and Advanced Tools

Audio editing and post production

[15]

Fundamental of Audio Video Technology, Digital Audio editing, Audio capturing, Audio mixing, Audio effect generation, audio streaming,

Digital Video Editing and post production

[15]

Video capturing, Video mixing, Compositing and special Fx, streaming video format.

Animation

[10]

Animation Basics Key frame Animation Nonlinear Animation Path Animation Motion Capture Animation Geometry Caching Animation Layers Animation File Formats Animation Reference, Character Animation

Paint Animation and Simulation Effects

[10]

Paint Effects and 3D Paint, Artisan Dynamics, Classic Hair, Fluid Effects, Fur, nDynamics, Effects Assets, Bullet, XGen, Lighting, Shading.

Advanced Tools

[10]

To fulfill the need of professionals in the field of animation and advertisement the recent widely used tools should be taught. The content of this Unit will be declared at the beginning of the Semester.

DAW 203: Project Work

Full time in house project should be carried out with advanced tools taught in DAW-202 . The Project Report should be submitted in soft copy on CD.

DAW LAB-III: Lab on Web Designing -II

Practical assignments on DAW-201 (PHP and MySQL)

Lab on Web Designing –II

Lab Assignment : JavaScript

1. Create HTML page; add JavaScript that includes two prompts for input from the user. Also write script that concatenates these two input values and display the result in an alert box.
2. Write a java script program to find the factorial of given number.

3. Create a java script program to accept the first, middle, last names of user and print them.
4. Write a function where the name of the function is foo which has one parameter called parm. The body of foo uses document.write to print out the value of parm.
5. Write a Javascript for validating HTML form controls.
6. Write a JavaScript code to calculate the sum of allelements in the array and display the result in an alert box.
7. Create a simple falling snow animation using Javascript.
8. Design client side image map using Javascript.
9. Define a custom object person, and then add to it its own properties and method using javascript

Lab Assignment : PHP & MySQL

- 1) Implement a PHP program to display a Well-Come page based on client browser.
- 2) Implement a PHP program to process HTML forms.
- 3) Implement a PHP program to demonstrate use of Arrays.
- 4) Implement a PHP program to demonstrate use of String functions,
- 5) Implement a PHP program to demonstrate Object Oriented Programming in PHP
- 6) Implement a PHP program to demonstrate use of File Handling.
- 7) Implement a PHP program to demonstrate database handing.
- 8) Implement a PHP program to demonstrate use of Cookies & Session objects

DAW LAB-IV: Lab on MAYAand Advanced Tools

Practical assignments on DAW-202.

1. Prepare a slide presentation using Flash
2. Prepare a candle using Flash
3. Prepare a Guitar using MAYA
4. Prepare a interior design of a hall using MAYA
5. Prepare a temple using MAYA

Scope and Opportunities

- 1) The objective of this course is to produce skilled versatile and dynamic web designers
- 2) The proposed course is committed to produce Web Designers, Rendering Artist, Studio Artists, Animation experts, 2D Animation Expert sand 3D Animation Expert.
- 3) These artist are having very good scope in advertising agency and in file industry.
- 4) This course will convert a student to a professional Web Designer and Animator.
- 5) The student will get an opportunity to become the main creative factor of Print Publishing, Advertising and Corporate environment.

After Completing the said course, the students will be able to:

- 1) Demonstrate an advanced knowledge of the Web Designing,
- 2) Can develop effective web pages & websites.
- 3) To navigating back and forth the web pages using various animation, tooltips
- 4) Demonstrate the skills in the appropriate use of various advanced features of the photo editing software like Photoshop and other advanced software like Maya VRML etc.
- 5) Create useful graphical structure like color, shading and attractive slicing.
- 6) Linking pictures to other links using hyperlinks.

The Placement Opportunities

- 1) The student will get a job in Advertising Industry
- 2) In IT industry as web designer.
- 3) In film industry, for designing animation and play a role of Studio Artists, Animation experts, 2D Animation Expert sand 3D Animation Expert.
- 4) The student can be placed in Print Publishing industry and Advertising and Corporate environment.
