

Syllabus

Parsons School of Design
Communication Design Department

CD Foundations: Interaction

PSAM 1028 | CRN 3066 | Section D

Spring 2021

Monday, 7-9:40pm

Online Course (Zoom & Canvas)

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[github repository](#).

[Google Drive Folder](#)

Course Description

CD Foundations: Interaction is designed to introduce students to programming as a creative medium—as a way of making and exploring. The coursework focuses on developing a vocabulary of interaction design principles which can then be applied across a range of platforms. Students are encouraged to experiment with various media, tools, and techniques, ultimately producing a portfolio of interactive and visual projects designed for the screen. An emphasis is placed on typography as it applies to a screen context, research-based problem solving and a learning-through-making approach to technical skill building. Historical and current interaction design precedents will be discussed. This course is intended for non-communication design majors, as an introduction to the discipline.

Learning Outcomes

1. Use a basic vocabulary of interactive media to both give and respond to critique productively.
2. Create compelling interactive experiences through more careful and inspired interpretation/translation of content (i.e. develop great design concepts)
3. Demonstrate an understanding of the iterative making process in interaction design, using incremental methods such as prototyping, user research and evaluation to build toward more advanced work.
4. Conceptualize a product, object, or experience for the web and realize it through coding.
5. Evaluate the difference in designing interfaces for different kinds of devices, their limitations and specific user situations including responsive websites and apps for mobile.
6. Evaluate how typography and its variables are applied to inter- active systems to facilitate orientation, support usability and create consistency.
7. Research historic and current design precedents to contextualize your own work.
8. Be able to archive and document work that is printed, on screen or time based in a reflective manner for learning portfolio.
9. Combine your artistic creativity with technology related to the internet.
10. Demonstrate a comprehension of skills, methods, techniques and processes to realize interactive systems, particularly systems for dealing with unpredictable, variable, and ever-changing content.

Final Grade Calculation

- In-class and home Assignments 50%
- Final Project 30%
- In-class Participation 20%

Course Overview

Weeks 1-6

The development environment, markup in general, and web development with HTML and CSS

Week 7

Midterm evaluation

Weeks 8-10

Javascript

Weeks 11-15

Advanced topics and final project

Course Outline

Week 1 - 01/25

- How Computers Work and Organizing your Files
- The Development Environment: Browser Web Developer Tools and Text Editors
- Firefox Developer Edition, ATOM
- Markup languages and HTML. What it is and what it is not
- HTML Syntax and writing for computers
- Coding an HTML page

Assignment

- **Recipe** (due next session)
- **Class Form** (due next session)

Week 2 - 02/01

- CSS and HTML
- How CSS works
- CSS selectors

Assignment

- **Recipe Style** (due next session)

Week 3 - 02/08

- Color on the web
- Compressing folders with ZIP
- Pixels and em spaces
- The box model
- Commenting and Indenting

- CSS resets

Assignment

- ***Recipe Style 2*** (due next session)

No class - 02/15

Week 4 - 02/22

- Layout with CSS
- Padding and margins
- CSS Columns
- Flexbox

Assignment

- ***Circle, Square, Triangle*** (due next session)

Week 5 - 03/01

- Type on the web
- Grid Systems
- CSS Shapes
- CSS Positioning

Assignment

Week 6 - 03/08

- Responsive design
- Media queries

Assignment

- ***Responsive Recipe*** (due next session)

No class - 03/15

Week 7 - 03/22

- Mid semester Review
- Links
- Linking to sections of the current page

Assignment

- ***Bestiary Page*** (due next session)

Week 8 - 03/29

- CSS Animations
- CSS Gradients
- Alternate ways of using images

Assignment

- *CSS Effects*

Week 9 - 04/05

- Introduction to Javascript
- Understanding the DOM
- Selecting objects in the DOM
- Javascript - Working with page events

Assignment

- *Javascript Review*
- *MadLib*

Week 10 - 04/12

- Javascript functions
- Creating responsive navigation

Assignment

Final Project Proposal (due next session)

Week 11 - 04/19

- Downloading and using Javascript libraries
 - jQuery
 - lightbox.js

Assignment

- *Development Plan* (due next session)
- *Final 1* (due next session)

Week 12 - 04/26

- Using HTML Frameworks

Assignment

- *Final 2* (due next session)

Week 13 - 05/03

Assignment

- *Final* (due in two sessions)

Week 14 - 05/10

- Work session

Week 15 - 05/12

- Review of final project
- Overview

Assessable Tasks

Recipe

A recipe is a set of instructions that describes how to prepare or make something. Create a web page showing a recipe. Your recipe should not be a recipe for food. You could give instructions for performing a ritual, creating an object or a process. Your recipe must contain the following items:

- Title
- Main image
- Preparation time
- Amount of servings
- Description
- Unordered list of at least five ingredients
- Ordered list of at least five steps
- At least one image

Keep the following in mind:

- Clean code
- Correct use of HTML codes
- Use Paragraph and Div tags to divide up different types of information.

This assignment is designed to begin the process of familiarizing students with the development environment as well as basic HTML. Understanding how to properly organize files and the use of a plain text editor will be required. Additionally, students will have to research how to add an image to their HTML. This assignment will begin the process of understanding programming concepts and researching unfamiliar technical topics.

Recipe Style

Use the concepts we learned in class to add styling to your recipe. Please keep in mind the difference in purpose between HTML and CSS. Do not leave aspects of your design to the web browsers default settings. Take care to ensure careful use of type and hierarchy in your work. Make design decisions regarding:

- Body copy size and spacing
- Header size and spacing
- Paragraphs
- Text styling such as bold, italic, links, etc.

Style Guide

Create a *Style Guide* that can be used as a tool for making design decisions. Similar to a *type specimen*, this style guide shows how type can be used on the web. Using the provided examples as a guide, create an HTML/CSS document that shows a variety of layouts of body copy, justification styles, paragraphs, and headlines. Include a color palette, use of images and forms. Create two documents. One using a serif typeface and one for sans-serif.

Recipe Style 2

Edit your recipe document to use the material we covered in class.

- Padding and margins
- Columns
- Flexbox

Circle Triangle Square

Create a page 3 screens tall. Each screen has a circle, an equilateral triangle, and a square in a horizontal row. Choose a yellow, a red, and a blue to color each shape a different color. Using only those three colors, assign the shapes a different color on each screen. Change only the color of the shapes on each screen and then adjust the spacing.

In each screen:

- the three shapes appear to be centered
- the three shapes appear to be the same distance apart
- the three shapes appear to be on the same baseline

Responsive Recipe

Edit your recipe to be viewed across three different screen sizes.

Bestiary Page

Create a webpage that is a single page of a [bestiary](#). Choose or create a [fictitious creature](#) for the subject matter and consider using content based on a [real creature](#).

Final Project: Student's choice

Create a web site of your choosing for the final project. Your proposal must be approved.

The final project is designed to give the students the freedom to be creative and explore the aspects of the course that interests them while providing a structured framework that is of their own design.

Final Project Proposal

Create a simple presentation pitching your final project to the class. Include a description of the project, an outline of the process you will use to complete it, and what you hope to achieve by presenting your work to the public.

Reading / Media

1. Casey Reas, Chandler McWilliams, and LUST, Form+Code in Design, Art, and Architecture
2. Kimberly Elam, Geometry of Design
3. Armin Hofmann, Graphic Design Manual
4. Robert Bringhurst, The Elements of Typographic Style
5. Frank Chimero, The Shape of Design

6. Leah Buley, The User Experience Team of One
7. Compiled by Laurel Schwulst, Very Interactive Library
8. [How to / Why Make Internet Art](#)
9. [What is Code?, Paul Ford](#)
10. [Paragraphs on Conceptual Art, Sol Lewitt](#)
11. [Guide to Website Navigation](#)
12. [Web Design: The First 100 Years, Maciej Cegłowski](#)

Materials and Supplies

-Access to your FTP server.

Class Resources

[Resources file](#)

[W3 Schools](#)

[freeCodeCamp](#)

[Unix for Mac Users](#)

[Git on Lynda.com](#)

[Special Characters](#)

[CSS Tools: Reset CSS](#)

[Javascript Reference](#)

[Get Started with the Google Fonts API](#)

[Introduction to jQuery](#)

[Interactivity with JavaScript | Coursera](#)

[HTML, CSS, and Javascript for Web Developers | Coursera](#)

[Full Stack Web and Multiplatform Mobile App Development](#)

[Intro to JavaScript](#)

[A-Frame](#)

FTP (File Transfer Protocol)

You should have received access to a folder on the newschool servers from IT services. If not you will need to get that information from them. Inside this folder (also known as a directory) is another folder named *public_html*. This folder is viewable online at the address you have received.

To access this folder and upload your site:

Option 1: Use Cyberduck or other FTP program.

- Download an FTP program like Cyberduck.
 - Set the mode to SFTP
 - Input the correct name, password, and port number.
- You can now upload files and folders.

Option 2: Use the Terminal

- Open the application *Terminal* on your computer.

- Navigate to the folder containing your site's folder using the `cd` command. example: `cd Documents/school/creative\ computing/mySiteFolder`
- You can check the contents of this folder with `ls` (list). The folder containing your site should be in this list of files and folders.
- Next you will access the remote folder with `sftp`. Type the following into the terminal and press return.
`sftp -P 222 yourUserName@b.parsons.edu.`
- After entering your password you will be in the remote server. `ls` to list the contents of a folder. `cd public_html` to move into that folder.
- Now create a folder to hold your site by typing `mkdir yourSiteFolder`
- Move into the folder you created with `cd yourSiteFolder`
- Now you can use the `put` command. `put -R mySiteFolder`. Your site is now online. and available at the <http://b.parsons.edu/~yourUserName/yourSiteFolder/>

Code Editors:

- [Bare Bones Software | BBEdit 11](#)
- [Brackets - A modern, open source code editor that understands web design.](#)
- [Atom](#)
- [Vim] (Already on your computer)
- [Spacemacs] (<http://spacemacs.org/>)
- [Nano] (Already on your computer)

New School Resources

The university provides many resources to help students achieve academic and artistic excellence. These resources include:

- [The University and associated Libraries](#)
- [The University Learning Center](#)

For additional help with coursework assigned during the semester, you are encouraged to schedule tutoring sessions at the University Learning Center (ULC). Individual appointments are offered in Writing (all levels), Math, Adobe, Computer Programming, Oral Presentations and Time Management. Sessions are interactive, with both tutor and student participating. Appointments can be scheduled on Starfish or you can stop by for a walk-in session. The ULC is located on the 6th floor of 66 West 12th street. Academic and skill-building workshops are also offered. For a complete list of services, workshops, and general information, visit www.newschool.edu/learning-center.

Attendance, Grading and Work Submission Standards, Program Policies, Making Resources, and University Policies

All CD classes adhere to the same program and university policies:

https://docs.google.com/document/d/1u358io8doX_SVVMGqIM_oH5V0OIccneYu4Ww-uE55QM/edit?usp=sharing