

San José State University
Department of Computer Science
Spring 2016
CS 174 – Server-side Web Programming, Section 2

Course and Contact Information

Instructor: Maria Dalarcao
Class Hours: MW: 7:30PM - 8:45PM
Office Hours: MW: 8:45PM – 9:15PM, MacQuarrie Hall, room 225
Web Page: <http://www.cs.sjsu.edu/~dalarcao>
Email: Maria.Dalarcao@sjsu.edu
Classroom: MacQuarrie Hall, room 225

Prerequisites:

CS 46B *Introduction to Data Structures* with a grade of C- or better, or instructor's consent. The Department of Computer Science strictly enforces prerequisites. The instructor may drop any student who does not show up for the first two class meetings without providing a valid excuse ahead of time.

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

Upon successful completion of this course, students should be able to develop and deploy web applications that involve components, web services, and databases using various technologies.

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.

Assessments

At the end of the semester, each of you will turn in an assessment of your own performance on your team, and an assessment of each of the other members of your team.

Exams

The midterm and final examinations will be open book and notes. There will be no laptops, or any personal digital devices allowed. There will be no make-up exams. If a student misses an exam without a legitimate excuse, a grade of zero will be recorded. If a student missed an exam with a legitimate excuse then the grade for that exam will be prorated.

Grading Policy

Your individual class grade will be weighted as follows:

- Assignments 30% 300 points team scores
- Final project 30% 300 points team scores
- Midterm 20% 200 points individual scores
- Final exam 20% 200 points individual scores

Each assignment, project, and exam will be scored (given points) but not assigned a letter grade. The mean score and standard deviation will be announced after each assignment and exam.

Final individual class letter grades will be assigned based on the class curve. Your final class grade can be adjusted up or down depending on your level and quality of participation on your project team.

University Policies

General Expectations, Rights and Responsibilities of the Student

As members of the academic community, students accept both the rights and responsibilities incumbent upon all members of the institution. Students are encouraged to familiarize themselves with SJSU’s policies and practices pertaining to the procedures to follow if and when questions or concerns about a class arise. See University Policy S90–5 at <http://www.sjsu.edu/senate/docs/S90-5.pdf>. More detailed information on a variety of related topics is available in the SJSU catalog, at <http://info.sjsu.edu/web-dbgen/narr/catalog/rec-12234.12506.html>. In general, it is recommended that students begin by seeking clarification or discussing concerns with their instructor. If such conversation is not possible, or if it does not serve to address the issue, it is recommended that the student contact the Department Chair as a next step.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester’s Catalog Policies section at <http://info.sjsu.edu/static/catalog/policies.html>. Add/drop deadlines can be

found on the current academic year calendars document on the Academic Calendars webpage at http://www.sjsu.edu/provost/services/academic_calendars. The Late Drop Policy is available at <http://www.sjsu.edu/aars/policies/latedrops/policy>. Students should be aware of the current deadlines and penalties for dropping classes. Information about the latest changes and news is available at the Advising Hub at <http://www.sjsu.edu/advising>.

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Consent for Recording of Class and Public Sharing of Instructor Material

University Policy S12-7, <http://www.sjsu.edu/senate/docs/S12-7.pdf>, requires students to obtain instructor’s permission to record the course. “Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor’s permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.” “Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.”

Academic integrity

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Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 at http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf requires that students with disabilities requesting accommodations must register with the Accessible Education Center (AEC) at <http://www.sjsu.edu/aec> to establish a record of their disability. In 2013, the Disability Resource Center changed its name to be known as the Accessible Education Center, to incorporate a philosophy of accessible education for students with disabilities. The new name change reflects the broad scope of attention and support to SJSU students with disabilities and the University's continued advocacy and commitment to increasing accessibility and inclusivity on campus.

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

Tentative course calendar

Week	Date	Item
1	February 1 st , 3 rd	Lecture Introduction to XAMPP Create project teams HTML elements like lists, tables, links, and images HTML integration with PHP
2	February 8 th , 10 th	Lecture Simple form processing with PHP Database access with PHP Dynamic page generation with PHP

Week	Date	Item
3	February 15 th , 17 th	Lecture CSS 3
4	February 22 nd , 24 th	Lecture Search engine optimization (SEO) Data modeling and MySQL databases
5	February 29 th , March 2 nd	Lecture PHP and database access Basic JavaScript Input validation
6	March 7 th , 9 th	Lecture JSON Advanced JavaScript
7	March 14 th , 16 th	Lecture HTML 5 canvas drawing and animation Midterm on Wednesday, March 16th
8	March 21 st , 23 rd	Lecture Advanced PHP Object-relational mapping (ORM)
9	April 4 th , 6 th	Lecture Session maintenance and cookies jQuery
10	April 11 th , 13 th	Lecture jQuery jQuery UI
11	April 18 th , 20 th	Lecture AJAX XML
12	April 25 th , 27 th	Lecture Processing XML with PHP Web services PHP RESTful APIs
13	May 2 nd , 4 th	Lecture Security Laravel PHP framework Model-view-controller (MVC) architecture Final projects due on Friday, May 6th
14	May 9 th , 11 th	Final project presentations
15	May 16 th	Lecture Course review Final assessments due on Monday, May 16th
16	May 18 th 7:45 PM – 10:00 PM	Final exam