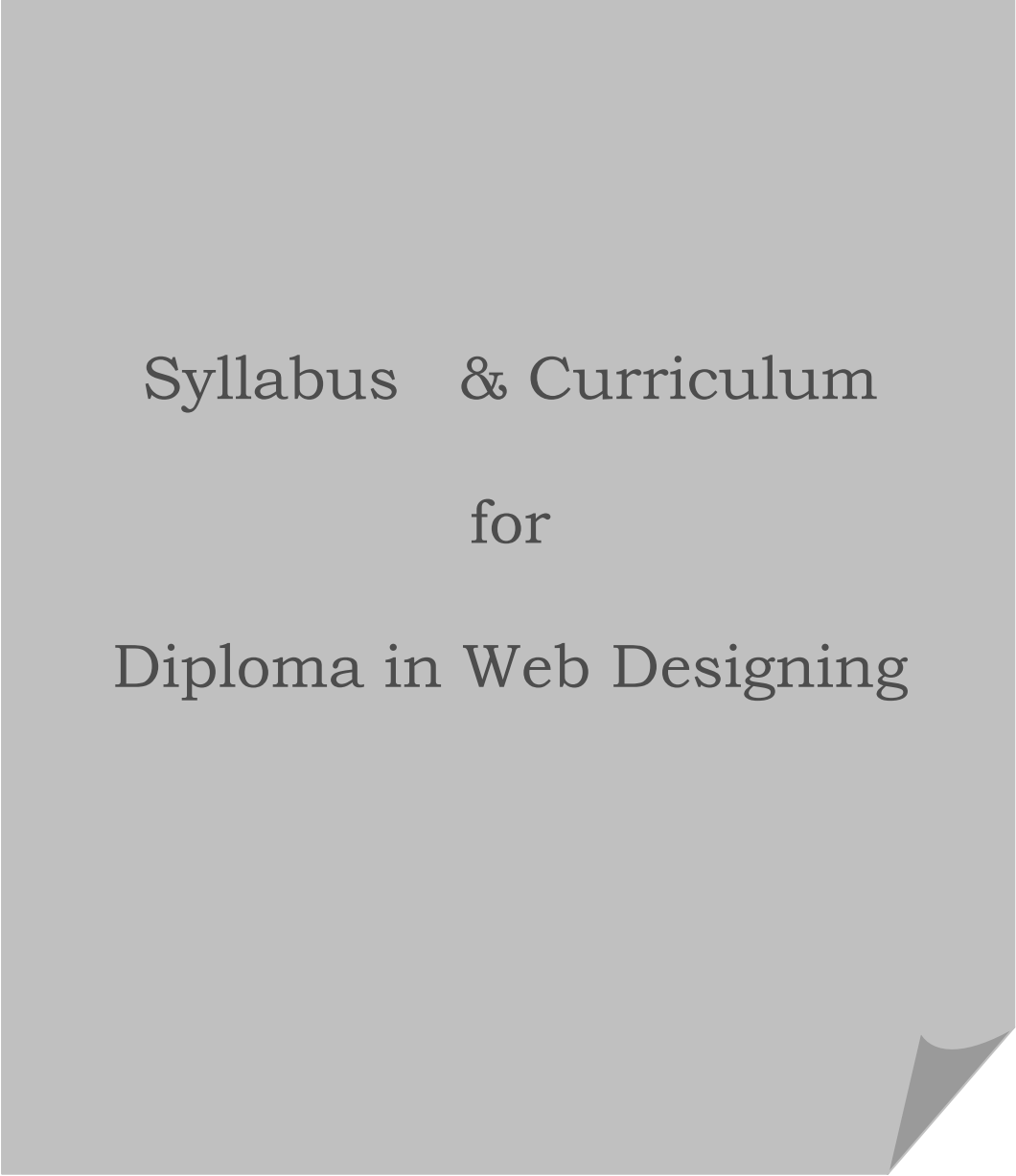


# **Syllabus & Curriculum For Diploma In Web Designing**



Prepared by DOEACC Centre, Calicut



Syllabus & Curriculum  
for  
Diploma in Web Designing

## 1. General description

In today's competitive world, Web sites are a major source of delivering data. Internet is becoming the backbone of any commercial or scientific activity.

Web designing has grown out to be a very fast growing industry; it is the need of any firm to have a good looking and feature rich site. The purpose of this course is to get the participant well acquainted with the art of web designing using the software's Microsoft FrontPage, Adobe Photoshop, Macromedia flash, and Dream Weaver.

## 2. General eligibility

While extensive computer experience is not required to attend the class, it is important to be able to type, and to be familiar with Windows prior to attending. Having an interest towards designing and art would be an added advantage

Prerequisite: Familiarization with Windows based applications.

## 3. Hardware & software required for teaching

**Hardware:** Personal Computer with multimedia system loaded with any one of Windows 2000/Windows XP Home & Pro operating system with 800MB free Hard disk space and 256 MB RAM.

**Software:** Microsoft FrontPage, Adobe Photoshop, Macromedia flash, and Dream Weaver.

## 4. Course objectives and content

Upon completion of this course students will be able to:

- Demonstrate an advanced knowledge of the Web Designing, the participant can develop effective web pages & websites. The art of navigating back and forth the web pages using various animation, tooltips etc will be mastered by the participant.
- Demonstrate the skills in the appropriate use of various advanced features of the photo editing software like photoshop and also
- Create useful graphical structure like color, shading and attractive slicing.
- Linking pictures to other links using hyperlinks.

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- Demonstrate the skills in making effective animation using macromedia flash. The skill of action scripting and the task of validation is also mastered.
- Demonstrate advanced web page designing using macromedia dreamweaver
- Understand the use of animated gifs and learns the technique to create it.
- Understand the concepts of interwoven links,site navigation,site map creation,validations and image processing.

### 5. Suggested reference material

#### a. Recommended Web sites

##### HTML

1. [www.w3schools.com](http://www.w3schools.com)
2. [www.htmlcodetutorial.com](http://www.htmlcodetutorial.com)
3. [www.echoecho.com](http://www.echoecho.com)

##### Photoshop

1. <http://www.insidegraphics.com/photoshop>
2. <http://www.tutorialized.com/tutorials/Photoshop>
3. <http://www.trainingtools.com/online/photoshop7>
4. <http://www.pslover.com/tutorials/basics>

##### Flash

1. <http://www.webdevelopersnotes.com/tutorials/flash/>
2. <http://www.adobe.com/devnet/flash/>
3. [http://www.adobe.com/support/flash/tutorial\\_index.html](http://www.adobe.com/support/flash/tutorial_index.html)
4. <http://www.thefreecountry.com/webmaster/flash.shtml>

#### b. Books

##### HTML

1. HTML Black Book
2. The Complete Reference HTML Second Edition

### **Photoshop**

1. Adobe Photoshop CS 2 - One on One (2005 edition)  
by Deke McClelland
2. PhotoShopCS for digital photographers by Colin Smith  
Publisher: Charles River Media. 1st edition (2004 edition)
3. Photoshop CS Bible Professional Edition

### **Flash**

1. Macromedia Flash MX 2004: The Complete Reference by  
Brian Underdahl
2. ActionScript for Flash MX: The Definitive Guide, 2nd  
Edition By Colin Mook
3. Animating with Flash MX: Professional Creative Animation  
Techniques By Alex Michael

### **Dreamweaver**

1. DreamWeaver Bible Author-Joseph .W. Lowery

## **6. Examination /Evaluation scheme**

The evaluation will be done based on one theory Examination of 2 hour and practical examination of 3-hour duration.

- a. Theory Examination: The examination will be of 2 hour duration and will contain 100 objective type questions with maximum marks of 100.
- b. The questions will be in proportion to the weightage of the modules described in this curriculum.
- c. Practical Examination: One Practical examination of 3 hour duration will be conducted on the modules described in the curriculum. The maximum marks will be 100.

## **7. Suggested duration for theory, tutorials, case study & practical sessions**

## Syllabus & Curriculum for Diploma in Web Design

Sl.No	Modules	Duration in hrs			Weightage of Modules
		Theory	Lab/ Tutorials	Project/ Case study	
1	Introduction	5	5	0	5%
2	HTML/CSS/MS Frontpage	11	19	0	15%
3	Adobe photoshop	22	33	0	20%
4	Macromedia Flash	30	45	0	30%
5	Dreamweaver	12	23	0	15%
6	project	0	0	40	15%
Total		80	125	40	100.00%

# **Detailed Syllabus**

## **Contents**

**Module 1: Introduction**

**Module2: HTML/FrontPage**

**Module 3: Adobe PhotoShop**

**Module 4: Macromedia Flash**

**Module 5: Dream weaver**

**Module 6: Project**

## **MODULE1: INTRODUCTION**

### **1 Introduction to computers**

- i. CPU, motherboard, hard disk,
- ii. Floppy drive, CD drive, memory
- iii. Monitor display card.
- iv. Keyboard, mouse cables, connectors- USB, COM
- v. Multimedia - Definition
  - a. Soundcard, scanner, digital camera.
  - b. Multimedia files formats for text, audio, picture, video etc

### **2 Introduction to computer networks**

- i. Basics of computer networks, LAN, WAN
- ii. Concepts of Internet, services on Internet  
WWW, Browser, URL
- iii. What is IP address? TCP/ IP basics

### **3 Principles of design and composition**

- i. Web pages, Hyperlinks, Web server.
- ii. Planning a website-How to plan a website- importance of good web content.
- iii. Structuring & site navigation, browser compatibility issues, domains and hosting

### **4 Web tools**

- I. FrontPage, Photoshop, Macromedia flash, Dream weaver
- II. Comparative study of the tools.
- III. Web programming platforms, .NET, Java
- IV. Dynamic and static websites

### **5 Trends in website design**

- i. Server side programming/ Client side programming
- ii. Desirable site elements

## Syllabus & Curriculum for Diploma in Web Design

- iii. Developing a look
- iv. Testing the design
- v. Knowing your audience

## **MODULE2: HTML/FRONTPAGE**

### **1 Introduction**

- a. WEB publishing
- b. HTML tag concept
- c. <head><body>
- d. URL, hyperlinks <link> href,<A> tags
- e. Image basics,
  - i. <img> alt attribute
  - ii. Hspace, Vspace
  - iii. Height, Width
  - iv. Image as buttons

### **2 Presentation and layout**

- f. Text alignment
  - i. Center, left, right
  - ii. Multicol
- g. Color settings
  - i. bgcolor
  - ii. Foreground color
- h. Tables
  - i. TD
  - ii. TR
  - iii. Rowspan
  - iv. Colspan
  - v. cell padding
  - vi. Table within table

### **3 Lists**

- a. Ordered lists
  - Types of order list
- b. Unordered lists
  - i. Types of unordered list
- c. Nested Lists

#### **4 Frames**

- a. Frameset
  - i. Row
  - ii. Col
  - iii. % split up of row, col
- b. Frame targeting
- c. Horizontal splitting
- d. Vertical splitting

#### **5 HTML form**

- a. Input fields
  - i. Text box
  - ii. Password
  - iii. Button
  - iv. Drop down list box
  - v. Radio button
  - vi. Check boxes
- b. Submit /reset button
- c. Methods post/get

#### **6 Style sheet**

- a. Setting background
  - i. Setting background
  - ii. Repeating background image
  - iii. Setting background image
- b. Setting text color
  - iv. Align the text
  - v. Text decoration
- c. Font
  - vi. Setting the font
  - vii. Size, boldness of font
- d. Border
  - i. Style of four order
  - ii. Different borders on each side

- iii. Width setting
- e. Margin
- f. Padding
- g. List
- h. List-item marker
- i. Positioning
  - iv. Vertical alignment of an image
  - v. Placing an element behind another

### **MODULE3: PHOTOSHOP**

#### **Fundamentals**

## 1 Graphics Basics

- i. Bitmap vs. vector-based graphics
- ii. Color/bit depth and image resolution
- iii. Graphic file formats
- iv. Optimizing web graphics
- v. Vector graphics vs. bitmap graphics
- vi. Regular text vs. anti-aliased text
- vii. Pixel resize vs. smart resize
- viii. Regular graphics vs. interlaced graphics
- xi. Lossy compression vs. lossless compression
- x. Dithered graphics vs. non-dithered graphics
- xii. Standard selection vs. floating selection
- xiii. Tolerance
- xiv. Opacity

## 2 Introduction to Color

- i. Color modes- RGB, CMYK, grayscale, LAB, bitmap
- ii. Hue, saturation, and brightness
- iii. Browser safe colors
- i. Shadows, highlights and midtones of an image

## PhotoShop Interface, Tools and Options

### 3 Photoshop Environment

- i. *About Photoshop*
- ii. *The Photoshop Interface*
- iii. *Setting up a new Photoshop document*
- iv. *Saving a new document*
- v. *The Default palettes*
- vi. *Working with Photoshop palettes*
- vii. *The Photoshop Toolbox and Options bar*
- viii. *Using Guides and Ruler*

### 4 Photoshop Image and Color Basics

- i. Supported import and export image formats

- ii. Opening an Image in *Photoshop*
- iii. Creating images In *Photoshop*
- iv. Saving images In *Photoshop*
- v. Basic image editing
- vi. Changing image size
- vii. Cropping an image
- viii. Changing color/bit depth
- ix. Optimizing Images using *Save for Web*
- x. Working with color in *Photoshop*

## 5 Photoshop Tools

- i. Parts of the *Toolbox*
- ii. Toolbox shortcuts
- iii. Tools options
- iv. Marquees
- v. Magic wand
- vi. Lassos
- vii. Move tool
- viii. Crop tool
- ix. Slice tools
- x. Pencil
- xi. Paintbrush
- xii. Eraser tools
- xiii. History brushes
- xiv. Gradient
- xv. Paint bucket
- xvi. Burn-dodge-sponge
- xvii. Blur-sharpen- smudge
- xviii. Shapes-line-rectangle-polygon
- xix. Path selection tool
- xx. Pen tool
- xxi. Type tools
- xxii. Notes tool-audio annotation
- xxiii. Eyedropper-color sampler- measure tool

- xxiv.* Hand-zoom
- xxv.* Quick mask-Screen modes
- xxvi.* Jump to ImageReady
- xxvii.* Back ground and foreground.

## **6 Transforms**

- i.* Using free transform
- ii.* Move
- iii.* Rotate
- iv.* Scale
- v.* Skew
- vi.* Distort
- vii.* Perspective
- viii.* Flip-vertical, horizontal
- ix.* Invert
- x.* Rotate 180°
- xi.* Rotate 90° CW
- xii.* Rotate 90° CCW

## **Layers, Channels and Actions**

### **7 Photoshop Layers**

- i.* About layers-fill and adjustment layers
- ii.* The layer palette
- iii.* Naming layers
- iv.* Creating layers
- v.* Deleting layers
- vi.* Viewing layers
- vii.* Moving layers
- viii.* Layer opacity
- ix.* Locking layers
- x.* Merging layers
- xi.* Layer modes and blending options
- xii.* Image compositing using layers

## **8 Photoshop Channels**

- i. About channels
- ii. The channel palette
- iii. Creating and viewing channels
- iv. Modifying channels
- v. Deleting channels
- vi. Alpha channels and masks

## **9 All about Actions**

- i. Using the action palette
- ii. Recording action
- iii. Playing action
- iv. Editing action
- v. Loading a saved action

## **Restoring and enhancing images**

### **10 Restoration of photos**

- i. Restoring damaged photos
- ii. Photo retouching
- iii. Clone stamp-pattern stamp
- iv. Healing brush tool
- v. Retouch tool

### **11 Photo enhancement and Color correction**

- i. Changing levels
- ii. Changing curves
- iii. Color balance
- iv. Changing brightness and contrast
- v. Changing hue saturation and brightness
- vi. Histogram
- vii. Gradient map
- viii. Desaturate
- ix. Invert
- x. Color replace

- xi. Selective color
- xii. Equalize
- xiii. Threshold
- xiv. Channel mixer
- xv. Posterize
- xvi. Changing background using layer compositing

## **Text editing and special effects**

### **12 Text editing in PhotoShop**

- i. About the type layer
- ii. Creating vertical and horizontal types
- iii. Point and paragraph text creation
- iv. Using horizontal and vertical type mask tools
- v. Using character palette for text editing
- vi. Choosing a font
- vii. Changing the type color
- viii. Choosing a type size
- ix. Specifying kerning and tracking
- x. Using fractional character widths
- xi. Specifying baseline shift
- xii. Applying underline and strikethrough
- xiii. Text alignment and justification
- xiv. Specifying anti-aliasing
- xv. Creating text warp
- xvi. Rasterizing type
- xvii. Converting type to shapes
- xviii. Adding effects to text

### **13 Photoshop Special effects and Filters**

- i. About special effects
- ii. Using filters
- iii. Basic filter examples
- iv. Artistic filters
- v. Distorting filters

- vi. Filter combinations
- vii. Plug-in filters

## **Web application and animation**

### **14 Adobe ImageReady**

- i. About *ImageReady*
- ii. Opening *ImageReady*
- iii. The *ImageReady* Interface
- iv. Image maps
- v. Image slicing
- vi. Basic animation

### **15 Photoshop for building web interface**

- i. About the Interface

## **Module 4: Flash**

### **1. Fundamentals**

- i. Bitmap vs vector graphics
- ii. Image vs movie
- iii. Conventional animation Vs *Flash* animations
- iv. Concepts of frame rate and resolution
- v. PAL, NTSC and film standards

## **2. Exploring the Flash Interface**

- i. The *Flash* stage
- ii. Stage settings
- iii. Creating a new *Flash* file
- iv. The various import formats
- v. Timeline- play head/frames/key frames/ blank frames
- vi. Menus, *Toolbox* and properties
- vii. Keyboard shortcuts and preferences
- viii. Color swatches and color mixer
- ix. Rulers, guides, grids and snapping
- x. Common libraries
- xi. Debugger and output
- xii. Movie explorer

## **2 Working with images**

- i. Discussing bitmap and vector graphics
- ii. Importing and manipulating images
- iii. Converting bitmaps to vector graphics

## **4 Basic drawing and Selections**

- i. Applying the pencil and eraser tools
- ii. Drawing with the pen tool
- iii. Creating custom line styles
- iv. Selection tools -arrow tools, and lasso tool
- v. Navigation tools - hand and zoom tools

## **5 Shapes**

- i. Basic shapes
- ii. Creating rectangles, ovals, and circles
- iii. Creating freeform shapes
- iv. Selecting and editing shapes
- v. Using the Selection and Lasso tools
- vi. Transforming shapes
- vii. Copying, moving, and deleting a shape
- viii. Grouping and aligning objects

## 6 Color

- i. Applying color
- ii. Using the paint bucket and ink bottle tools
- iii. Using the eyedropper and brush tools
- iv. Custom colors and gradients
- v. Creating a custom color swatch
- vi. Applying gradients
- vii. Creating a custom gradient [fill transform tool]

## 7 Text

- i. The text tool
- ii. Creating an extending text block
- iii. Creating a fixed text block
- iv. Text formatting
- v. Changing font styles
- vi. Modifying a text block
- vii. Aliasing small text
- viii. Adjusting the kerning of text
- ix. Setting line spacing/margins//indentation
- x. Converting text into
- xi. Text utilities
- xii. Using the *Find and Replace* feature
- xiii. Using the *Spell Checker* feature
- xiv. Using the *History* panel

## Organizing large projects, symbols and animation

### 8 Introduction to Layers

- i. Layer basics
- ii. Merging and rearranging layers
- iii. Deleting a layer
- iv. Modifying layers
- v. Renaming a layer
- vi. Layers folders
- vii. Locking and hiding layers

- viii. Masking a layer
- ix. Creating layer folders
- x. Guide layers
- xi. Creating a guide layer
- xii. Controlling the speed of a motion tween
- xiii. Arranging and extending frames

## **9 Scenes and Frame labels**

- i. Creating a scenes
- ii. Organizing scenes
- iii. Creating frame labels

## **10 Symbols and instances**

- i. About symbols and Instances
- ii. Using and managing the symbol library
- iii. Graphic symbols
- iv. Movie clip symbols
- v. Button symbols
- vi. Managing the timeline of movie clip with the main timeline
- vii. Creating and editing a button symbol
- viii. Controlling tints, brightness and transparency of instances

## **11 Animation**

- i. Animation basics
- ii. Timeline, frames and key frames
- iii. Creating a basic text animation
- iv. Creating and manipulating animations
- v. Creating a basic frame-by-frame animation
- vi. Using onion skin to modify an animation
- vii. Using shape tweening and hinting
- viii. Using motion tweening

- ix. Using motion tweening with a guide
- x. Mask animations

## **Action Scripting and Interactivity**

### **12 Introduction to *ActionScript***

- i. Understanding object oriented programming
- ii. When to use *ActionScript*
- iii. Introducing the *Actions* Panel
- iv. Working in *Normal* mode
- v. Working in *Expert* mode
- vi. Using the *Reference* panel
- vii. Understanding *ActionScript* syntax

### **13 Creating *ActionScript* movies**

- i. About *Flash* symbol types
- ii. Adding an action to your script
- iii. Adding an action to a keyframe
- iv. Adding an action to an object
- v. Adding an action to a button
- vi. Planning your *ActionScript* movie
- vii. Tips for creating code
- viii. Dissecting an *ActionScript*

### **14 Controlling the timeline with *ActionScript***

- i. Starting and stopping the movie
- ii. Navigating to frames and scenes
- iii. Creating an interactive animation

- iv. Navigating to URLs
- v. Opening a URL in a different browser window

### **15 Controlling movie content with *ActionScript***

- i. Creating presentations
- ii. Working with *Flash* levels
- iii. Using the *LoadMovie* and *UnloadMovie* action

### **16 Creating *ActionScript* loops**

- i. About loops
- ii. Looping between frames
- iii. Creating a for loop
- iv. Creating a while loop
- v. Creating a do while loop

### **17 Working with variables and arrays**

- i. About variables and arrays
- ii. Understanding variable data types
- iii. Variable and array naming conventions
- iv. Declaring a variable
- v. Creating an array
- vi. Working with arrays
- vii. Getting data from an array

### **18 Modifying an object with *ActionScript***

- i. Creating a movie clip
- ii. Creating movie clip instances
- iii. Using the set property action
- iv. Changing an object's properties
- v. Getting an object's properties

### **19 Using *ActionScript* with text**

- i. Creating input text blocks
- ii. Creating dynamic text blocks
- iii. Loading text from an external document
- iv. Creating rich formatted text

### **20 *Flash UI* components**

- i. Macromedia *Flash UI* components
- ii. PushButton component
- iii. CheckBox component
- iv. RadioButton component
- v. MessageBox component
- vi. ComboBox component
- vii. ListBox component
- viii. Linking a *ComboBox* with a *ListBox*
- ix. Creating a master-detail view
- x. ScrollBar component
- xi. Changing the look and feel of components

### **Adding Media and publishing a *Flash* movie**

## **21 Working with sound**

- i.Event vs. streaming sounds
- ii.Importing and placing sounds
- iii.Putting a sound in the 'over' state of a button

## **22 Embedding video**

- i.Importing video files
- ii.Modifying and controlling videos

## **23 Testing and publishing a Flash movie**

- i.Selecting your publishing Settings
- ii.Previewing and publishing files
- iii.Evaluating download performance
- iv.Optimization factors
- v.Exporting and publishing movies

## **Module5: Dreamweaver**

### **1 Getting Started**

- i. Introducing *Dreamweaver*
- ii. Learning the interface
- iii. Defining a local site
- iv. Creating a website

### **2 Adding content to a site**

- i. Adding content
- ii. Controlling document structure
- iii. Making lists
- iv. Adding horizontal rules
- v. Adding special characters

### **3 Formatting with cascading style sheets**

- i. Formatting text
- ii. Introducing cascading style sheets
- iii. Creating styles
- iv. Exporting CSS rule definitions
- v. Creating class styles
- vi. Attaching external style sheets
- vii. Creating advanced styles
- viii. Creating a new external style sheet
- ix. Displaying styles
- x. Understanding cascading order and inheritance of styles
- xi. Creating internal styles with the property inspector

### **4 Working with Graphics**

- i. Using graphics on web pages
- ii. Placing graphics on the page
- iii. Modifying image properties
- iv. Editing images
- v. Doing roundtrip editing with fireworks
- vi. Customizing the Insert bar
- vii. Adding *Flash* content
- viii. Adding *Flash* video

### **5 Navigating your site**

- i. Understanding site navigation
- ii. Linking to files in your site
- iii. Linking to sites