

Northern Marianas College
CURRICULUM ACTION REQUEST

Effective Semester / Session: Fall 2008


Type of Action:

- New
- Modification
- Move to Inactive (Stop Out)
- Cancellation


Course Alpha and Number: CS 222

Course Title: Web Design and Programming

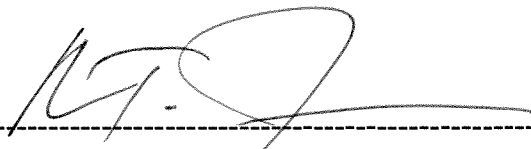
Reason for initiating, revising, or canceling:
Modified Student Learning Outcomes




Proposer 11/13/08
Date



Department Chair 11/13/08
Date



English and Format Reviewer 1/6/09
Date



Dean of Academic Programs and Services 1/6/09
Date

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1. Department

Business

2. Purpose

This course introduces the topic of Web Site Design with the focus being computer coding methodologies to include HTML, XHTML, and CSS. XHTML will be presented as a document structure language and CSS will be presented as the presentation (format) description language. Students will create and manipulate computer images to create web graphics for use on their web site. Fundamental computer networking concepts will be covered so that students understand how the Internet works. Students will host their web site on a web server. The course is proposed to be required for AAS Business Computer Applications students and will likely be of interest to the entire college community.

3. Description

A. Required/Recommended Textbook(s) and Related Materials

Required: HTML, XHTML, and CSS, 6th ed. (Visual Quickstart Guide).

Publisher: Peachpit Press; 6th ed. August 16, 2006 (Prentice Hall)

Language: English

Readability level: Grade 11

B. Contact Hours

1. **Lecture:** 3 hours per week / 45 hours per semester

2. **Lab:** Class is held in computer classroom/lab

3. **Other:**

C. Credits

1. **Number:** 3

2. **Type:** Regular degree credits

D. Catalogue Course Description

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host their web site on a web server. Prerequisite: CS 103. English Placement Level: EN 093/094. Math Placement Level: MA 132.

E. Degree or Certificate Requirements Met by Course

This course is a required course for the A.A.S. degree in Business Administration with an emphasis in Computer Applications. It also serves as a computer elective course for other degree and certificate options.

F. Course Activities and Design

This course will teach students how to code using a text editor in HTML/XHTML and CSS methodologies. The student will learn how to create and manipulate web graphics for use on their website. Students will upload their files to a web server and view their web site in a browser. Classes will include lectures with demonstrations, in-class assignments that allow students to practice what they learn, as well as larger projects.

4. Course Prerequisite(s); Concurrent Course Enrollment; Required English/Mathematics Placement Level(s)

Prerequisite: CS 103

English Placement Level: EN 093/094

Math Placement Level: MA 132

5. Estimated Cost of Course; Instructional Resources Needed

Cost to the Student: Tuition for a 3-credit course; cost of the textbook.

Cost to the College: Instructor's salary.

Instructional resources needed for this course include computer hardware and software, computer supplies, computer maintenance, lab aides' stipends and reproduction of teaching supplies. Instructional resources needed for this course include instructor's computer console, computer projector and projection screen, sound card and speakers, whiteboard, whiteboard markers, photocopied handouts, and appropriate reference materials.

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6. Method of Evaluation

Student grades will be based on the regular letter grade system as described below:

- A: Excellent – grade points: 4.0;
- B: Above average – grade points: 3.0;
- C: Average – grade points: 2.0;
- D: Below average – grade points: 1.0;
- F: Failure – grade points: 0.0.

NMC's grading and attendance policies will be followed.

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7. Course Outline

This is a topical outline and does not necessarily indicate the sequence of instruction.

- 1.0 Introduction to Computers and the Internet
- 2.0 Browsers: IE and Firefox
- 3.0 Web Page Building Blocks
- 4.0 XHTML Document Structure
- 5.0 XHTML Block Level Elements
- 6.0 XHTML Inline Level Elements
- 7.0 XHTML Lists
- 8.0 Creating and Using Web Images
- 9.0 XHTML Hyperlinks
- 10.0 RGB Color Codes
- 11.0 Cascaded Style Sheets for Formatting
- 12.0 Cascaded Style Sheets for Layout and Printing
- 13.0 XHTML Tables
- 14.0 Symbols and Unicode Characters
- 15.0 Publishing Your Pages on the Web

8. Instructional Goals

This course will introduce students to:

- 1.0 Valid XHTML strict code to define the structure of a web document
- 2.0 Good web design principles
- 3.0 Features and differences between various computer image formats.

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- 4.0 How to create custom web graphics and modify existing graphics.
- 5.0 Create CSS document presentation rules.
- 6.0 Create CSS element redefinition and classes and apply as inline styles, embedded CSS, and external CSS.
- 7.0 Manage a web site by transferring files to a remote web server.

9. Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- 1.0 Create web documents that utilize valid XHTML strict code to define the structure of a web document.
- 2.0 Identify the features and differences between various computer image formats.
- 3.0 Create custom graphics and modify existing graphics for use on their personal website.
- 4.0 Create CSS document presentation rules and apply this knowledge in the development of a personal website. This includes application of both element redefinition and classes to inline styles, embedded CSS, and external CSS.
- 5.0 Design a web site that applies good design principles and communicate a topic of interest using text and graphics.
[Gen Ed 1: Communication]
{Program SLO 8, 11}
- 6.0 Create a multiple webpage website using the coding methodologies XHTML and CSS, and include web graphics.
[Gen Ed 5: Critical Thinking]
{Program SLO 8, 11}
- 7.0 Organize text and graphics files for the web site using relative addressing throughout and then synchronize web files between a local drive and web server using FTP (File Transfer Protocol).

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10. **Assessment Measures**

Assessment of student learning may include, but not be limited to, the following:

- 1.0 Class attendance and participation
- 2.0 Practical project assignments
- 3.0 Periodic exams and quizzes