CIS 270 Client-Side Web Programming

Prereqs: CIS 202 (C - A/B Recommended)

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INSTRUCTOR: Joseph Wyatt PLACE: 122 Becker Hall TIME: mwf 11:00 TERM: Spring, 2012

OBJECTIVE :

Introduces the fundamentals of client-side web programming. Coverage includes HTML, XHTML, CSS and JavaScript. Although HTML and CSS do not constitute true programming, **JavaScript is programming**. That means the student must have an understanding of variables, assignment, arithmetic and boolean operators, loops, branches and functions (methods).

Programming can be tedious, time-consuming and frustrating -- it can also be rewarding and fun. I will present material, set goals and evaluate achievement. I will recognize and attempt to match extra effort, but will not shoulder the responsibility for lack of effort. **You** are responsible for your performance.

OUTCOMES :

The successful student will:

understand the fundamentals of how the internet and the world wide web work;
understand how a program executes;
understand and demonstrate web page construction and fundamentals of HTML for structure and content;
understand and demonstrate complex web page construction and fundamentals of CSS for presentation;
understand the advantages provided by dynamic web pages;
understand the syntax of a client-side web programming language such as JavaScript;
understand how to interface HTML, CSS and JavaScript in order to create a complex web page;
demonstrate the ability to partition complex pages into separate files and link those files together;
understand the need for variables and how JavaScript deals with variable types;
understand why conversion of variables is needed and demonstrate the conversion between different types;
demonstrate the ability to dynamically input data into a web page;
demonstrate the ability to dynamically output information from a web page;
demonstrate the ability to dynamically repeat statements in a loop within a client-side program;
demonstrate the ability to make decisions dynamically within a client-side program;
demonstrate the ability to create separate functions or methods within a client-side program;
understand user interfaces and demonstrate the ability to create a graphical user interface;
understand and demonstrate how to find and correct errors within a web page.

TEXT and MATERIALS: (**http://jbwyatt.com/270/**)

Murach's JavaScript and DOM Scripting by Ray Harris, ISBN 978-1-890774-55-4 (required)
Murach's HTML, XHTML, and CSS by Anne Boehm ISBN 978-1-890774-57-8 (optional)

You will need the FireFox browser, the FireFTP add-on, the Web Developer add-on and the FireBug add-on (all free). Access the UNIX server to hand in assignments via FireFTP or Filezilla or through the samba drive in the lab.

A USB flash drive (1GB+) is very useful and relatively cheap ($10).

ELECTRONIC ACCESS:

My E-mail address is: **wyatt@clarion.edu** or **wyattwyatt@gmail.com**
My Web URL is **http://jbwyatt.com/**

OFFICE INFORMATION: (**http://jbwyatt.com/advisee.html**)

My office is in **141** Becker Hall. My office telephone is (814) 393-**2643** - feel free to leave a message. Come see me!

Please defer personal conversations and smalltalk until after class as it annoys other students and bugs the heck out of me.

TOPICS / SCHEDULE (42 classes) (jbwyatt.com/270/ - topics & coverage is dynamic and is updated here**)**

First third (14 classes):

Intro to class
ch01 - Intro to Web Development
ch02 - Code a javaScript App
ch03 - Test & Debug a JavaScript App
ch04 - XHTML Crash Course
» Test 1

Second third (14 classes):

ch05 - CSS Crash Course
ch06 - Get Input & Display Output in JS
ch07 - Numbers, Strings and Dates in JS
ch08 - Coding JS Control Statements
» Test 2

Last third (14 classes+1):

ch13 - DOM
ch10 - Create & Use Functions in JS
ch09 - Create & Use Arrays in JS
ch12 - Regular Expessions & Validate Data in JS
» Test 3 (cumulative final)

GRADES: (http://jbwyatt.com/grades.htm) 1,000 total points

Grades are determined by your % score: 90+ = A ; 80 – 89 = B ; 70 – 79 = C ; 60 – 69 = D ; 59 & below = E.

Grades are determined as follows:

60%: TQ (tests and quizzes) (600 points)
Three tests (make-up only with prior notice and excuse). Various 5-10 point quizzes: no make-up .

40%: AS (assignments) (400 points)
6 - 8 programs - programs are worth between 25 and 100 points

2%: Bonus AP (attendance, participation) (up to 20 points)
1 bonus point per class (up to 20 points). There are 42 classes (mwf) per semester.
Bonus BEGINS accumulating after 21 classes attended.

While in class you are expected to be attentive and to participate. Participation means constructive and informed (by way of doing the assignments and reading) discussion about the subject material.

SPECIAL NEEDS and CONSIDERATIONS:

Special circumstances that may affect your performance in the class should be brought to my attention. Any student requiring accommodations for taking notes or tests should make arrangements to discuss their needs with me after the first class.

Copying code is cheating. Allowing others to copy your code is cheating. You must protect your intellectual property as you protect your personal property - with all reasonable measures.

You must *write your code on your own*, not as part of a group. Make efforts to avoid even the *appearance* of impropriety. Penalties will be severe: a grade of zero for all conspirators.