CS50A: Web Development 1

Summer 2017 Course Syllabus

Instructor: Jeffrey Diamond, jdiamond@santarosa.edu

Course Description

This course is intended for the beginning student who will learn how to build a simple website using HTML and CSS. Topics include: font formatting, navigation, images, layout, semantic elements, tables and forms.

Recommended Preparation: Course Completion of CS 5 OR CS 101A OR CS 105A and Course Eligibility for ENGL 1A

Whether you want to become a professional member of a web development team, or just want to create your own personal site, mastery of HTML and CSS is essential to those goals. We will work with current versions of both core clientside languages of the Web, HTML5 and CSS3, to become proficient in the creation of hand-coded static Web sites.

Student Learning Outcomes

Students will be able to:

- 1. Use HTML and CSS code that meets current industry standards to create a simple website.
- 2. Apply appropriate terminology to describe basic web development concepts.

Upon completion of the course, students will be able to:

- 1. Create a simple website.
- 2. Develop webpages that utilize the HTML elements that address the following functions: basics document structure, head elements, text markup, site navigation, images, div and span structure, semantic elements, tables, forms.
- 3. Develop webpages that utilize CSS to control the appearance of the site. Students will use these CSS property groups: text and font, color and background, the box model, position and display, lists, tables.
- 4. Develop webpages that utilize the CSS concepts of the cascade and inheritance of browser, external, embedded and inline CSS.
- 5. Students will correctly use the CSS elements of selectors, declarations, properties, values. Classes and id's will be stressed.
- 6. Summarize the following website development concepts: element, attribute, element nesting, asset path, style, rule, selector, declaration, property, and value.

Topics and Scope:

- 1. Basic Document Structure
- 2. Navigation
- 3. Structural Elements
- 4. Images
- 5. Cascading Style Sheets Usage
- 6. CSS Font / Text Properties
- 7. HTML Editors download, use and review
- 8. CSS (Cascading Style Sheets) Box Properties
- 9. Webpage layout using CSS
- 10. Semantic Elements
- 11. Tables
- 12.Forms
- 13. Commercial Website

Assignments:

- 1. Regular textbook reading
- 2. Fourteen (14) assignments. All webpages must be uploaded to the classprovided hosting account on the Internet and must validate.
- 3. Two (2) quizzes, a midterm and final exam
- 4. Website critiques
- 5. Participation in electronic message board discussions

Online Lectures

Summer 2017 Schedule- Attendance to Online Lecture is Optional

Monday	9:00am – 9:50am	Lecture	Online	
Wednesday	9:00am – 9:50am	Lecture	Online	

All class materials for each module will be released online in Canvas on Tuesdays throughout the entire semester.

Instructor Contact

Jeffrey Diamond

Email: jdiamond@santarosa.edu

Phone: <u>707-527-4855</u>

Summer 2017 Office Hours June 19 – August 11, 2017

By appointment

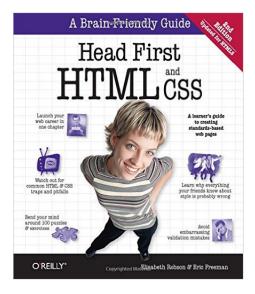
Online

I respond to emails within 48 hours. I never respond on Sundays.

Course Web Site

Students will use the Canvas course web site for assignment instructions, submitting assignments, viewing classmates' work, sharing resources, and viewing grades. *The Google Chrome browser is recommended for viewing the Canvas-powered course site. Internet Explorer is not recommended.*

Textbook



Head First HTML and CSS (2nd) Elizabeth Robson, Eric Freeman 0596159900 (ISBN 10) 978-0596159900 (ISBN 13) SRJC Libraries call number: <u>QA76.76.H94 R636 2012</u>

Consider buying a used copy. You can locate and order textbooks online via the <u>SRJC Bookstore</u>.

Equipment

• **A personal computer**, either at home, work or on the Santa Rosa or Petaluma campuses.

Required Software + Services

- Internet access
- Web browser
 - o <u>Google Chrome</u> strongly recommended
- Text editor, for Class 1 only, such as:
 - TextWrangler (Mac OS only)
 - o Brackets (Windows, Mac OS)
 - Sublime Text (Windows, Mac OS, Linux)
- Cloud hosting + development service

- <u>Cloud9</u> IDE (Integrated Development Environment) required for all students, starting Class 2, for hosting class assignments. This service provides a complete set of browser-based tools in place of the optional software listed below. *Complete the hosting survey to get your free account.*
- Graphics software such as:
 - Adobe Photoshop, part of a Creative Cloud subscription
 - o <u>Gimp</u> open source application
 - <u>PixIr</u> browser-based image editor
- **PDF display software** such as:
 - o Adobe Reader

Optional Software

The additional software listed below is often used for Web development. Our cloud-based IDE – Cloud9 – will provide a text editor and file transfer support without any additional software needed.

- Additional Web browsers including:
 - o <u>Mozilla Firefox</u>
 - Apple Safari (Mac OS only)
 - Microsoft Edge (Windows 10 only)
- File Transfer Protocol (FTP) software such as:
 - FireFTP add-on for Firefox browser (free)
 - <u>Fetch</u> (Max OS only)
 - <u>WinSCP</u> (Windows only)

Important Dates

Day Class Begins: Monday, June 19, 2017

Day Class Ends: August 16, 2017

Dropping the Class

If you decide to discontinue this course, it is your responsibility to officially drop it. A student may be dropped from any class when that student's absences exceed ten percent (10%) of the total hours of class time. It is strongly advised that if you need to miss more than one class/homework deadline in a row that you contact the instructor to avoid being dropped from the class.

Attendance

For face-to-face courses, students who fail to attend the first and second class meetings will be dropped by the instructor.

Pass NoPass (P/NP)

You may take this class P/NP. You must decide before the deadline, and add the option online with TLC or file the P/NP form with Admissions and Records. With a grade of C or better, you will get P.

Once you decide to go for P/NP, you cannot change back to a letter grade. If you are taking this course as part of a certificate program, you can probably still take the class P/NP. Check with a counselor to be sure.

Instructor Announcements and Q&A Forum

The instructor will post announcements on the "Instructor Announcements" page in Canvas throughout the semester. Canvas notifies students according to their preferred Notification Preferences.

Late Policy

All assignments are due at 11:59pm PST on the Monday corresponding to the due date. A late submission will receive a 10% penalty for each class it is late. Submissions more than two classes late are not accepted without prior written arrangement.

Exams

There will be online midterm and final exams. The material comes from the textbook, class lectures and supplemental materials. If any exam is missed, a zero will be recorded as the score, unless you have made prior written arrangements with me. It is your responsibility to take the exams by the due date.

Grading Policy

Click the "Grades" link in Canvas to keep track of your grades. I grade once a Class and post grades and comments in the Canvas gradebook.

А	90% - 100%	900 points or more
В	80% - 89%	800 to 899 points
с	70% - 79%	700 to 799 points
D	60% - 69%	600 to 699 points
F	59% or lower	599 points or less

Grades will be assigned as follows:

If taking Pass/No Pass you need at least 70% of the total class points and to complete the midterm exam and the final exam to pass the class.

Grading Breakdown

62%	620 points	Projects + Assignments
12%	120 points	Discussions + Attendance
6%	60 points	Quizzes
10%	100 points	Midterm
10%	100 points	Final Exam
100%	1000 points	1000 points possible

Standards of Conduct

Students who register in SRJC classes are required to abide by the SRJC Student Conduct Standards. Violation of the Standards is basis for referral to the Vice President of Student Services or dismissal from class or from the College. See the <u>Student Code of Conduct page</u>.

Collaborating on or copying of tests or homework in whole or in part will be considered an act of academic dishonesty and result in a grade of 0 for that test or assignment. Students are encouraged to share information and ideas, but not their work. See these links on Plagiarism:

SRJC Writing Center Lessons on avoiding plagiarism SRJC's statement on Academic Integrity

Special Needs

Every effort is made to conform to accessibility standards for all instructorcreated materials. Students should contact their instructor as soon as possible if they find that they cannot access any course materials. Students with disabilities who believe they need accommodations in this class are encouraged to contact Disability Resources by calling (707) 527-4278 or visit online at <u>drd.santarosa.edu</u>.

Student Health Services

Santa Rosa Junior College offers extensive health services to students. Visit Student Health Services online at <u>shs.santarosa.edu</u> or call them at (707) 527-4445.

Course Outline

Note to students: the assignments listed above will become available as modules are released in sequence each class. To view course content, go to **Modules**.

	Topics	Assignments
Class 1	Introduction to Web Development	Hosting Signup Survey
		Assignment 1: Syllabus Quiz
		Discussion 1: Check-in Discussion
		Reading: Head First, Ch. 1
Class 2	HTML Links + Paths	Assignment 2: First Pages
		Reading: Head First, Ch. 2
Class 3	HTML Elements	Assignment 3: An Animal Page
		Discussion 2: History of the Web
		Reading: <i>Head First</i> , Ch. 3 Assignment 4: Linking + Embedding
Class 4	HTML5 + HTTP Standards	Assignment 4: Linking + Embedding Quiz 1
		Reading: Head First, Chs. 4 + 6
Class 5	Media: Images, Video + Audio	Assignment 5: Adding Media
CIASS 5	Media: Images, Mdeo + Audio	Discussion 3: Web Accessibility
		Reading: Head First, Ch. 5
Class 6	Introduction to CSS + Selectors	Assignment 6: Start Styling
01035 0		Reading: Head First, Ch. 7
Class 7	Typography + Web Fonts	Assignment 7: Fonts for Animals
		Discussion 4: Design Theory
		Reading: Head First, Ch. 8, pp. 311-339
Class 8	Web Color	Midterm Project: About An Animal
		Reading: Head First, Ch. 8, pp. 340-359
Class 9	Midterm Review	Midterm Exam
		Discussion: Midterm Project Presentations
Class 10	CSS Box Model	Assignment 8: Decorated Boxes
		Discussion 5: CSS Box Model
		Reading: Head First, Ch. 9
Class 11	HTML5 Semantic Structure	Assignment 9: Organizing Elements
		Reading: <i>Head First</i> , Chs. 10 + 12
Class 12	CSS Layout	Assignment 10: Composing Layouts
		Discussion 6: Responsive Design
01000 10	Deservative CCC - Martin Oversian	Reading: Head First, Ch. 11
Class 13	Responsive CSS + Media Queries	Assignment 11: Responsive Pages Ouiz 2
		Reading: Online article
Class 14	HTML Tables	Assignment 12: Organizing Data
JIA35 14		Discussion 7: Interaction Design
		Reading: Head First, Ch. 13
Class 15	HTML Forms	Assignment 13: Interactive Forms
01033 10		Reading: Head First, Ch. 14
Class 16	Interactive CSS + Pseudo Classes	Assignment 14: Interactive Menus
		Discussion 8: Future Web
		Reading: <i>Head First</i> , Appendix + online
Class 17	Animation + CSS Transitions	Final Project: Responsive Animal Catalog
	Final Review	Reading: Head First, Appendix + online
Class 18	No Regular Class	Final Exam