

# CS50A: Web Development 1 Section 1373, Fall 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**

#### Fall 2020 Schedule

| Class Delivery   | Day and Time                   | Platform        |
|--|--------------------------------|-----------------|
| Online   | Modules start on Tuesdays      | Canvas<br>shell |
| Live Web conference (optional) <a href="https://santarosa-edu.zoom.us/j/640848204">https://santarosa-edu.zoom.us/j/640848204</a> | Tuesdays, 11:30am -<br>12:30pm | Zoom            |

All class materials for each module will be released online in Canvas on Tuesdays throughout the entire semester. A 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: <a href="https://santarosa-edu.zoom.us/j/640848204">https://santarosa-edu.zoom.us/j/640848204</a>

#### **Instructor Contact**

#### **Ethan Wilde**

Email: ewilde@santarosa.edu

Phone: 707-527-4855

| Day                 | Time                | Location   |
|---------------------|---------------------|--|
| Mondays<br>(online) | 12:00pm -<br>5:20pm | 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: QA76.76.H94 R636 2012

Publisher site available

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

### **Equipment**

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

### **Required Software + Services**

- Internet access
- Web browsers including:
  - o Google Chrome recommended and typically used in instructor demos
  - o <u>Mozilla Firefox</u> recommended
- Cloud hosting, version control + development environment services:
  - Repl.it IDE (Integrated Development Environment) required for all students, starting
    Module 2, for hosting class assignments in the first half of the term. Repl.it will provide a
    text editor and file transfer support without any additional software needed. Complete
    the hosting survey to get your free account.

- Graphics and prototyping software such as:
  - o Adobe Photoshop, part of a Creative Cloud subscription
  - o Gimp open source application
  - o PixIr browser-based image editor
  - o Draw.io browser-based drawing app
  - o Figma user interface design tool app
- PDF display software such as:
  - o 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)
- Code editor such as:
  - o Brackets (Windows, Mac OS, free license)
  - o Microsoft Visual Studio Code (Windows, Mac OS, free license)
  - o BBEdit (Mac OS only)
  - Sublime Text (Windows, Mac OS, Linux)
- GUI-based Git repository manager:
  - o GitHub Desktop
- File Transfer Protocol (FTP) software such as:
  - o CyberDuck (Mac OS and Windows, free license)
  - Fetch (Max OS only)
  - o WinSCP (Windows only)

# **Important Dates**

Day Class Begins: Tuesday, August 18, 2020

Day Class Ends: Friday, December 18, 2020

Last Day to Add without instructor's approval: Sunday, August 23, 2020

Last Day to Drop with refund: Sunday, August 30, 2020

Last Day to Add with instructor's approval: Sunday, September 6, 2020

Last Day to Drop without a 'W' symbol: Sunday, September 6, 2020

Last Day to Opt for Pass/No Pass: Sunday, September 27, 2020

Last Day to Drop with a 'W' symbol: Sunday, November 15, 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 online courses, students who fail to participate in the first and second class modules may 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 September 27, 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 module it is late. Submissions more than two modules 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:

| Letter Grade | Percentage | Points Total       |
|--------------|------------|--------------------|
| A            | 90% - 100% | 900 points or more |

| Letter Grade | Percentage   | Points Total       |
|--------------|--------------|--------------------|
| В            | 80% - 89%    | 800 to 899 points  |
| C            | 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**

| Percent | Points      | Grading Category         |
|---------|-------------|--------------------------|
| 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 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 <a href="mailto:shs.santarosa.edu">shs.santarosa.edu</a> or call them at (707) 527-4445.

# **Course Outline**

| Start<br>Date | Canvas<br>Module | Topics                             | Assignments   |
|---------------|------------------|------------------------------------|---|
| 8/18          | Module<br>1      | Introduction to Web<br>Development | Hosting Signup Survey Assignment 1: Syllabus Quiz Discussion 1: Check-in Discussion Reading: <i>Head First,</i> Ch. 1 |
| 8/25          | Module<br>2      | HTML Links + Paths                 | Assignment 2: First Pages<br>Reading: <i>Head First,</i> Ch. 2  |
| 9/1           | Module<br>3      | HTML Elements                      | Assignment 3: An Animal Page Discussion 2: History of the Web Reading: <i>Head First,</i> Ch. 3                       |
| 9/8           | Module<br>4      | HTML5 + HTTP Standards             | Assignment 4: Linking + Embedding<br>Reading: <i>Head First,</i> Chs. 4 + 6   |
| 9/15          | Module<br>5      | Media: Images, Video + Audio       | Assignment 5: Adding Media Discussion 3: Web Accessibility Reading: <i>Head First,</i> Ch. 5                          |
| 9/22          | Module<br>6      | Introduction to CSS + Selectors    | Assignment 6: Start Styling Quiz 1 Reading: Head First, Ch. 7   |

| Start<br>Date | Canvas<br>Module | Topics                         | Assignments  |
|---------------|------------------|--------------------------------|--|
| 9/29          | Module<br>7      | Typography + Web Fonts         | Assignment 7: Fonts for Animals Discussion 4: Design Theory Reading: <i>Head First,</i> Ch. 8, pp. 311-339 |
| 10/6          | Module<br>8      | Web Color                      | Midterm Project: About An Animal<br>Reading: <i>Head First,</i> Ch. 8, pp. 340-359                         |
| 10/13         | Module<br>9      | Midterm Review                 | Midterm Exam Discussion: Midterm Project Presentations   |
| 10/20         | Module<br>10     | CSS Box Model                  | Assignment 8: Decorated Boxes Discussion 5: CSS Box Model Reading: <i>Head First,</i> Ch. 9                |
| 10/27         | Module<br>11     | HTML5 Semantic Structure       | Assignment 9: Organizing Elements<br>Reading: <i>Head First,</i> Chs. 10 + 12                              |
| 11/3          | Module<br>12     | CSS Layout                     | Assignment 10: Composing Layouts Discussion 6: Responsive Design Reading: <i>Head First,</i> Ch. 11        |
| 11/10         | Module<br>13     | Responsive CSS + Media Queries | Assignment 11: Responsive Pages Quiz 2 Reading: Online article   |
| 11/17         | Module<br>14     | HTML Tables                    | Assignment 12: Organizing Data Discussion 7: Interaction Design Reading: <i>Head First,</i> Ch. 13         |
| 11/24         | Module<br>15     | HTML Forms                     | Assignment 13: Interactive Forms<br>Reading: <i>Head First,</i> Ch. 14                                     |

| Start<br>Date                     | Canvas<br>Module | Topics   | Assignments   |
|-----------------------------------|------------------|--|---|
| 12/1                              | Module<br>16     | Interactive CSS + Pseudo Classes   | Assignment 14: Interactive Menus Discussion 8: Future Web Reading: <i>Head First,</i> Appendix + online |
| 12/8                              | Module<br>17     | Animation + CSS Transitions  | Final Project: Responsive Animal Catalog  |
| 12/14<br>Mon<br>-<br>12/18<br>Fri | Module<br>18     | Final Exam Review<br>(does not include material from<br>modules 16 + 17) | Final Exam <i>due 8/9</i> Discussion: Final Project Presentations                                       |

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