

CRAFTON HILLS COLLEGE

Course Outline

- 1. **Discipline:** Computer Information Systems
- 2. **Department:** Information Technologies
- 3. **Course Title:** Web Page Programming and Design
- 4. **Course ID:** CIS 111
- 5. **Prerequisite(s) :** None
- Corequisite(s) :** None

**Departmental recommendations(s) :** None

- 6. **Semester Units:** 3

- 7. **Minimum Semester Hours:**

Lecture: 48                      Lab:                      Clinic:                      Field:

- 8. **Need for the Course:**

The ability to design, create, maintain and administer web pages using HTML and scripting programming languages is in high demand by both business and the public sector. For this reason students are requesting that this course be included in our curriculum. This course will introduce concepts and techniques that will prepare students for the transition to other Web-based programming languages such as Java and J++ that will be offered in our program. This course fulfills the Associate in Science Degree as well as the certification requirements for Computer and Information Science.

- 9. **Goals for the Course:**

CIS 111 enhances the CIS discipline by offering another branch of computer training to the personal user, business user, and the programmer. Training in this area will enable our students to be more employable by having an additional area of expertise. It will also provide training for businesses and for current computer professionals who want to update or expand their skills. This course is appropriate to the college mission in that it is part of a complete vocational education program leading to employment.

- 10. **Catalog Description**

Introduction to web page design for personal users, business users and computer professionals. Introduces web page design, programming, and administration using HTML, DHTML, XHTML and scripting languages such as JavaScript and Visual Basic. Students will design, create, publish and maintain web pages.

- 11. **Entrance Skills:** None
- 12. **Course Objectives:**

**Upon completion of the course, students will be able to:**

- A. Design and develop a professional web site using HTML, DHTML, XHTML and scripting languages such as Java, Perl, and Visual Basic.
- B. Publish and maintain a web site.
- C. Identify and use FTP (File Transfer Protocol) software.
- D. Develop and apply scripting to a web site.
- E. Understand and apply CGI (Common Gateway Interface) technology.
- F. Describe and create relationships between information objects.
- G. Design and include multimedia (audio, video, graphic) elements in a web page.
- H. Identify and describe the goals of web presentations.
- I. Create text that contributes to effectiveness navigational efficiency.

**13. Representative Texts and Instructional Materials:**

**TEXTS:**

JavaScript, Gosselin, Thomson Learning, Cambridge, MA., 1999.

HTML COMPLETE CONCEPTS AND TECHNIQUES, Gary B. Shelly, Thomas J. Cashman, Course Technology, A Division of International Thompson Publishing Inc., Cambridge, MA., 1999.

**14. Course Content:**

- A. Overview, history and terminology of the Internet and World Wide Web.
- B. Principles of Web Site Design
- C. Planning the Site
  - 1. Site specification
  - 2. Content goals
  - 3. Audience analysis
- D. Creating and Editing a Web Page
  - 1. Elements
  - 2. HTML and Notepad
  - 3. Using tags to code your page
  - 4. Linking to other pages and sites
- E. Images and Multimedia
  - 1. Creating and modifying graphic files for your site
  - 2. Adding sounds for site enhancement
  - 3. Adding animation to your site
- F. Tables
  - 1. Planning and designing tables
  - 2. Implementing tables
  - 3. Table borders and cell spacing
- G. Style Sheets
  - 1. Creating internal and external style sheets
  - 2. Applying style sheets to web pages.
- H. Frames
  - 1. Using frames in page design
  - 2. Implementing scrollbars
  - 3. Linking frames
- I. Coding forms on web pages
- J. CGI (Common Gateway Interface)

K. Adding depth and enhancements to web pages using scripting and applets

L. Dynamic HTML

M. Pragmatic HTML

**15. Methods of Instruction:**

The course will combine lecture, class discussion, computer-aided presentations, and computer classroom practice.

**16. Assignments and Methods of Evaluation:**

Students will read appropriate chapters from the text.

Students will complete a variety of exercises and web page design exercises and examinations. Students will complete a term web page design project.

Web page project:	50% -70%
Examinations:	20% -30%
Exercises/Quizzes	Up to 20%