San José State University
Department of Computer Science
Spring 2017
CS 174 – Server-side Web Programming

Course and Contact Information

Instructor:	Ramin Moazeni
Class Hours:	TTh: 7:30PM - 8:45PM
Office Hours:	TTh: 7:00PM – 7:30PM, DH 282
Email:	Ramin.Moazeni@sjsu.edu
Classroom:	DH 450
Prerequisites:	CS 46B *Introduction to Data Structures* with a grade of C- or better, or instructor's consent.

Course Description

Development and deployment of multi-tier web-based applications. Introduction to HTML 5, CSS 3, JavaScript, jQuery, AJAX, PHP, XML, search engine optimization (SEO), enterprise design patterns, web services and database access (MySQL). Students will work in small project teams. Each team will incrementally develop a significant web application of its choosing throughout the semester.

Learning Outcomes

By the end of this course, a student should be able to:

CLO1 -- Write HTML documents containing standard HTML elements including forms, tables, client-side scripts, and server-side scripts.
CLO2 -- Write schemas, DTDs, and style sheets for XML documents.
CLO3 -- Write server-side scripts that process HTML forms.
CLO4 -- Write client-side scripts that validate HTML forms.
CLO5 -- Develop and deploy web applications that involve components, web services, and databases.

Required Texts

There are no required books for this class.

Recommended texts for self-study

Learning PHP, MySQL & JavaScript: With jQuery, CSS & HTML5 by Robin Nixon
O'Reilly Media; 4 edition (December 14, 2014), ISBN-13: 978-1491918661

HTML5 and CSS3 All-in-One for Dummies by Andy Harris
3 edition (January 7, 2014), ISBN: 978-1118289389

PHP and MySQL for Dynamic Web Sites: Visual QuickPro Guide by Larry Ullman
Peachpit Press; 4 edition (September 23, 2011), ISBN-13: 978-0321784070

JavaScript & jQuery: The Missing Manual by David Sawyer McFarland
O'Reilly Media; 3 edition (October 3, 2014), ISBN: 978-1491947074

Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf. Note that University policy F15-12 at http://www.sjsu.edu/senate/docs/F15-12.pdf states that "Attendance shall not be used as a criterion for grading."… "Students are expected to attend all meetings for the courses in which they are enrolled as they are responsible for material discussed therein, and active participation is frequently essential to ensure maximum benefit to all class members. In some cases, attendance is fundamental to course objectives; for example, students may be required to interact with others in the class. Attendance is the responsibility of the student."… "Participation may be used as a criterion for grading when the parameters and their evaluation are clearly defined in the course syllabus and the percentage of the overall grade is stated."

All the assignments and related documents must be handed in electronically. Programs that are handed in after the due date will not be accepted.

Assignments
The assignments are to be submitted on time. A penalty of 10% per day is applied to late submissions. No assignments will be accepted after a week past its due date.

Exams
- The exams are based on lectures, homework/lab assignments, and reading materials covered before the exam's date.
- Absolutely NO items may be shared during the exams, including books, notes, and calculators.
- Absolutely NO usage of cell phones during exams. Cell Phones must in off or silent mode and not within your reach.

Makeup exams will only be granted in case of documented medical emergency with an advanced notice to the instructor. If a student misses and exam without a legitimate excuse, a grade of zero will be recorded.

Grading Policy

Your individual class grade will be weighted as follows:

Programming assignments	50%
Midterm	25%
Final	25%
Total	100%

A -- 90-100, B -- 80-89, C -- 70-79, D -- 60-69, F -- Below 60

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/

CS 174, Server-side Web Programming, Section 2, Course Schedule

Tentative course calendar

Week	Date	Item
1	February 2	**Lecture** Introduction to XAMPP Create project teams HTML elements like lists, tables, links, and images HTML integration with PHP
2	February 7, 9	**Lecture** Simple form processing with PHP Database access with PHP Dynamic page generation with PHP

Week	Date	Item
3	February 14, 16	**Lecture** CSS 3
4	February 21, 23	**Lecture** Search engine optimization (SEO) Data modeling and MySQL databases
5	February 28, March 2	**Lecture** PHP and database access Basic JavaScript Input validation
6	March 7, 9	**Lecture** JSON Advanced JavaScript
7	March 14, 16	**Lecture** HTML 5 canvas drawing and animation **Midterm on Thursday, March 16th**
8	March 21, 23	**Lecture** Advanced PHP Object-relational mapping (ORM)
9	April 4, 6	**Lecture** Session maintenance and cookies jQuery
10	April 11, 13	**Lecture** jQuery jQuery UI
11	April 18, 20	**Lecture** AJAX XML
12	April 25, 27	**Lecture** Processing XML with PHP
13	May 2, 4	**Lecture** Security Laravel PHP framework Model-view-controller (MVC) architecture
14	May 9th, 11th	Web services PHP RESTful APIs
15	May 16th	**Lecture** Course review
16	**May 18th 7:45 PM – 10:00 PM**	**Final exam**