CS50A: Web Development 1 Section 5397, Spring 2020 Course Syllabus

Instructor: Ethan Wilde, ewilde@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 client-side 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 class-provided 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

Class Meetings

Spring 2020 Schedule

Online	Weeks start on Tuesday	Canvas shell
Live weekly Web conference (optional) https://cccconfer.zoom.us/j/640848204	Tuesdays, 11:30am - 12:30pm	Zoom

All class materials for each module will be released online in Canvas on Tuesdays throughout the entire semester. A weekly live online meeting will be held on Tuesdays, 11:30am - 12:30pm. Attendance at the live web conferences is optional but highly recommended. Use this link to join: <u>https://cccconfer.zoom.us/j/640848204</u>

Instructor Contact

Ethan Wilde

Email: ewilde@santarosa.edu

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

Spring 2020 Office Hours *January 14 – May 14, 2020*

Wednesdays (in office)	10:40am - 11:40am	Maggini 2937 (inside Computer Studies Dept office on 3rd floor)
Thursdays (online)	10:40am - 4:40pm	Online: Email <u>ewilde@santarosa.edu</u> or Skype <u>ethanwilde</u>

» Reserve a future office hour appointment

I typically respond to emails within 48 hours, weekends excepted. 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> <u>Publisher site available</u>

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

Equipment

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

Required Software + Services

- Internet access
- Web browsers including:
 - <u>Google Chrome</u> recommended and typically used in instructor demos
 - Mozilla Firefox recommended
- Code editor such as:
 - Brackets (Windows, Mac OS, free license)
 - Microsoft Visual Studio Code (Windows, Mac OS, free license)
 - <u>BBEdit</u> (Mac OS only)
 - Sublime Text (Windows, Mac OS, Linux)
- Cloud hosting, version control + development environment services:
 - <u>Repl.it</u> IDE (Integrated Development Environment) required for all students, starting Week 2, for hosting class assignments in the first half of the term. For the first eight weeks, Repl.it will provide a text editor and file transfer support without any additional software needed. Starting in Week 10, you will need a text editor and file transfer application. *Complete the hosting survey to get your free account*.
 - <u>GitHub</u> Software version control and repository required for all students, starting Week 10.
- Graphics and prototyping software such as:
 - Adobe Photoshop, part of a <u>Creative Cloud</u> subscription
 - <u>Gimp</u> open source application
 - <u>Pixlr</u> browser-based image editor
 - <u>Draw.io</u> browser-based drawing app
 - Figma user interface design tool app
 - PDF display software such as:
 - Adobe Reader

Optional Software

The additional software listed below is often used for Web development.

- Additional Web browsers including:
 - Apple Safari (Mac OS only)
 - Microsoft Edge (Windows 10 only)
- GUI-based Git repository manager:
 - o GitHub Desktop
- File Transfer Protocol (FTP) software such as:
 - <u>CyberDuck</u> (Mac OS and Windows, free license)
 - <u>Fetch</u> (Max OS only)

• <u>WinSCP</u> (Windows only)

Important Dates

Day Class Begins: Tuesday, January 14, 2020

Day Class Ends: Friday, May 23, 2020

Last Day to Add without instructor's approval: Sunday, January 19, 2020

Last Day to Drop with refund: Sunday, January 26, 2020

Last Day to Add with instructor's approval: Sunday, February 2, 2020

Last Day to Drop without a 'W' symbol: Sunday, February 2, 2020

Last Day to Opt for Pass/No Pass: Sunday, February 23, 2020

Last Day to Drop with a 'W' symbol: Sunday, April 19, 2020

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.

You must file for the P/NP option by February 23, 2020. 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

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 Pacific time on the **Monday** corresponding to the due date. A late submission will receive a 10% penalty for each week it is late. Submissions more than two weeks 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 week and post grades and comments in the Canvas gradebook.

Grades will be assigned as follows:

Α	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

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: <u>SRJC Writing Center Lessons on avoiding plagiarism</u> <u>SRJC's statement on Academic Integrity</u>

Special Needs

Every effort is made to conform to accessibility standards for all instructor-created 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 drd.santarosa.edu.

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

Start Date	Canvas Module	Topics	Assignments
1/14	Week 1	Introduction to Web Development	Hosting Signup Survey Assignment 1: Syllabus Quiz Discussion 1: Check-in Discussion Reading: <i>Head First</i> , Ch. 1
1/21	Week 2	HTML Links + Paths	Assignment 2: First Pages Reading: <i>Head First</i> , Ch. 2
1/28	Week 3	HTML Elements	Assignment 3: An Animal Page Discussion 2: History of the Web Reading: <i>Head First</i> , Ch. 3
2/4	Week 4	HTML5 + HTTP Standards	Assignment 4: Linking + Embedding Reading: <i>Head First</i> , Chs. 4 + 6
2/11	Week 5	Media: Images, Video + Audio	Assignment 5: Adding Media Discussion 3: Web Accessibility Reading: <i>Head First</i> , Ch. 5
2/18	Week 6	Introduction to CSS + Selectors	Assignment 6: Start Styling Quiz 1 Reading: <i>Head First</i> , Ch. 7
2/25	Week 7	Typography + Web Fonts	Assignment 7: Fonts for Animals Discussion 4: Design Theory Reading: <i>Head First</i> , Ch. 8, pp. 311-339
3/3	Week 8	Web Color	Midterm Project: About An Animal Reading: <i>Head First</i> , Ch. 8, pp. 340-359

3/10	Week 9	Midterm Review	Midterm Exam Discussion: Midterm Project Presentations
3/17	NO CLASS	Spring Break	
3/24	Week 10	CSS Box Model	Assignment 8: Decorated Boxes Discussion 5: CSS Box Model Reading: <i>Head First</i> , Ch. 9
3/31	Week 11	HTML5 Semantic Structure	Assignment 9: Organizing Elements Reading: <i>Head First</i> , Chs. 10 + 12
4/7	Week 12	CSS Layout	Assignment 10: Composing Layouts Discussion 6: Responsive Design Reading: <i>Head First</i> , Ch. 11
4/14	Week 13	Responsive CSS + Media Queries	Assignment 11: Responsive Pages Quiz 2 Reading: Online article
4/21	Week 14	HTML Tables	Assignment 12: Organizing Data Discussion 7: Interaction Design Reading: <i>Head First</i> , Ch. 13
4/28	Week 15	HTML Forms	Assignment 13: Interactive Forms Reading: <i>Head First</i> , Ch. 14
5/5	Week 16	Interactive CSS + Pseudo Classes	Assignment 14: Interactive Menus Discussion 8: Future Web Reading: <i>Head First</i> , Appendix + online
5/12	Week 17	Animation + CSS Transitions	Final Project: Responsive Animal Catalog Reading: <i>Head First</i> , Appendix + online

5/18 Mon	Week 18	No Regular Class: Final Review Optional Mon 5/18	Final Exam Discussion: Final Project Presentations	

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