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CSCI 491.03: Advanced Client-Side Web Programming

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Advanced Client-Side Web Programming CSCI 491 Syllabus Fall 2015

CSCI 135 Section 00
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Overview:

This class is designed to give you a good general understanding client-side programming technique and tools currently used in web programming today. This course will focus on HTML5, CSS, JavaScript, and JQuery. Having knowledge in server side programming is a plus, but not a requirement. The objectives of the course are as follows:

- General Client-Side Web Concepts
- Applying Object Oriented Concepts in web programming
- Logical Reasoning and Critical Thinking
- HTML and JavaScript Programming Constructs

Upon completing this course, a student will be able to:

- Understand the difference between client-side and server side programming
- Declare and understand how to write client side scripts using JavaScript
- Create client side programs using HTML5 Canvas and JavaScript
- Use the JQuery library to create client side programs
- Understand how CSS works and be able to create responsive websites
- Create offline client side applications
- Create test cases for programs written
- Read from files, iterate through the file and manipulate the data within the file

Attendance:

Attendance is mandatory however I realize there are times when you must be absent. Please give me advance notice of any absences, and I will provide you with the same courtesy.

Class consists of Monday, Wednesday, and Friday 10 am – 11 am in JRH 205. There is no official lab, but most likely we will hold a lab session on Fridays to provide hands-on learning opportunities

Grading:

Homework 35%
Labs 20%
2 Exams 15% for each test
Final Exam 15% **Final: Wednesday Dec 16th, 2015 8-10 am**

All Assignments will be submitted through Moodle assignments. If you have trouble with your submission, please send them to

michael.cassens@mso.umt.edu

Your subject must be CSCI 491 Assignment # (e.g CSCI 491 Assignment 1)

If you have multiple files, please zip all your files and label your file: "CSCI491LastNameAssignment1.zip"

Grading Scale

100-90 A, A-	79-70 C+, C, C-	59-and beyond F
89-80 B+, B, B-	69-60 D+, D, D-	

P/NP – pass/no pass, 70 or greater is passing determined by Computer Science Department policy, which is a C or better.

Late Assignments:

- Late assignments will not be accepted. Sorry for the inconvenience.

Requirements

- Required Texts**:**
- A Software Engineer Learns HTML5, JavaScript and jQuery: A guide to standards-based web applications
    - Dane Cameron
    - http://www.amazon.com/gp/product/B00GAMTRI8/ref=oh_aui_d_detailpage_o02_?ie=UTF8&psc=1
- Optional Texts:
    - The Definitive Guide to HTML
        - Adam Freeman
    - Pro jQuery 2.0
        - Adam Freeman
- Pre-requisites for this course: CSCI 136
- Required Software:
    - **Notepad++, Visual Studio, etc. Some editor of your choice**

Suggestions:

- It would be beneficial to read and ask as many questions as you can.
- Feel free to set up an appointment if you need help. I am here to help you understand and do well.

Collaboration:

- I encourage you all to work together through problems – make sure you comment who you worked with at the top of the page, but copying and plagiarism will not be tolerated. If you are caught cheating, I will give you an F for the course.
- Please refer to the Student Conduct Code in how this will be dealt with: http://life.umt.edu/VPSA/student_conduct.php

Incompletes:

"Incomplete for the course is not an option to be exercised at the discretion of students. In all cases it is given at the discretion of the instructor…." Some guidelines for receiving an incomplete are listed in the catalog which include having **a passing grade up to three weeks before the end of the semester** and being in attendance. "**Negligence and indifference are not acceptable reasons**." Also note that there may be financial aid implications.

Late Drops:

The University's policy on drops after **45** days of instruction is very specific. The Computer Science Department follows this policy rigorously. There are five circumstances under which a late drop might be approved: registration errors, accident or illness, family emergency, change in work schedule, no assessment of performance in class after this deadline. Except in very unusual circumstances, I will only approve late drops if there is documented justification for one of these circumstances.

Disabilities:

This course is accessible to and usable by otherwise qualified students with disabilities. To request reasonable program modifications, please consult with the instructor. Disability Services for Students will assist the instructor and student in the modification process. For more information, visit the Disability Services website at http://life.umt.edu/dss/.

Class Etiquette:

- Be respectful of your fellow classmates.
- Call me anytime if you have a question.
- Profanity and Obscenity will not be tolerated in class or assignments.

Special Dates:

- Aug 31, 2015 Classes Begin
- Sept 7, 2015 Labor Day – No Class

- Sept 21-23th, 2015 online
- Nov 11, 2015 Veteran's Day
- Nov 25-27 Thanksgiving
- Dec 14th-18th, 2015 Finals
- **Final: Dec 16th, 2015 8-10 am**

Tentative Schedule:

Syllabus Review and Overview of the course
Week 1 Introduction of HTML5, CSS
Week 2 Introduction Cont. HTML5, CSS, Bootstrap
Week 3 JavaScript Basics
Week 4 JavaScript Programming
Week 5 jQuery introduction
Week 6 Project Update 1
Week 7 jQuery programming
Week 8 Web Storage and Data Storage
Week 9 Offline Web Applications
Week 10 User File Systems
Week 11 Web Workers
Week 12 Project Update 2
Week 13 Thanksgiving
Week 14 AJAX, jQuery API
Week 15 Server Sent Events and Web Sockets
Week 16 Final – Wednesday Dec 16th, 2015 8-10 am Submission