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## **Syllabus**

This course will introduce the students to the design and implementation of World Wide Web pages using the Hypertext Markup Language (HTML).

assignments to cover topics that include: principles of Web page layout, text formatting, tables, forms, images, and hosting of Web pages. Emphasis

The class will use lectures, demonstrations, lab activities, and homework

during the class will be on the individual construction of **Web** pages.

**Course Description** 

Grading

**Requirements** 

**Assignments** 

Project

**Policies** 

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**CIS 110** • Home Page

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# **Course Objectives**

The course is intended to help the students to:

- . become familiar with the basics of Web page layout
- . learn the HTML to implement Web pages
- . learn how to scan images and incorporate them into Web pages
- . be able to construct personal Web pages that are well designed.
  - informative, functional, and responsible

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# Text Book

There will be no official text book for this course. We will rely on the resources available on the Web, along with a set onf on-line notes prepared especially for this course.

## Exercises

There are many **software** packages available on the market that allows you to create Web pages without knowing the underlying HTML code. But, at some *point*, in order to modify a Web page, to fix its problems, and to enhance it, knowing HTML becomes a valuable skill. Once you have learned the basics of HTML, it makes sense to use a Web creation software for practical applications. This course, however, will emphasize the creation of Web pages by using the HTML code. For the sake of developing HTML skills, you are not encouraged to use such packages as FrontPage, Dreamweaver, or HotDog software in completing your exercises. However, you are encouraged to learn how to use such tools when you are creating Web pages for your own use. (It's not difficult to determine whether or not such a software was used in Web page development, because an automatically' created Web page contains many unnecessary--though

harmless--HTMLtags.)

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## Project

An important requirement in the course is to develop a Web document with a type and subject of your choosing, modifying and enhancing its pages each week as you learn more techniques. These pages are to be submitted in four stages--corresponding to. four projects assignments (PAs)--by uploading them to the server. These posting are due at the *end of the due dates*, which are indicated in the *Schedule*-section of this Web site. On some occassions, class time may be used to work on these exercises. However, *you* are expected to spend additional time outside the class to: complete the Project Assignments (PAs).

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# Submitting **One's Own** Work

Each student is expected to write his or her own code. Although modern programming projects require extensive teamwork, one of the main goals in this class is that each student learn the basic Web development skills by practicing individually. You must distinguish between consulting your friends and discussing problems with them from copying other people's work. The penalty for copying in tests, quizzes, and project assignments is, for the first offense, a grade of F for all parties involved; for the second offense, an F for the course.



## Attendance

**Regular** class attendance is important since you are responsible for all materials covered in the class. University regulations limit the number of cuts -a Freshman may take. Attendance will be taken at all class sessions. Generally speaking, there will be no make-up quizzes, except in cases of excused absences for which prior arrangements will he necessary. Be sure to inform the instructor when you foresee that you cannot be present for a scheduled quiz. A missed quiz receives a grade of 0.

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## **Requirements**

Following are the class requirements. Refer to the section on Grading for further details.

- Project Assignments (4)
- . Class Attendance
- . Final Exam

The project **assignments** on the Web server, at appropriate times, in order to be given full credit.

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# Grading

The semester grade will be based on the following elements of your course responsibilities:

| Project Assignments | 180 |
|---------------------|-----|
| Attendance          | 20  |
| Final Exam          | 1 0 |

Total

The following guidelines will be used in determining the final grades.

%; B: >= 80%; f: >= 70%; D: := 60%; F: < 60%

Test and Quiz Dates are indicated in the Course Syllabus

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# **Grading Criteria for Web Page Projects**

Your Web page projects will be graded on the following points.

- 1. Do they satisfy all the requirements described in the problem statement?
  - Are required objects--e.g., lists, links, tables-- present? Are the texts formatted as required? Are all the links valid?
  - Do they contain the **information** expected of **th** Are the Web pages designed well?
    - Is the page design appropriate for the particular Web page?
    - Is the page layout pleasing and readable?
    - Is the color combination sensible'?
    - Is it easy to navigate to other pages?

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# **Getting Help**

For "quick" questions the email is the simplest way to contact me. Feel free to drop in at my office during  $\Omega$  fice hours or to Set up an appointments outside those hours. (I am around my office usually in the afternoon.)

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| wk Date | Topics  | Readings/Exercises | Due                      |
|---------|---|--------------------|--------------------------|
| 1/22    | Introduction  | Basic HTML Page    | - Proiect Description    |
|         | <ul><li>Local System</li><li>Web &amp; Internet</li></ul>           | Elements           | * <u>Sample Pr</u> oiect |
|         | <ul> <li>URL</li> <li>Objectives of Web Page '.</li> </ul>          | Exercise No. 1     |                          |
|         | <ul> <li>Layout Design</li> </ul>                                   |                    |                          |
|         | <ul> <li>Steps in Creating Web<br/>Page</li> <li>Notepad</li> </ul> |                    |                          |
| 1/29    |   | Text Formatting    |                          |
|         | <u>Web Policy</u><br>Formatting Text                                | Exercise No. 2     |                          |
|         | . Formatting Tags   | Design Basics      |                          |
|         | . Nested Tags<br>. Tags' Attributes                                 | Delign Dusies      |                          |
|         | <ul> <li>Special Characters</li> </ul>                              |                    |                          |
|         | Anacrophilia  |                    |                          |
| 2/5     | <u>Uploading Web Page to</u> the Server                             | Creating Lists     |                          |
|         | Lists   |                    |                          |
|         | <ul><li>Unordered Lists</li><li>Ordered Lists</li></ul>             |                    |                          |
|         | Definition Lists     Nested Lists                                   |                    |                          |
|         | Linking Web Pages   |                    |                          |
|         | Link to Local File  | Hypertext Links    |                          |
|         | <ul> <li>Link to Another URL</li> <li>Link to Book Marks</li> </ul> |                    |                          |
|         | External Linking  |                    |                          |
|         | <ul> <li>Specifying Directory<br/>Paths</li> </ul>                  |                    |                          |
|         | . Linking to FTP and<br>E-mail Sites                                |                    |                          |
|         | Linking Small Image to a Larger Image                               |                    |                          |
|         | <ul> <li>Linking to Sound and<br/>Video</li> </ul>                  |                    |                          |
| 4 2/12  | Including Images  | Inserting Images   | PA_1: Upload home page   |
|         | Downloading Free  | mage As a Link     | to the server $(2/13)$   |
|         | Clipart<br>• Inline Image   |                    |                          |
|         | <ul> <li>Images &amp; Texts</li> <li>Image as a Link</li> </ul>     |                    |                          |
|         | Enhancing Home Page   |                    |                          |
|         | . Background Color<br>. RGB   |                    |                          |
|         | Image As a Destructured   | Background Color   |                          |
|         | . Transparent Image<br>. Horizontal Rule                            |                    |                          |

| 5  | 2/19 | Tables      Table Structure     Column Heading     No Border     Empty Cell     Spanning Multiple Units     Controlling Table & Cell     Size | Tables                  | PA No. 2: Upload<br>sub-page 1 to the server<br>(2/20)   |
|----|------|---|-------------------------|--|
|    | 2%26 | Image Scanning<br>Forms   | Forms                   | PA No. 3: Upload<br>sub-page 2 to the server<br>(2/27)   |
|    |      | <ul> <li>Interactive Form</li> <li>Form Tag</li> <li>CGI Programs</li> <li>Input Objects</li> </ul>   |                         |  |
| 7  | 3/4  | Demonstration offrames<br>Demonstration of Some<br>DHTML Features   | The Top 20 HTML<br>Taqs |  |
| 8, | 3/11 | Exam: 9:00 - 11:00  |                         | PA No. 4: Upload the<br>complete Web document<br>consisting of the home<br>page and at least 3<br>subpages. (3/12) |
|    | 3/18 |   |                         | Last day to for<br>submitting PAs (with<br>penalty)  |

# **Personal Web Page Guidelines**

The World Wide Web offers you the means to gather all kinds of information from sources around the world. It also gives you an opportunity to share your information with a world-wide audience. Personal Web pages are a powerful medium for presenting a positive image of oneself or an organization.

Because they can be viewed by a large number of clients, you take on a serious responsibility when you create Web pages, especially when they are hosted on the Chaminade University server. You should try to make your pages attractive, user-friendly, accurate, and free of offensive contents. Personal Web Pages do not represent official position of the Chaminade University; however, as members of the University community, you are expected to act responsibly regarding the contents of your pages. While personal pages on the Web server are not monitored as a routine matter, materials that are brought to our attention and are determined to be objectionable maybe removed from the server.

The following guidelines should be observed in the creation and posting of any Web Page.

- . Pages should be checked for accuracy of contents and tested for functionality before they are posted.
- You should respect the copyrights of both text and image materials on the Web. (Examine different home pages on the Web for source of inspiration for designing your own home page but not for copying texts and other objects.)
- Pages should be free of any text, image, sound, or other elements considered offensive. The same restriction applies to any links to URLs.
- The *home page* should contain the e-mail address of the author, so that interested readers can contact him or her.
- . Each page should include the date of last update and the name of the author. The date of update informs the viewers the freshness of the page content. Author name is important especially for a large Web site, where many people might be responsible for updating various sections.

The following points should be observed for pages contained in the Chaminade Web site.

- All file names and directory path names specified in Web page scripts should be in lower case (except when the Unix Operation System requires captialization in those names).
- . Images that you use should be store in a subdirectory, with names like "image" or "graphics".
- All addressing in your Web documents should be relative, rather than absolute, so that changes in the overall directory structure will not affect the links in your pages.
- No active link to any page outside the Chaminade site should be incorporated into a Chaminade Web page unless it has the approval of the Dean.

I have read the Personal Web Page Guidelines and agree to them.

Name:

J E-mail Address: We Page Address: (e.g., *ttp:* c *aminade.edu/~userid*) http://www.chaminade.edu/~

Submit the form.



# **Resources for Web Page Development**

Graphics Resources | HTML Tutorials | HTML Editors | Web Page Design Cyber Ethics | References | Search Engines

## **Graphics Resources**

**Background Colors** 

You can view any color corresponding to a color name or its hexadecimal code. <u>Color Center</u>

Another page that lets you view background colors dynamically. Written in Javascript. Clip <u>Art Universe</u>

A source of free clip art, buttons, backgrouds, and other graphics objects

**Everything Icon** 

Contains animated giffs, java applets, fractals, as well as clip art and other image samples <u>Barry's Clip Art Server</u>

Another source of free graphics elements

**Business Clipart and Photos** 

Collection of free clipart and photos from various sources on and off the Web

Food Image Gallery

Some clipart samples which can be used in the Abigail project.

## HTML Tutorials

#### HTML: Tutorial

An interactive HTML for beginners, organized by detailed topics but written in an informal style <u>Webmonkev</u>

An excellent set of tutorials at the beginners's level as well as the advanced level, on topics including HTML, Java, Javascript, DHTML, and Perl

#### 32 Ways to Build a Better Web

HTML technology primer, including an introduction to advanced features of the Web page, such as the Cascaded Style Sheet (CSS) and Dynamic HTML (DHTML)

Design Basics

Considers such quesitons as: What is the purpose of your Web site? Who is it audience? How sophisticated should your page be? What about colors? How do you make pages more readable?

### HTML Quick Reference

List of HTML (version 2) tags for easy reference

Web Developers' Virtual Library

A rich source of tutorials and examples related to HTML, Multimedia, Web References, Java, Javascript, etc. Recommended for anyone involved with the creation of Web pages or is interested in what the Web technology offers.

#### **HTML Cheatsheet**

A quick reference to major HTML elements and their attributes

Learn More about HTML Elements

More complete explantion on HTML elements, with examples including, images, lists, fonts, blockquotes, etc. Provides on-line practice exercises

#### HTML fo the Rest of Us

Step-by-step guide to develop sophiscated Web pages, starting with basic HTML elements Frames Tutorial

A step-by-step instruction on how to create and modify frames on a Web page Using Frames

A description Web page frames--what they are and how to implement them--as part of a general HTML tutorial

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#### HTML Editors

#### Arachnophilia

A 32-bit HTML editor and workshop -- you can import fully formatted text, tables and outlines, import them into Arachnophilia and watch as they are converted into HTML code, complete with colors, fonts and styles.. Also supported: CGI, Frames, Java, JavaScript and C++ development. And new in this version -- Arachnophilia has an FTP client built-in, to automatically update your Web site. (From Tucow's description.) This is an excellent HTML editor.

#### Edit Pad

A great replacement for windows Notepad with multiple file support, drag and drop capabilities, and more. Switch between your different files easily with tabs at the top of the window, and manage your web pages with ease without a dozen windows open at the same time. This program is fantastic, try it out for yourself! (From Tucow's description.)

This software is called a postcardware, which in the words of author Jan Goyvaerts, means that "you may try out EditPad for a short while, but if you wish to keep on using it, you are kindly requested to say 'thank you' to the author by sending him a nice postcard. If everyone would say 'thank you' when someone else said or did something nice, this world would be a much better place." You can visit his Home page for more resources.

#### **ZipCentral**

Easy-to-use File Comression/Decompression Utility. Freeware

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#### Web Page Design

#### **Cool Sites**

Examples of well laid out Web pages, designed for personal use, professional groups, and institutional organizations

#### Tripod.Com

Offers Web page building wizards at various degrees of sophistication; free Web site space. <u>Family Web Page</u>

"The hardest thing about making a family Web site may be explaining to your kids and doubting spouse why you're doing it in the first place." These pages offer some suggestions on how to design a family Web page.

#### Design Basics

Introduction to the design of a Web Homepage by asking questions like: "What is its purpose?"; "Who is the intended audience?"; "What level of technology is required?"; "How should the pages be organized?"

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Cyber Ethics

#### Web-Law FAQ

Discussions on questions related to the copyright law as it relates to the Web Cyberspace Law for Non-Lawyers

Explains the meaning of "Fair Use" of copyrighted materials

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## References

Dictionary of Computer <u>Terminology</u> You can search for almost any term related to the computer and the Internet, and this source will provide you with an explanation and related links.

#### World Wide Web Consortium

Standardization organization for the World Wide Web activities. Source of official specifications for the HTML, Style Sheet, and Document Object Model.

**Index of HTML 4.0 Elements** (Tags)

Lists all the tags available in HTML 4.0, with their discriptions, allowed attributes, and examples HTML 3.2 Reference Specification

Describes elements of HTML 3.2, most of which are still recognized by new browsers <u>Compact Index of HTML Tags</u>

Alphabetical listing of common HTML tags and their explanations, examples of useage. More complete list of tags is also available from this site.

#### **HTML Document Character Set**

Table of Characters Set (Latin-1) used in HTML documents. E.g., for the browser to display  $\theta$ , type:

<b>&#233;</b> or <b>&eacute;</b>

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## Search Engines

One study of the range of the WWW covered by search engines has reported that the most comprehensive of the search engines reach only about 1/3 of all Web pages in 1999. The percentage of Web pages reached by many of the popular search engines is in one-digit figures. Given this fact, it pays to try several search engines when you are looking for speicific topics. Some search engines cover a wide range without going deep in the link hierarchy and return a large number of URLs, while others which make use of specific, narrowly stated queries, delve deeper into the link hierarcy, and return more sharply defined responses.

Northern Light Covers the most comprehensive list of URL (1999) Altavista Second most comprehensive, after Northern Light Snap Like Altavista, another comprehensive search engine Hotbot Good for specific and obscure topics Goole **Returns results ranked by popularity Directhit** Similar to Google Dogpile Search the Web using several search engines simultaneously GoTo.com Allows queries in ordinary English. E.g., "What is the capitol of Vietnam?" LookSmart Categorizes returned URLs in logica groups; seems to be better than many in returning relevant responses.

# Techniques

Including Interactive Maps in Web Page

Describes how you can insert Interactive Maps in your Web Page from several sources, with hints on good and not so good ways

Cookie Crumbs

Answers such questions as "What is a cookie?"; "What's inside a cookie?"; "Is it safe for the user?"; "Where do you find it in your browser?"

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Last updated on August 24, 1998. Please send comments and questions to Robert K. Maruvama.