



DCMP

**WITH SPECIALISATION IN
WEB DESIGNING**

DCMP

[DOEACC Certified Multimedia Professional]

With Specialisation

In

Web Designing

Course Syllabus

Course Description

DCMP with specialisation in Web designing is a very comprehensive course that teaches how to plan, organize, and create a web site from start to finish. The course focuses on individual page design and layout. Using some very powerful techniques taught in this course, students will learn how even the most simplest of pages can be arranged to look more appealing and professional!

Career Options

- ❑ Web Designer
- ❑ 2D Graphic Artist
- ❑ User Interface Designer
- ❑ 2D Creative Designers
- ❑ Multimedia Specialist

Eligibility

The eligibility for learning this course is a graduation in any discipline. Under graduate students can also join the course, if they have an artistic talent and aptitude towards graphic designing and multimedia.

An entrance exam can be conducted for the students in order to test the aptitude and basic skills in art and design.

Course Objectives

The course aims at developing expertise in the field of 3D Animation and Visual effects

Upon Completion of the course, the students will be able to:

- Create 2D Professional artworks and Techniques with Macromedia Flash and Photoshop
- Create interactive contents and web animations using Macromedia Flash
- Understand the basics of HTML scripting.
- Manage Web sites in DreamWeaver
- Apply sound principles of interface design in developing Web pages and sites.
- Understand the evolution of design on the Web and current issues in Web design, both aesthetic and technical

Course Content, Examination And Evaluation

The course comprises of two foundation and two specialisation modules. Each module has duration of 60hr for theory and 60hr for practical sessions. There will be assignments after each subject. and a final project, upon completion of the subjects.

Altogether, there will be 5 exams (2Theory, 3 Practicals) and a Course Viva .

Theory: First theory exam will be a combination of the subjects DCMP1 & DCMP2 and the Second theory exam will be a combination of subjects DCMP3 & DCMP4. The maximum mark for each theory is 100.

Practical ans Viva: The first paractical exam is from the the two foundation subjects DCMP1 & DCMP2 , the second practical exam is from the specialisation subject , DCMP3 and the third practical is from the specialisation subject, DCMP4. There will be viva along with the practicals. This can also cover topics from the final project. Thus each practical carries a total maximum mark of 100 ie 80 for practical and 20 for viva.

The evaluation will be in Grade, depending on the performance of students in the theory and practical exams.

To qualify for a pass in practical exam, a candidate must have obtained at least 50% marks in the practical examination (D Grade).

To qualify for a pass in the course, a candidate must have obtained at least 55% marks aggregate in the theory and practical exam combined (C Grade)

Subjects		Softwares	Code	Practical	Theory
Foundation	Fundamentals And Typography	Adobe InDesign	DCMP1	1	1
	Graphic Designing	Adobe Illustrator AdobePhotoshop	DCMP2		
Specialisation	Web Fundamentals And HTML scripting	Microsoft FrontPage	DCMP3	1	1
	Web Designing With Flash And DreamWeaver	Macromedia Flash Macromedia DreamWeaver	DCMP4	1	

Grades	
S	85% and above
A	75% to 84%
B	65% to 74 %
C	55% to 64%
D	50% to 54%
F	49% and below

		Marks
Theory	1	100
	2	100
Practical + viva	1	100
	2	100
	3	100
Total		500

References

Text Books

1. Dreamweaver MX Bible by Joseph W. Lowery
2. Macromedia Flash MX 2004: The Complete Reference, Second Edition (Complete Reference): Books: Brian Underdahl
3. DreamWeaver MX: The Complete Reference (Paperback) by Ray West (Author), Tom Muck (Author)
- 4 HTML & XHTML: The Complete Reference (Osborne Complete Reference Series) by Thomas Powell

CDs

1. Macromedia Flash Training CD- by VTC
2. Macromedia DreamWeaver Training CD- by VTC

Websites

1. www.tutorialized.com/tutorials/Dreamweaver/1
2. www.tutorialized.com/tutorials/Flash/1
3. www.indiawebdevelopers.com/articles/dreamweaver_tutorial.asp

Infrastructure Required

For an institute for a batch of Ten students:

	Item	Item	Quantity
H/W	1	Processor – Pentium 4 2.6 GHz or AMD Athlon, RAM – 512 M, Hard disk – 80GB, Floppy disk – 1.44MB 3.5", Monitor – 15" LCD monitor (or CRT monitor), Mouse (Optical)	5 each
	2	Printer – Inkjet or laser	1
	3	DVD Burner	1
	4	Modem – 56K or ADSL or cable modem, or any other means of Internet connection	1
S/W	5	Operating system – Windows XP (XP Pro is recommended)	5–licences
	6	Adobe InDesign	5–licences
	7	Adobe Illustrator	5–licences
	8	Adobe Photoshop	5–licences
	9	Microsoft FrontPage	5–licences
	10	Macromedia Flash MX	5–licences
	11	Macromedia DreamWeaver	5–licences

Subject: Fundamentals And Typography (Foundation)

Theory	60hrs
Practical	60hrs
Max.marks	100hrs

Subject Code: DCMP 1

1 Basics (25hrs)

1 Introduction to Computer

CPU Motherboard Hard Disk, Floppy Drive, CD Drive Memory Monitor Display Card Keyboard, Mouse Cables and Connectors

2 Operating Systems

Introduction DOS Commands Microsoft Windows, Software Tools

3 Introduction to computer networks

Network Topologies, Network Card, Network Operating System, Server/Workstation, Hub

4 Introduction to Multimedia

What is Multimedia? – Definition– Multimedia file formats–Multimedia Soft wares– Soft wares for–Page setting, illustrations, Photo editing, Sound and Video editing, compositing, special effects, Web designing and Animation–Multimedia Hardware Devices– Sound Card, Speakers/Mike, MPEG Encoder, MPEG Decoder, Scanner, Digital Camera, TV/VCR/VGA to PAL Converter, Cables and Connectors like (BNC, RCA, EP etc.)–Multimedia Applications

5 Principles Design and composition

Elements of design – White space, Focus, Balance, Page Layout, Pictures, Fonts, Style and Substance, Developing Your Own Skills– making a good Composition–Color theory– Color harmony, Color modes–Art as a Profession –Principles, What Your Client Needs, Presentation, Production, Printing, Legal Issues and Copyrights– Story board– Steps of Storyboard creation

2 Typography and Documentation Using Adobe InDesign (35hrs)

Introduction

Introduction to the interface–Overview of the toolbox –Document setup–Specifying page attributes–Setting margins and columns–Adjusting document setup–Setting preferences–Using ruler guides–Moving the zero point–Using x and y references–Locking a point in the proxy box–Showing hidden characters Creating text frames–Resizing, repositioning & rotating

Text Frames

Using the transform palette–Specifying frame options–Text frame properties
Frame alignment options–Fitting content to a frame–Changing a frames content–Locking and unlocking–Grouping and ungrouping–Magnification and views–Placing text files–Linking and unlinking text frames–

Introduction to typography

Typeface, style and size–Leading and spacing–Formatting paragraphs–Setting rules, drop caps

Using text

Setting tabs and leaders–Checking spelling–Using find and change–Adjusting character attributes–Creating Outlines–Find and Replace Font–Type on a path

Styles

Applying style sheets–Modifying style sheets–Locally formatting a style

Working with Images

Importing graphics–Images formats–Resizing graphics–Link to files –Editing and updating original files–Compound Paths–Alpha channels

Document

Combining text and graphics–Setting a text wrap–Duplicating object–Using arrangement options–Master pages–Creating master pages–Applying master pages–Modifying master pages–Inserting page numbering–Working with colour–Using the colour palette–Colour application–Stroke and fill options–Swatches palette–Specifying a pantone colour–Spot and process colour–Customising the swatches palette–Gradient palette–Using the gradient tool–Creating graduated blends–Adding and deleting colours

Output & Workspace

Tiling windows–Setting margins and columns–Saving InDesign files–Printing InDesign files.

Assignments:

1. Creating a storyboard with a given theme.
2. Creating a formatted textual documentation with the given theme.

Subject: Graphic Designing (Foundation)

Theory	60hrs
Practical	60hrs
Max.marks	100

Subject Code: DCMP 2

1 Introduction to Graphics (2hrs)

Types of Graphics– Vector Vs Raster Graphics– Pixels and Resolution–Color Modes– RGB, CMYK, LAB, Bitmap, and Gray scale

2 Introduction to Vector Graphics and illustrations with Adobe Illustrator (20hrs)

Getting started

Illustrator environment and Work area–Page setup–Viewing the document and working in artwork or preview modes–Grids, guides, and other features to help you accurately position objects–Adding and using guidelines – locking and unlocking, positioning accurately–Getting information about the document and contents – Keyboard Shortcuts: For zooming in and out, Duplicating & selecting, Turning palettes on & off, etc.

Selection Tools & drawing tools

Drawing and modifying basic shapes–Using the pen and pencil tools to create paths–Adjusting path segments–Combining, Dividing and Grouping Paths–Path transformations – Using and Editing Spline Curves–Using Beziér Curves– Compound Path–Applying Stroke and Fill colours–Filling Paths –Using the knife & scissors tools to slice a path or an object into two–Using paintbrushes

Using Colour

Picking RGB, CMYK & Pantone colours–Using the paint bucket & the eyedropper –Gradients and blends, gradient mesh–Saving and modifying colours for later use

Working with Text

Typing directly onto the page and importing text from a text file–Creating columns of text–Setting text attributes (font, colour, size, kerning, etc.)–Copying text attribute from other text–Wrapping text around objects or flowing along a path– Paragraph and character styles–Glyphs–Open type–Tabs–Composition methods

Working With Images

Placing photographs and other artwork into Illustrator–Choosing whether to link or embed image files–Creating borders around images–Using an illustrator path to mask an an area of an image–Tracing the outlines of a photograph or bitmap image–modifying image colours

Working with Layers

Creating layers – setting layer properties–Viewing, hiding and locking layers
Moving objects between layers

Symbols

Symbol introduction– Using Symbol Tools Creating custom symbols–Accessing Symbol Libraries–Manipulating and Duplicating Symbols–Altering All Instances of a Symbol–Replacing All Instances of a Symbol –Saving default symbols

Graphs

Creating graphs–Changing the graph type–Coloring graphs–Styling type–Column designs–Value divisions–Design markers–Other line graphs

Object Transforms and Alignment

Moving, aligning, & grouping objects–Scaling, rotating and transforming and distorting objects–Applying envelope transformations

Filters Effects and Masking

Using filters – Vector and bitmap filters– 3D effects and visualising
Opacity masks–Clipping masks– Graphic styles and the appearance palette

Pathfinder options

An Introduction to the Pathfinder Operations–Working with the Pathfinder Palette

Exporting and Printing artwork

Exporting artwork for Photoshop or for a DTP program–Tools & Palettes–Using the Info Palette & the Transform Palette to maintain accuracy–Marks and bleeds–Crop marks–Printing gradients, mesh objects and blends–Tiling artwork–Transparency and flattening options–Setting output / separation options–Annotating objects

Advanced Options

Producing colour separations Including–Separating artwork–Calibrating your monitor–Trapping –Reusing elements and Automating tasks–Designing artwork for the web–Pixel preview–Slicing artwork–Creating image maps

3 Introduction to Image Editing with Adobe Photoshop

(38hrs)

Basics

Basic Photoshop concepts–Paint versus Draw–Ways of acquiring images–Overview of Photoshop tools–Document options–Background and foreground colours–How text works in Photoshop–Selection & Masks–Use of layer masks in montage–Modifying masks–Rectangular and elliptical marquees–Using the lasso tool–How the magic wand works–Defining a feather edge–Defining an anti-aliased edge–Subtracting and adding–Essential keyboard image–navigation–Moving and exporting a selection–Saving and reloading a selection–Transforming and editing

Image navigation

Power shortcuts in navigating the image–Importance of pixel view

Cutting out / isolating areas of an image

Using navigation techniques to facilitate cutouts–Edges softening and smoothing–Offsetting problems created by softening

Tools & Layers

Brushes and brush types–Erasing and canvas colour–How text works in Photoshop–The advantages of using layering–Transforming and distorting–Layer blending modes

Layer masks

Advantages of use / importance of isolating image areas–Masks from selections–Masks made using freehand techniques–Combining the two Floating selections to make masks across the layer stack–Useful things to know about the wand and marquee tools

Adjustment layers

Advantages of use in retaining image quality–Use in conjunction with masks–Common darkroom techniques applied through layer masks–Using the histogram–Using levels to ensure correct tonal range–Common colour correction problems–Changing the feel of an image through colour correction–Effects of image saturation

Image Preparation & Re-touching

Layer masks adjustment layers–Advantages of adjustment layers–Colour correction techniques–Using levels–Colorizing greyscale images–Achieving subtlety when retouching –Removing unwanted detail–Correcting a damaged image

Combining Images

Creating montages–Saving feathered borders–The gradient tool and selection–Working with multiple layers–Overlaying images–Ways of combining images–Creating layer masks

Working With Paths

Creating and saving paths–Adding and deleting points–Converting selection to paths–Exporting paths to Quark

Filters As Tools

Introduction to Photoshop Filters–Tips on using filters–Blurring and sharpening–Synthesising texture–Preparing video grabs

Importing and Exporting Files

Creating common file types–Setting transparency–Images for print–Images for the web–Examination of file types–Advantages of various formats–Converting the image type–Overview of scanner types–Scan-time resolutions–Output resolutions–Using scanner controls

Photoshop advanced

Advanced selection–Alpha channels and masks–Using the alpha channel palette–Creating a complex cutout using the alpha channels as a mask–Precise control of image edges after feathering/ mask blurring–Using colour range and layer modes to make a complex selection involving hair–Making a complex mask using filters and image duplication

Image quality–Digital image limitations–The importance of bit depth in image manipulation–Effects of bit depth on the image histogram–Common bit depths and what they mean–Maintaining image Quality with Smart Objects–Using Smart Objects –Transforming and resizing Smart Objects–Saving Smart Objects as a separate file

Tonal manipulation–Using curves – the ‘s’ curve – what it does and how it can be used–Modifying the ‘s’ curve–Using curves with the image histogram instead of levels–The reasons behind difficult colour balance problems and some solutions

Black and white from colour–Appreciating the issues in changing to monochrome–Differences between conversion methods–Using the channel mixer

Colour management–The need for colour management–Configuring default working colour spaces–Choosing an image profile–Generic cmyk – does it really exist–Monitor calibration–Printing to a desktop printer using colour management–Sending work out using colour management–Soft proofing–Effect of ‘intent’ on conversion between colour profiles.

Hardware requirements to run Photoshop efficiently–Configuring memory and scratchpad
Automated actions–Creating an action–Editing an action–Running a batch command

Assignments:

- 1 Creating, a vector illustration of a character.
- 2 Designing an Ad banner with a Logo
3. Retouching and restoring an old photograph.

Subject: Web Fundamentals and HTML Scripting (Specialisation)

Theory	60hrs
Practical	60hrs
Max.marks	100

Subject Code: DCMP 3

1 Web designing Fundamentals (10hrs)

Planning A Web Site

How to plan your site–Mapping the site–Chunking information–The importance of good web content

Basic web design principles

The good the bad and the ugly–Structuring and Site Navigation–The limitations of html

Common web page elements

Headers and footers–Navigation bars–Back buttons

Typography for the web

Limits–Tips–Typefaces for the Web

Working With Images

Optimising files–Gifs and Jpegs–File formats and image compression

Formatting your pages

Printable areas–Browser compatibility issues

Getting your customers to come back

Domains and Hosting

What to consider when choosing a hosting company/registrar:-Will I require database connectivity/cgi?-How many mailboxes will I need-Buying domain names & web space-Pointing your domain to your site & DNS Settings-FTP

2 Introduction to HTML (30hrs)

Introduction

An introduction to HTML background and usage. Internet jargon and background explanation along with ideas about web site design and page design. Use of different web browsers.

Hyper Text Markup Language (HTML) Documents

What is HTML and its page structure. Understand the structure of the tags. Using a directory structure for improved navigation through pages and files. File naming conventions.

HTML Coding

Creating a page with the correct page structure using HTML tags.

Text Formatting and Alignment Tags

Using text, paragraph and list tags to build and format the HTML pages. Adding fonts, font size, paragraph, alignment and list type tags.

Images and Horizontal Rule

How to add graphical elements. Incorporating Images and Horizontal Rules. Changing the attributes of images. Adding page colours and backgrounds to pages. Understand web safe colours. Including Image Maps. File types and sizes.

Hyperlinks

Understanding links. Adding Anchor tags and linking processes. How to use images as links. Creating links to web pages, emails and files.

Tables

Introducing tables for effective layout. Creating tables, adding data to rows and columns. Setting widths for tables, borders, cell spacing, cell padding and alignment. Using column and row span attributes. Changing cell and table attributes.

Frames

Introducing frames and concepts. Creating frames as columns and rows. Setting frame attributes including width, borders, adding scroll bars and resizing. Setting target frames and hyperlinking to them. Work with a noframes concept.

Forms

Forms overview. Adding text boxes, password boxes, larger text areas, drop down menus, check boxes and radio buttons to the form. Create submit and reset buttons. Discussing CGI Scripts and form hosting.

HTML Extentions

How to add and use Cascade Style Sheets, JavaScript components.

Publishing and Publicising your Site

3 Introduction to FrontPage (20hrs)

Creating A New Web Site

Learn to use built-in wizards to quickly create your first site. Create advanced sites manually with the empty web wizard.

FrontPage Views

Using navigation view to manage the layout of your site. Managing broken links, web site size and workflow with reports. Adding to do items and tasks for group collaboration.

Working within a Site

Learn to import, add, edit, delete and manage the structure of a web site with pages and folders. Deleting a Web

Essential Web Page Layout Techniques

A comprehensive introduction to formatting, adding and editing text. Incorporating word processing documents, charts, etc. Liven up your web site with graphics. Learn which graphic types are appropriate for your site. Use Page Properties.

Linking Web Pages Together

Use hyperlinks to link your site, open another site in a new window, and send eMail. Learn to create both text and image hyperlinks. Use bookmarks to divide up web pages. Create image maps for visual navigation.

Creating Dynamic Web Templates

Learn to create, update or attach the Dynamic Web Template. This is a new feature in FrontPage 2003. This new and sophisticated type of Web page template enables you to share a layout among several pages in a site or attach a different Dynamic Web Template.

Advanced Web Page Layout Techniques

Learn what layout tables are and the benefits they provide – Create visually appealing layouts using tables and layers. Also learn to insert interactive buttons that change appearance when people hover over them and press them. In addition, learn some basics of JavaScript. Add frames to an existing site to ease complex navigation.

Getting User Information and Feedback

Using forms to collect information from users. Learn to validate user input, send information to an eMail and a file, and create a confirmation page.

Publishing Your Site

Getting the final product published to the Internet or an intranet.

Assignments:

- 1 Creating, a website using HTML tags
- 2 Creating, a Personal website using FrontPage

Subject: Web designing with Flash And DreamWeaver (Specialisation)

Theory	60hrs
Practical	60hrs
Max.marks	100

Subject Code: DCMP 4

1 Introduction to Macromedia Flash (35hrs)

Introduction to Flash

The Flash Interface–Flash and HTML–How Flash movies work – streaming and vectors–Finding your way around Flash MX–What Flash can and can't do

Flash basics

Setting Movie properties–Using Vector–based paint and draw tools–Creating & editing shapes and working with shapes and elements–Grouping elements–Using panels and shortcuts for efficiency.

Creating vector graphics

Lines and brush strokes–Drawing lines, rectangles and ovals–Smoothing /straightening lines and curves–Using grids and rules–Aligning objects–Using gradients and fills–Creating and editing custom colours and fills–Using colours to create 3d and light effects

Text

Creating and editing text–Breaking apart and reshaping text–Adjusting–weighting, font, style and alignment–Transformations–Rotating, skewing, scaling and flipping–Free Transform

Layers and Keyframes

Locking layers and colour coding layers–Using Mask and masked layers
Understanding frames and keyframes

Creating simple animations

Using the Timeline Frames and keyframes–Using the onion skin and outline colours mode–Frame by frame animations

More animation features

Creating tweened animations–Shape and motion tweening–Creating animations along a path

Symbols and Instances

Working with symbols–Creating and editing symbols–Assigning properties to instances–Using the Edit symbol Commands–Applying transparency to colours and gradients

Importing Images/Jpegs

Interactivity

Explaining actions and event-handlers-Types of actions-Adding actions to buttons and keyframes-Giving control to the user-Nesting symbols-Creating animated buttons-Making interactive links to other scenes and URLs

Sound

Importing sound-Adding sound to a scene and adding sound to buttons
Synchronising sound-Streaming audio with MP3 compression

Management

Using the library to organise elements-Using the Movie Explorer to keep track of elements

Testing and Publishing

Using the bandwidth profiler-Streaming and streamlining your movie-Using the Publish command-Inserting a preloader.

Introduction To ActionScript

Understanding Object Oriented Programming-When to Use ActionScript
Introducing the Actions Panel-Working in Normal Mode-Working in Expert Mode-Using the Reference Panel-Understanding ActionScript Syntax

Creating ActionScript Movies

About Flash Symbol Types-Adding an Action to Your Script-Adding an Action to a Key frame-Adding an Action to an Object-Adding an Action to a Button-Planning Your ActionScript Movie-Dissecting an ActionScript

Controlling The Timeline With ActionScript

Starting and Stopping the Movie-Navigating to Frames and Scenes-Creating an Interactive Animation-Navigating to URLs-Opening a URL in a Different Browser Window

Controlling Movie Content With ActionScript

Creating Presentations–Working with Flash Levels–Using the LoadMovie and UnloadMovie Action

Creating ActionScript Loops

About Loops–Looping Between Frames–Creating a For Loop–Creating a While Loop–Creating a Do While Loop

Working With Variables And Arrays

About Variables and Arrays–Understanding Variable Data Types–Variable and Array Naming Conventions–Declaring a Variable–Creating an Array–Working with Arrays–Getting Data From an Array

Modifying An Object With ActionScript

Creating a Movie Clip–Creating Movie Clip Instances–Using the Set Property Action–Changing an Object's Properties–Getting an Object's Properties

Using ActionScript with Text

Creating Input Text Blocks–Creating Dynamic Text Blocks–Loading Text From an External Document–Creating Rich Formatted Text–

Flash UI Components

Macromedia Flash UI Components–PushButton Component–CheckBox Component–RadioButton Component–MessageBox Component–ComboBox Component –ListBox Component–Linking a ComboBox with a ListBox–Creating a Master–Detail View–Scrollbars Component–Changing the Look and Feel of Components

2 Web designing with Macromedia DreamWeaver (25hrs)

Getting Started

Introducing Dreamweaver–Learning the interface–Defining a local site–Creating a website

Adding Content to a Site

Adding content–Controlling document structure–Making lists–Adding horizontal rules–Adding special characters

Formatting with Cascading Style Sheets

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Formatting text–Introducing cascading style sheets–Creating styles–Exporting CSS rule definitions–
Creating class styles–Attaching external style sheets–Creating advanced styles–Creating a new
external style sheet–Displaying styles–Understanding cascading order and inheritance of styles–
Creating internal styles with the Property inspector

Working with Graphics

Using graphics on web pages–Placing graphics on the page–Modifying image properties–Editing
images–Doing roundtrip editing with Fireworks–Customizing the Insert bar–Adding Flash content–
Adding Flash Video

Navigating Your Site

Understanding site navigation–Linking to files in your site–Linking to sites

Assignments:

1 Designing an interactive interface using Flash

Final Project:

Suggested Topics

1 Designing a Commercial Web Site using DreamWeaver

2 Creating a digital portfolio using Flash