# **California State University, Dominguez Hills**

# **Computer Science Department**

Syllabus – CS255 Dynamic Web Programming

Dr. Jason Isaac Halasa

Office Hours: MW 12:45-2:30 and 3:45-5:30 and by Appointment

# **Office Location: SAC115**

E-mail jhalasa@csudh.edu Please put CS 255 in the subject line.

# **Text Book**

 Programming the World Wide Web 8<sup>th</sup> edition Robert W. Sebesta ISBN-13:978-0-13-377598-3

Recommended texts:

- <u>Web Application Design and Implementation</u> Publisher: <u>John Wiley & Sons Inc</u> Published: 06 May 2015 Format: Hardback 400 pages
- Web Application Design & Implementation Edition: 2nd

Author: Gabarro ISBN: 9781118361962 Copyright Year: 2013 Publisher: John Wiley & Sons, Incorporated

 Core Web Application Development with PHP and MySQL Marc Wandschneider ISBN-10: 0131867164

#### **Recommended online resources:**

Student may find that the following online references indispensable over the course of the semester. (Be aware that no online references may not be used during any exam.)

Microsoft's Alphabetical Function Reference - << <u>http://tinyur1.com/yay8238</u>>>

#### **Meeting Information**

#### Meeting Time Location

CS255	Intro to Programming Concepts	M,W	5:30 PM	06:45 PM	SAC 2102
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### **Description:**

This class offers the latest coverage on web design and implementation. Fully updated to feature all the most current versions and how to install them, while still including their earlier versions, the class will cover information and improvements to HTML, PHP, MySQL, JavaScript, Linux, Apache, CSS, AJAX, web security, JQuery, and browsers as web tools.

#### Learning outcomes:

Upon completion of the course students will demonstrate the ability to:

- Write dynamic web documents,
- Implement and execute program scripts,
- Set-up and administer database servers,
- Create complete applications.

#### **REQUIREMENTS:**

- 1) Xampp, Apache, CSS
- 2) HTML, PHP, MySQL, JavaScript
- 3) Microsoft Visual Studio C++ 2008 or Express
- 4) Email account for sending lab assignments for grade submission

# COURSE REQUIREMENTS AND GRADING POLICY

Your performance objectives will be met by exams and lab assignments. Each exam and lab assignment will be graded and your final grade will be determined as a weighted average of these grades as follows:

Homework	<mark>10%</mark>
Lab assignments/Project	<mark>40%</mark>
Midterm Exam	<mark>20%</mark>
Quizzes	<mark>10%</mark>
Final Exam	<mark>20%</mark>
Total	<mark>100%</mark>

The letter grade will be assigned as follows:

A	90 - 100
В	80 - 89%
С	70 - 79%
D	60 - 69%
F	Below 60%

# List of Projects Due for CSC255

Chapter 2	HTML/XHTML Project 2.3, 2.5 and 2.7 Page 94/5
Chapter 3	Cascading Style Sheets Project 3.3, 3.4 and 3.5 Page 137/8
Chapter 4	The Basics of JavaScript Project 4.3, 4.4 and 4.6 Page 192/3/4
Chapter 5	JavaScript and HTML Documents Project 5.2 and 5.4 Page 235
Chapter 6	Dynamic Documents with JavaScript Project 6.3, 6.4 and 6.6 Page 273
Chapter 7	Introduction to XML Project 7.5 Page 321
Chapter 9	Introduction to PHP Project 9.3, 9.5 and 9.6 Page 406/7
Chapter 10	Introduction to Ajax Project 10.2, 10.3 and 10.5 Page 438
Chapter 11	Java Web Software Project 11.2, 11.3 and 11.4 Page 501
Chapter 12	Introduction to ASP.NET Project 12.1, 12.2 and 12.4 Page 566
Chapter 13	Database Access through the Web Project 13.3, 13.5 and 13.6 Page 645

Week	Material	Chapter
1	Fundamentals of Computers and the Internet	1
2	HTML/XHTML	2
3	Cascading Style Sheets	3
4	The Basics of JavaScript	4
5	JavaScript and HTML Documents	5
6	Dynamic Documents with JavaScript	6
7	Dynamic Documents with JavaScript	6
8	REVIEW and MID TERM EXAM	
9	Introduction to XML	
10	Introduction to PHP Introduction to ASP.NET	9
11	Introduction to Ajax	10
12	Java Web Software	11
13	Introduction to ASP.NET	12
14	Database Access through the Web	13
15	REVIEW and FINAL EXAM	

# FINAL EXAM: Day-Date @ TBA

## Course goals and objectives:

The goal of the course is to provide introduction to the design and implementation of dynamic web applications. Topics include origins of Internet, TCP/IP basics, Standard Generalized Markup Language SGML, XML and XSL languages, client-side and server-side languages: Perl and PHP, interactivity in website design, front-end interface to databases, website access control, confidentiality, integrity, and accessability of websites.

The **objective** of the course is to know tools (DHTML, XML, JAVAscript, Perl, PHP, and Linux/Unix, Apache and Navigator/Firefox software packages), and their applicability in developing dynamic and distributed client/server web applications.

### Learning outcomes:

Upon completion of the course students will demonstrate the ability to: - write dynamic web documents, - implement and execute program scripts, - set-up and administer database servers, - create B2B applications.

### Software Project 1

Due date: week 6

Install and launch Apache server and mySQL server web server on (www255.csudh.edu) *Sun Blade 1500 workstation: courtesy of ASI TRF Grant*.

Program your homepage in HTML and store it as index.html file. On (or before) the due date you have to send me an e-mail containing of URL of the entry point to your website.

#### Website Structure and Software Project 2

Due date: week 9

Create a homepage (due: week 3) as the entry point to a collection of other webpages and install the entire collection (ePorfolio: electronic Portfolio) as html files in your server root directory. Make sure all files have proper access priviliges.

Create a webpage (as an element of a collection of other webpages in website structure) that utilizes PHP scripting.

#### **Programming Project 3**

Due date: week 11 Create a webpage (as an element of a collection of other webpages in website structure) that utilizes JavaScript.

#### **Database Access**

#### Due date: week 14

Create a webpage (as an element of a collection of other webpages in website structure) that contains access to database.

# • ALL HOMEWORK MUST BE TURNED IN AT THE BEGINNING OF CLASS ON THE ASSIGNED DATE. LATE HOMEWORK WILL NOT BE ACCEPTED.

- NO LATE OR PARTIALLY-COMPLETED ASSIGNMENTS WILL BE ACCEPTED!!! Failure to turn in a completed lab will result in a zero for that lab. Poor lab scores can impact your final score.
- Lab assignments/Homework must be completed on time and you must attend all sessions.
- Lab attendance is mandatory and required to pass the course.
- The instructor reserves the right to adjust the grades up according to the performance of the whole class. However, there will not be any exceptions for any individual students.
- The instructor may at any time ask questions regarding any work submitted.

#### BONUS POINTS:

Bonus points are for those students who wish to add points to their score. These points will only help students who decide to do them. If a student decides not to do them, this will not have an effect on their grade.

#### SPECIAL NEEDS:

Please inform me during the first week of classes about any disability or special needs that you have that may require specific arrangements related to attending the class sessions, carrying out class assignments, or writing papers or examinations. According to the California State University Policy, students with disabilities need to document their disabilities with Disabled Student Services.

#### Academic Dishonesty:

Academic dishonesty includes such things as cheating, inventing false information or citations, plagiarism, and helping someone else commit an act of academic dishonesty. It usually involves an attempt by a student to show possession of a level of knowledge or skill which he or she does not possess.

Cheating is defined as the act of obtaining or attempting to obtain credit for work by the use of any dishonest, deceptive, fraudulent or unauthorized means. Examples of cheating include, but are not limited to: using notes or aids or the help of other students on tests and examinations in ways other than those expressly permitted by the instructor, plagiarism as defined below, tampering with the grading procedures, and collaborating with others on any assignment where such collaboration is expressly forbidden by an instructor.

Plagiarism is defined as the act of taking the specific substance of another and offering it as one's own without giving credit to the source. When sources are used, acknowledgment of the original author or source must be made following standard scholarly practice.

The following will be the guidelines for collaboration in the laboratory activities.

Except during exams, students may discuss general program design and strategies for solving problems. However, any time you use another person's design or insight, it must be properly credited in the program documentation. This includes crediting algorithms taken from the text, web sites, notes, teaching assistants, or tutors. You may NEVER give your code or use another person's code: the detailed algorithm and coding must be the student's own. This also holds true for debugging; another student may identify the error but should not dictate, rewrite, or show the code to correct it. Please note that the student giving help in violation of these guidelines will be held as responsible as the student receiving the help.

The Computer Science Department takes this matter very seriously. Any instance of academic dishonesty may result in failing the course and a notation in your University records.

# STATEMENT OF WORKPLACE AND FOUNDATION COMPETENCIES

California State University, Fullerton is determined to prepare students with the knowledge and skill you need to succeed in today's dynamic work environment. Towards this end, the following workplace competencies and foundation skills have been designed into the curriculum for CS101

# **Common Workplace Competencies**

#### Manage Resources: Identifies, organizes, plans, and allocates resources

Students in CS255 must appropriately allocate their time in order to complete class assignments in a timely fashion. They must budget their time and perform class-related activities through a ranking process which allows them to meet self-determined goals.

#### Interpersonal: Works with others

Students in CS255 at times work together in groups. Many times these groups are randomly selected, thus giving the students an opportunity to interact with different types of students. Students must learn to use leadership skills, learning skills, negotiating skills, and evaluating skills as they work together to accomplish a common goal.

#### Information: Acquires and uses information

Students in CS255 –must acquire the proper information in order to successfully complete the course. Sources include classroom lectures, the text, the Internet, and reference books available in the classroom. Most importantly, students must use computers to process this information and to perform various tasks.

#### Technology: Works with a variety of technologies

Students in CS255 must apply technology to specific tasks, determining what application to use to obtain a specific outcome.