WD103 – Website Design & Development II Syllabus

COURSE DESCRIPTION

Students will learn how to write valid code for web sites using common markup languages. They will utilize the proper syntax for industry standard markup languages to create a usable web site while using accepted design principles.

Prerequisite: DD170

Clock Hours: 50 Lecture Hours | 50 Lab Hours | 50 Out-of-Class Work Hours (12.5 Hours Weekly)

Semester Credit Hours: 4

INSTRUCTOR: TBA

(Instructors, please fill-in your name here):______

COURSE COMPETENCIES

In this course, students will:

Write valid code for mobile and Web devices.

- ✓ Identify and utilize techniques for validating code.
- ✓ Analyze web sites in common web browsers and mobile devices.

Use the proper syntax for common markup languages.

- ✓ Identify markup languages used for web site development.
- ✓ Determine the needs for different mark-up languages
- ✓ Explain the differences between HTML, XHTML, CSS, XML and their benefits
- ✓ Explain "syntax" in the context of a web site.

Apply accepted design principles to web site designs.

- ✓ Identify accepted design principles.
- ✓ Explain how design principles add to site usability.
- ✓ Critique a web site according to accepted design principles.

Create a usable web site utilizing accepted web usability standards..

- ✓ Identify the audience of a web site.
- ✓ Develop usable web navigation structures.
- ✓ Describe the concept of information architecture within the context of site usability.

Research and utilize current web technology trends.

- ✓ Show continual desire to learn new and emerging web technologies.
- ✓ Use current versions of markup and scripting languages.

INSTRUCTIONAL METHODS

- Lectures
- Discussions
- Demonstrations
- Reading Assignments
- Writing Assignments
- Homework Assignments
- Project Assignments

TEXTS, MEDIA, & RESOURCE REQUIREMENTS

Required Texts:

Castro, E., Hyslop, B., & Castro, E. (2012). HTML5 and CSS3. Berkeley, CA: Peachpit. ISBN: 9780321719614

Devlin, I. (2012). HTML5 Multimedia: Develop and Design. Berkeley, CA: Peachpit Press.

ISBN: 9780321793935

Reading Level:

| Title | Author | Publisher | Level | Method |
|--|---|-----------|-------|----------------|
| Visual Quick Start Guide: HTML5 and CSS3 | Castro, E., Hyslop, B., & Castro, E. | Peachpit | 8.7 | Flesch-Kincaid |
| HTML5 Multimedia: Develop and Design | Devlin, I | Peachpit | 10.0 | Flesch-Kincaid |

Required Media:

Whiteboard, Projector.

Resource Requirements:

Student Art Kit, Color Printer, Adobe Creative Suite 5 Master Collection (2010), Microsoft Word 2010 (2010), Komodo Edit

GRADES

The following represents the basis upon which your course grade will be calculated and determined:

| Homework | 15% |
|-----------|-----|
| Classwork | 15% |
| Exams | 15% |
| Projects | 55% |

Computation of Grade

| A = | 90% to 100% | of total cumulative points |
|-----|---------------|----------------------------|
| B = | 80% to 89% | of total cumulative points |
| C = | 70% to 79% | of total cumulative points |
| F= | Less than 70% | of total cumulative points |

STUDENT: TEACHER RATIO

Maximum class capacity and student to teacher ratio for lecture and lab is 18 to 1.

COURSE OUTLINE

A unit in the course outline is defined as 25 contact hours.

UNIT 1:

> Housekeeping

- Class Introductions: Students introduce themselves to each other and to the instructor; Instructor introduces themselves to the class.
- Syllabus Review: Instructor goes over syllabus and explains requirements for homework, reading, assignments, and projects.
- Classroom Expectations: Instructor explains Policies and Procedures and expectations of the students.
- Lab/Project/Homework Assignments: Assignments are due upon the date specified by instructor

Unit Lecture/Demonstrations

- Lecture 1
 - Lecture over: Web Page Building Blocks
 - Lecture over: Working with Web Page Files
 - Lecture over: Basic HTML Structure
- Lecture 2
 - Lecture over: Text
 - Lecture over: Images
 - Lecture over: Links
- Lecture 3
 - Lecture over: CSS Building Blocks
 - Lecture over: Working with Style Sheets
- Lecture 4
 - Lecture over: Defining Selectors
 - Lecture over: Formatting Text with Styles

Unit Lab/Assignments

- Lab Assignments
 - Assignment 1, 2, 3, 4, 5, 6, 7 and 8
 (Refer to student Lab Assignment handout for instructions)

Unit Projects

 Project 1 Assigned: (Refer to student Project handout for instructions)

Unit Homework

- Develop Thumbnails and Sketches for Project 1
- Complete Lab/Assignments
- Study materials for project application and Exam 1

Reading Assignments

Reading Assignment 1, 2, 3 and 4

Page 4

(Refer to student Reading Assignment handout for instructions)

- Homework Assignments
 - Homework Assignment 1, 2, 3, 4 and 5
 - (Refer to student Designer's Homework Booklet for instructions)

Unit Peer Review

None

Unit Exam

- Issue Exam 1 to students
 - Review Exam 1 with students

UNIT 2:

Unit Lecture/Demonstrations

- Lecture 1
 - Lecture over: Layout with Styles
 - Lecture over: Style Sheets for Mobile Desktop
- Lecture 2
 - Lecture over: Working with Web Fonts
 - Lecture over: Enhancements with CSS3
- Lecture 3
 - Lecture over: Lists
 - Lecture over: Forms
- Lecture 4
 - Lecture over: Tables

Unit Lab/Assignments

- Lab Assignments
 - Assignment 9, 10, 11, 12, 13, 14, 15 and 16 (Refer to student Lab Assignment handout for instructions)

Unit Projects

Project 2 Assigned:
 (Refer to student Project handout for instructions)

Unit Homework

- Develop Thumbnails and Sketches for Project 2
- Complete Lab/Assignments
- Study materials for project application and Exam 2
- Reading Assignments
 - Reading Assignment 5, 6, 7 and 8 (Refer to student Reading Assignment handout for instructions)
- Homework Assignments
 - Homework Assignment 6, 7, 8, 9 and 10
 (Refer to student Designer's Homework Booklet for instructions)

Unit Peer Review

Proiect 1

Unit Exam

- Issue Exam 2 to students
 - Review Exam 2 with students

UNIT 3:

Unit Lecture/Demonstrations

- Lecture 1
 - Lecture over: HTML5 Multimedia Elements
 - Lecture over: Video, Audio and Other Multimedia Elements
 - Lecture over: Using Audio
 - Lecture over: Using Video
- Lecture 2
 - Lecture over: Working with Scripts
 - Lecture over: JavaScript API and Custom Controls
- Lecture 3
 - Lecture over: Styling Media Elements with CSS
 - Lecture over: Transitions, Transforms and Animation
- Lecture 4
 - Lecture over: Testing & Debugging Web Pages

Unit Lab/Assignments

- Lab Assignments
 - Assignment 17, 18 and 19
 (Refer to student Lab Assignment handout for instructions)

Unit Projects

 Project 3 Assigned: (Refer to student Project handout for instructions)

Unit Homework

- Develop Thumbnails and Sketches for Project 3
- Complete Lab/Assignments
- Study materials for project application and Exam 3
- Reading Assignments
 - Reading Assignment 9, 10, 11 and 12 (Refer to student Reading Assignment handout for instructions)
- Homework Assignments
 - Homework Assignment 11, 12, 13, 14 and 15
 - (Refer to student Designer's Homework Booklet for instructions)

Unit Peer Review

Project 2

Unit Exam

- Issue Exam 3 to students
 - Review Exam 3 with students

UNIT 4:

Unit Lecture/Demonstrations

- Lecture 1
 - Lecture over: Multimedia and Accessibility
 - Lecture over: Using Video with Canvas
- <u>L</u>ecture 2
 - Lecture over: Using Video with SVG
- Lecture 3
 - Lecture over: Future Features
- Lecture 4
 - No Lecture: Publishing Your Pages on the Web

Unit Lab/Assignments

- Lab Assignments
 - Assignment 20
 (Refer to student Lab Assignment handout for instructions)

Unit Projects

 Project 4 Assigned: (Refer to student Project handout for instructions)

Unit Homework

- Develop Thumbnails and Sketches for Project 4
- Complete Lab/Assignments
- Study materials for project application and Exam 4
- Reading Assignments
 - Reading Assignment 13, 14 and 15
 (Refer to student Reading Assignment handout for instructions)
- Homework Assignments
 - Homework Assignment 16, 17, 18 and 19 (Refer to student Designer's Homework Booklet for instructions)

Unit Peer Review

Project 3 and Project 4

Unit Exam

- Issue Exam 4 to students
 - Review Exam 4 with students

EXAMS

There are 4 unit exams for this course, each exam is worth 25 points, and consists of 25 multiple choice or true/false questions, essay questions and problem solving questions, and will cover the material covered within the unit.

LAB/ASSIGNMENTS

Each lab/assignment is worth 10 points. Each lab/assignment covers the material presented in class.

PROJECTS

There are 4 projects for this course, one for each unit. Each project is worth 125 points and is due on a weekly basis on the last day of the current Unit (week).