

# **CS50B: Web Development 2** Section 1384, Fall 2020 Course Syllabus

Instructor: Ethan Wilde, ewilde@santarosa.edu

# **Course Description**

Combines hand-coded exercises in CSS code with Bootstrap, a front-end development tool. Students will expand their CSS skills as they format text, display images, layout pages, and create navigational systems. Bootstrap will provide the basis for an e-folio that is customized with hand coding.

Recommended Preparation: Eligibility for ENGL 1A or equivalent

Prerequisites: Course Completion of CS 50A OR CS 50.11B

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 engage in advanced HTML5 and CSS3 work while using the Bootstrap framework, the JavaScript language and the jQuery library, as well as the WordPress Content Management System. You will be proficient in the creation of interactive websites using static files as well as CMS-generated HTML.

### **Student Learning Outcomes**

#### Students will be able to:

- 1. ! Use CSS code that meets current industry standards to layout a site, create navigation, and control color and text.
- 2. ! Apply appropriate terminology to describe CSS selectors, styles, and units.
- 3. ! Create CSS code that is supported by current browsers, complies with accessibility standards, and validates under current industry standards.

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

- 1. ! Describe the current status of CSS implementation across various browsers.
- 2. ! Analyze and modify an existing web site's HTML and CSS using a Browser Code Inspector.
- 3. ! Use Bootstrap to create an efolio site.
- 4. ! Create webpages, which are styled using HTML, CSS, and JavaScript.
- 5. ! Produce validated HTML and CSS documents.
- 6. ! Produce a file / folder structure that matches industry standards.
- 7. ! Apply the principles of the cascade, inheritance, pseudo classes, pseudo elements, and ! advanced selectors in CSS documents. !

- 8. ! Produce an e-folio created using Bootstrap HTML, CSS and JavaScript with hand coded CSS modifications.
- 9. ! Demonstrate appropriate use of CSS properties.

#### **Topics and Scope:**

- 1. ! Overview: HTML, CSS, JavaScript
- 2. ! CSS selectors
- 3. ! Structure and the cascade
- 4. ! Bootstrap efolio
- 5. ! Fonts / Text
- 6. ! Position
- 7. ! Backgrounds
- 8. ! Images
- 9. ! Layout
- 10. Bootstrap layout
- 11. Navigation
- 12. Bootstrap Navigation
- 13. Content Management Systems (CMS)
- 14. WordPress CMS

#### 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 Meetings	Weeks start on Tuesdays	Canvas shell
Live weekly Web conference https://santarosa-edu.zoom.us/j/135129123	Tuesdays, 3:30pm - 4:30pm	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, 3:30pm - 4:30pm. Attendance at the live web conferences is optional but highly recommended. Every student must either attend the live web conference or watch the entire screencast recording of the web conference. Use this link to join live only on Tuesdays, 3:30pm - 4:30pm: <u>https://santarosaedu.zoom.us/j/135129123</u>. To view any weekly lecture's recorded screencast, visit the Screencast page for any week in the Modules section.

## **Instructor Contact**

#### Ethan Wilde

Email: ewilde@santarosa.edu

Phone: 707-527-4855

#### Fall 2020 Office Hours August 17 – December 11, 2020

Day	Time	Location
Mondays	12:00pm -	Online: Email <u>ewilde@santarosa.edu</u> or Skype
(online)	5:20pm	<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**

**Online Students will use the Canvas course web site to access all course content,** for assignment instructions, submitting assignments, viewing classmates' work, sharing resources, and viewing grades.

### Textbook

*WordPress 5 Complete* (7th) Karol Król 978-1789532012 (ISBN 13) Publisher book site available

*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:
  - o <u>Google Chrome</u> recommended and typically used in instructor demos
  - Mozilla Firefox recommended
- Code editor such as:

- o Brackets (Windows, Mac OS, free license)
- Microsoft Visual Studio Code (Windows, Mac OS, free license)
- o BBEdit (Mac OS only)
- <u>Sublime Text</u> (Windows, Mac OS, Linux)
- File Transfer Protocol (FTP) software such as:
  - CyberDuck (Mac OS and Windows, free license)
  - Fetch (Max OS only)
  - WinSCP (Windows only)
- 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>Pantheon</u> required for all students, starting in Week 10, for hosting WordPress-based assignments in the second half of the term. *Instructions will be provided for setting up your free account later in the term.*
- Graphics and prototyping software such as:
  - Adobe Photoshop, part of a Creative Cloud 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:
  - 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)

### **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 complete the requirements of the first and second class modules 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 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 "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 textbooks, 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
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**

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: <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
8/18	Week 1	Responsive HTML5 and CSS3 + Review	Hosting Signup Survey Assignment 1: Syllabus Quiz Discussion 1: Check-in Discussion Reading: "Responsive Web Design"
8/25	Week 2	Introduction to the Bootstrap Framework: the Responsive Grid	Assignment 2: Bootstrap Basics Reading: online
9/1	Week 3	Bootstrap Page Elements + Components	Assignment 3: Human-Centered Page Discussion 2: Design Thinking Reading: online
9/8	Week 4	Bootstrap Navigation	Assignment 4: Responsive Navigation Reading: online
9/15	Week 5	Bootstrap Forms + Decoration	Assignment 5: Interaction + Decoration Discussion 3: Interaction Design Reading: online

Start Date	Canvas Module	Topics	Assignments
9/22	Week 6	Customizing Bootstrap CSS	Assignment 6: Restyling Bootstrap Quiz 1 Reading: online
9/29	Week 7	Introduction to JavaScript	Assignment 7: First Scripts Discussion 4: Agile Workflow Reading: online
10/6	Week 8	Bootstrap + JavaScript	Midterm Project: Interactive Catalog Reading: online
10/13	Week 9	Midterm Review	Midterm Exam Discussion: Midterm Project Presentations
10/20	Week 10	WordPress 1: Introduction to CMS	Assignment 8: Setting Up WordPress Discussion 5: Content Management Systems Reading: <i>WP Complete,</i> Chs. 1 + 2
10/27	Week 11	WordPress 2: Posts	Assignment 9: Creating Content Reading: <i>WP Complete,</i> Ch. 3
11/3	Week 12	WordPress 3: Pages, Menus + More	Assignment 10: Site Building Discussion 6: Final Student Project Proposals Reading: <i>WP Complete,</i> Ch. 4
11/10	Week 13	WordPress 4: Plug-ins, Widgets + Themes	Assignment 11: Extending Your Site Quiz 2 Reading: <i>WP Complete,</i> Chs. 5 + 6

Start Date	Canvas Module	Topics	Assignments
11/17	Week 14	WordPress 5: Custom Bootstrap Theme	Assignment 12: Building a Custom Theme Discussion 7: Sass + CSS Preprocessors Reading: <i>WP Complete,</i> Ch. 8
11/24	Week 15	Introduction to Sass: CSS Preprocessor	Assignment 13: Sass Basics Reading: online
12/1	Week 16	Customizing Bootstrap's Sass Rules	Assignment 14: Remixing Bootstrap with Sass Discussion 8: Final Student In- Progress Projects Reading: online
12/8	Week 17	Mastering Sass + Bootstrap Final Review	Final Project: Student-Defined Site Reading: online
12/14 Mon - 12/18 Fri	Week 18	No Regular Class (Exam online, no regular class meeting)	Final Exam Discussion: Final Project Presentations

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