# **PUCD 2026 ~ Section E**

# **Core 2: Interaction Lab**

Program	School of Art, Media, and Technology: Communication Design
CRN	2573
Semester	Spring 2021
Meeting Day	Friday
Meeting Time	9:00 – 11:40am
Building/Room/ Zoom	https://NewSchool.zoom.us/j/98580083262
Instructor & Email	Mark Beasley / beasleym@newschool.edu
Class Website	https://tidepool.school

## **Course Description**

This course serves as a complement to Core Studio Interaction. The assignments are built to work in tandem with the projects students are developing in the studio class. The lab is designed around a series of small workshops that teach beginning and intermediate interaction design through a hands-on engagement with HTML and CSS.

## **Accessible Tasks**

#### Lab Demos

Pre-recorded technical demos will be provided by Lab instructors to support the studio projects. Students are expected to watch these demos in advance of class for class discussion and in-class exercises.

#### **Assignments**

There will be homework assignments due by the start of class the following week and posted to your Github Page. These assignments will focus on a specific computing topic relating to the technical material requirements to the projects being assigned in Core Studio. Assignments will be introduced in class and listed in detail on our class site.

#### **In-Class Exercises**

Students will be expected to complete individual/group in-class exercises to push your knowledge of the concepts discussed in class.

#### **Skills Test**

A final skills test will be given on May 7 to evaluate your comprehension of the technical lab material.

## **Course Outline**

#### Unit 1: Interaction with the Internet

In weeks 1-3 we will focus on:

- File management (naming, organization, file paths)
- Setting up and starting a new project
- Tools (code editor, inspector, Git/GitHub, Glitch)
- Local web development environment
- Review of HTML/CSS basic concepts and syntax
- Embedded content

### Unit 2: Interaction with Type

In weeks 3-7 we will focus on:

- Digital typography and web fonts
- Responsive web design
- Multi-page navigation
- Creating structure with HTML and CSS
- CSS Layout + Style

#### **Unit 3: Interaction with Data**

In weeks 7–12 we will focus on:

- Real-time data sources (APIs/CMS)
- Javascript: the DOM and interacting with data
- AirTable as database and API

#### **Unit 4: Interaction with People**

In weeks 12-15 we will focus on:

- Creating dynamic outputs with HTML/CSS/JS
- Prototyping software

# **Learning Outcomes**

By the end of the semester, students will be able to:

#### 1. Apply skills in HTML

- a. Standards: W3C, the World Wide Web Consortium: W3C recommendations as standards
- b. Understand the difference between programming and markup
- c. Title, Meta (keywords/descriptions); !DOCTYPE and Document Type Definition
- d. HTML tags and the HTML Element Syntax including opening/closing tags, nested structures.
- e. HTML Attributes: class, id, style, title
- f. Headings, Paragraphs and Formatting
- g. Links, lists, forms and images
- h. The Box Model
- i. HTML5 Semantic/Structural elements
- j. HTML5 Media Elements

#### 2. Apply skills in CSS

- a. Cascading Style Sheets, their storage in external CSS files and reference in HTML
- b. Styling backgrounds, text, links, lists and forms

- c. Styling the Box Model: border, outline, margin, padding
- d. Working with dimensions, positioning, display, floating and align
- e. Color systems
- f. Manipulating images with CSS
- g. Using Webfonts
- h. Using CSS to create interactive elements
- i. Media queries and responsive design

#### 3. Understand the meaning of JavaScript

a. Basic idea of JavaScript

#### 4. Prepare Images for the Web

- a. Digital Image Formats what are they for and how are they created professionally: GIF, JPG, PNG
- b. Working for different resolutions

#### **5. Understand Web Environments**

- a. Getting it online: Purchasing URL/Webspace
- b. Use FTP to upload files
- c. Use in-browser tools to troubleshoot and amend HTML/CSS
- d. Search engine optimization
- e. The role of content management systems / blog systems

# **Materials and Supplies**

#### Laptop

#### **Technologies**

#### https://tidepool.school

Classroom management for schedule, projects, 1:1 signups, and presentations

#### Slack

Class communication for all Core 2 and direct messaging with instructor and peers.

#### Git/GitHub

We will be using GitHub to manage our code. Sign up if you don't have an account already.

#### **Atom**

Atom is a sophisticated text editor for code, markup and prose. We'll also utilize the <u>TeleType</u> plugin for collaborative editing and debugging.

#### Glitch

Glitch is a real-time, collaborative coding platform that we'll use for in-class demos and exercises.

#### Google Chrome

A fast, secure, and free web browser. We'll be using Chrome exclusively in the class.

#### <u>Vimeo</u>

Watch lectures and demos on the CD Vimeo account. Password for all videos: interaction

# **Assessment Criteria**

50% Assignments
20% In-Class Exercises
10% Core 2 Skills Test
20% Class Participation

# **Grading Rubric**

The following grading rubric will be used to assess both mid-semester score and final grade.

Assignments / 50 pts	
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Assignment 1	# /10
Assignment 2	# /10
Assignment 3	# /10
Assignment 4	# /10
Assignment 5	# /10
n-Class Exercises / 20 pts	
Delivery and completion of all exercises (5 pts per exercise)	# /20
Tests / 10 pts	
Core 2 Skills Test	# / 1
Participation / 20 pts	
Frequency	# / 1
Regular contribution to other's critique, enthusiasm, and quantity of comm	nents
Professionalism	#/1
Timely and productive weekly progress, attitude to feedback, verbal and v	isual

Total Score # / 100

**A** (95 – 100); **A**- (90 – 94); **B**+ (86 – 89); **B** (84 – 85); **B**- (80 – 83); **C**+ (76 – 79); **C** (74 – 75); **C**- (70 – 73); **D** (60 – 69); **F** (59 and below)

# 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://bit.ly/2LHztsW

**Attendance Policy**: For classes meeting once a week, students are allowed **2 absences**. Any absence beyond the allowed absences will result in an automatic failure (F) for the course. There are no excused absences, and doctor's notes are not necessary.

A student is deemed tardy if a student fails to arrive within 15 minutes past the beginning of class. **2 tardies** will result in an automatic absence. A student who arrives an hour past the beginning of class will be deemed absent.

## **CD Code Tutors**

CD student code tutoring sessions are offered Monday, Wednesdays, and Fridays throughout the semester on a drop-in basis. Students are encouraged to supplement their Lab instruction with tutors to assist you on Studio and Lab assignments. The most updated schedule and Zoom meeting links are here: <a href="https://bit.ly/3rBDcso">https://bit.ly/3rBDcso</a>

## Schedule

Schedule is subject to change per instructor discretion.

#### Unit 1: Interaction with the Internet

Week 1: Skills Review	
Synchronous	Core 2 Lab Kickoff Class introduction Lecture: HTML Recap Core 1 Skills Assessment
Asynchronous Demos	HTML & CSS Basics     Embedded Content     Glitch
Homework	Start a personal profile for the class

Week 2: Embedded Content	
Synchronous	Lecture: CSS Recap     Add class profile to Github
Asynchronous Demos	GitHub & GitHub Pages     Local Web Development Environment

Homework	Make a playlist with a service or method of your choosing (mp3, youtube, spotify, itunes, etc) and embed it within a new page linked from your profile. Style the page with css in a way that compliments your playlist.
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# Unit 2: Interaction with Type

Week 3: Typography on the Web	
Synchronous	Lecture: Font Resources and Services
Asynchronous Demo	Typography on the Web
Homework	Add typographic treatment to your class profile and playlist page

Week 4: Responsive Design and CSS	
Synchronous	Lecture: Responsive CSS Recap     Workshop: CSS animation
Asynchronous Demos	CSS Layout + Style     Responsive Web Design
Homework	Assignment 1: Wikipedia clone

Week 5: Structure	
Synchronous	Review assignment 1     Small Group     Technical Meetings: Studio Project 2
Asynchronous Demos	Creating structure with HTML and CSS
Homework	Assignment 2: Wonder Cabinets

Week 6: Studio Project 2 Technical Meetings	
Synchronous	Review assignment 2     1:1 Meetings     Technical Meetings: Studio Project 2
Asynchronous Demos	

Homework	

## **Unit 3: Interaction with Data**

Week 7: Javascript Introduction	
Synchronous	Lecture: Javascript Recap
Asynchronous Demos	AirTable     Javascript: Getting Started
Homework	Assignment 3: Instruction Sets

Week 8: Mid-Semester Reviews	
Synchronous	Review Assignment 3     1:1 Meetings with Instructor     Mid-Semester Evaluation
Asynchronous Demos	JavaScript + the DOM
Homework	

Week 9: API + Airtable	
Synchronous	Workshop: Web APIs
Asynchronous Demos	API Overview     Creating an API key in Airtable
Homework	Assignment 4: Biomimicry

Week 10: Javascript + Data	
Synchronous	Review Assignment 4     Workshop: Javascript + data <u>Small Group</u> Technical Meetings: Studio Project 3
Asynchronous Demos	Javascript + Data
Homework	

Week 11: Studio Project 3 Technical Meetings	
Synchronous	1:1 Meetings • Technical Meetings: Studio Project 3
Asynchronous Demos	
Homework	

## **Unit 4: Interaction with People**

Week 12: Prototyping	
Synchronous	Workshop: Javascript Events
Asynchronous Demos	Prototyping in Software     Input/Output Examples
Homework	Assignment 5: Variation Machines

Week 13: Studio Project 4 Technical Meetings	
Synchronous	Review Assignment 5     Small Group     Technical Meetings: Studio Project 4
Asynchronous Demos	
Homework	

Week 14: Studio Project 4 Technical Meetings	
Synchronous	1:1 Meetings • Technical Meetings: Studio Project 4
Asynchronous	
Homework	Core 2 Skills test prep

Week 15: Core 2 Skills Test	
Synchronous	Lecture: Putting sites online, documenting your work All Class

	Class Discussion: Reflection and Q&A
Asynchronous	Core 2 Skills Test
Homework	Course evaluation