# **PARSONS SCHOOL OF DESIGN**

Interaction: Core Lab PUCD 2126

Section E CRN: 3186 Spring 2018 Wednesday 9:00 am 2 W 13th Room 1006

Instructor: Robby Kraft, kraftr@newschool.edu

## **COURSE DESCRIPTION**

This course serves as a complement to Core Studio Interaction. The assignments are build 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.

#### **LEARNING OUTCOMES**

Students will be able to:

- apply skills in HTML including W3C Standards, HTML tags and the nesting structure, links, forms, and the box model
- apply skills in CSS including styling divs and text, targeting, padding and margins, positioning, interaction, @media queries and responsive design
- apply skills in Javascript including storing information, processing data, JQuery, affecting the DOM
- demonstrate familiarity with webfonts, color spaces, FTP and HTTP, SEO, interfacing with APIs, and the role of content management systems
- demonstrate the ability to research and learn unfamiliar technical topics

## **CLASS OVERVIEW**

Class meets 15 times between January 24th and May 9th.

 $8 (\pm 2)$  homework assignments will be assigned that respond to technical material requirements to the projects being assigned in the accompanying Core Studio. Homework should be completed within one week and discussed at the beginning of the following class.

#### Weeks 1-2: Code Fundamentals

In the first few weeks, we will revisit the computing fundamentals learned in Creative Computing. As each class was different we will revisit the foundations upon which we built our relationship to code, begin again with a quick review of language and approaches.

## Weeks 3-6: The Hyperlink

Students will gain experience constructing small webpages and become familiar with the rules that determine layout and typography in HTML and CSS. Students will design for multiple device sizes and become introduced to flexible units and media queries. Students will finish this section comfortable with the box model and contemporary layout practices on the web.

#### Week 7-10: Innovation and Invention

This period begins with a review of JavaScript and the common logic patterns and control flow associated with the language. The initial focus will be learning the tools helpful for manipulating the DOM, including JQuery. Also in this period students will be introduced to the handling and processing of data, both usergenerated and data incoming from an API.

#### Week 11-15: Observations

Students will be continuing to interface with 3rd party libraries and APIs of familiar digital and social spaces. Students will be interacting with code written by other people and begin to consider the implications of writing systems to used by other people and the inclusivity it may promote. The class will continue to act as a toolbox for the final project, and if students' needs begin diverging the class will migrate to more of a work session model.

W	DATE	IN CLASS	HOMEWORK DUE
1	1/24	code as art the 2 languages of computers and humans	(no homework due)
2	1/31	html & font nested containers, Google fonts, style sheets	handwritten code
3	2/7	style advanced nested containers, full screen div	newspaper
4	2/14	devices @media layout, flexible units	(no homework due)
5	2/21	transforms coordinates, css transforms	Mondrian
6	2/28	<b>drawing</b> DOM interaction, absolute positioning	device layout
7	3/7	memory var, numbers and strings	animation
8	3/14	control flow loops, branching, random, generative content	(no homework due)
		(spring break)	
9	3/28	<b>data</b> HTML form fields, process data with javascript	(no homework due)
10	4/4	<b>api</b> interface with an API, retrieve and process data	HTML forms

11	4/11	data visualization data-based content creation, visualization	secret image
12	4/18	<b>libraries</b> 3rd party javascript frameworks	dynamic content
13	4/25	<b>deploy</b> publishing content. Node.js, Heroku	code library
14	5/2	Core Studio work session one on one help	(no homework due)
15	5/9	wrap up review	(no homework due)

#### **OUTSIDE ASSISTANCE**

# **Tutor Specialist: Ray Luo**

The tutor will make themselves available at a planned time to meet 1 on 1 with any student seeking assistance.

# The University Learning Center:

https://www.newschool.edu/university-learning-center/

Computer programming sessions are available for students who need help with a variety of coding languages (see below). Trained tutors can help you with the basics, works-in-progress, and other issues. Students are asked to bring their laptops and any projects they are working on.

## **Instructor: Robby Kraft**

Students can email the instructor for briefer technical help questions.

## MATERIALS, SOFTWARE

Every student should bring a laptop to class. A notepad and pen can be helpful too, there will be times spent with laptops closed.

Please download these free and cross-platform programs:

- Sublime Text
- Google Chrome
- Github Desktop, can be downloaded at <u>desktop.github.com</u>

Please make an account at Github: <a href="http://github.com">http://github.com</a>

#### **GRADING STANDARDS**

Attendance and participation 50% In-class and Take-home Assignments 50%

Α Work of exceptional quality, which often goes beyond the stated goals of the course Α-Work of very high quality Work of high quality that indicates higher than average abilities B+ Very good work that satisfies the goals of the course В Good work B-C+ Above-average work C Average work that indicates an understanding of the course material; passable \* Satisfactory completion of a course is considered to be a grade of C or higher. C-Passing work but below good academic standing Below-average work that indicates a student does not fully understand the assignments; Probation level though passing for credit Failure, no credit F

#### W

The grade of W may be issued by the Office of the Registrar to a student who officially withdraws from a course within the applicable deadline. There is no academic penalty, but the grade will appear on the student transcript. A grade of W may also be issued by an instructor to a graduate student (except at Parsons and Mannes) who has not completed course requirements nor arranged for an Incomplete.

# Z

The grade of Z is issued by an instructor to a student who has not attended or not completed all required work in a course but did not officially withdraw before the withdrawal deadline. It differs from an "F," which would indicate that the student technically

completed requirements but that the level of work did not qualify for a passing grade.

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The grade of I, or temporary incomplete, may be granted to a student under unusual and extenuating circumstances, such as when the student's academic life is interrupted by a medical or personal emergency. This mark is not given automatically but only upon the student's request and at the discretion of the instructor. A Request for Incomplete form must be completed and signed by student and instructor. The time allowed for completion of the work and removal of the "I" mark will be set by the instructor with the following limitations: Work must be completed no later than the seventh week of the following spring or summer term incompletes and no later than the seventh week of the following spring semester for fall term incompletes. Grades of "I" not

revised in the prescribed time will be recorded as a final grade of "WF" by the Office of the Registrar.

#### MAKING CENTER

The Making Center is a constellation of shops, labs, and open workspaces that are situated across the New School to help students express their ideas in a variety of materials and methods. We have resources to help support woodworking, metalworking, ceramics and pottery work, photography and film, textiles, printmaking, 3D printing, manual and CNC machining, and more. A staff of technicians and student workers provide expertise and maintain the different shops and labs. Safety is a primary concern, so each area has policies for access, training, and etiquette that students and faculty should be familiar with. Many areas require specific orientations or trainings before access is granted. Detailed information about the resources available, as well as schedules, trainings, and policies can be found at resources.parsons.edu. Faculty who are planning curriculum that makes use of specific resources should contact the Making Center in advance to coordinate.

## **DIVISIONAL, PROGRAM AND CLASS POLICIES**

#### Responsibility

Students are responsible for all assignments, even if they are absent. Late assignments, failure to complete the assignments for class discussion and/or critique, and lack of preparedness for in-class discussions, presentations and/or critiques will jeopardize your successful completion of this course.

#### **Participation**

Class participation is an essential part of class and includes: keeping up with reading, assignments, projects, contributing meaningfully to class discussions, active participation in group work, and coming to class regularly and on time.

#### Submitting Work

Web-based assignments are due at 11:59PM on the night before class. Using Canvas, you will submit a URL for your project as well as a screenshot of it running in a browser. Physical assignments or presentations are due at the start of class. Late assignments will have 20 points deducted from their final grade.

#### Attendance

Parsons' attendance guidelines were developed to encourage students' success in all aspects of their academic programs. Full participation is essential to the successful completion of coursework and enhances the quality of the educational experience for all, particularly in courses where group work is integral; thus, Parsons promotes high levels of attendance. Students are expected to attend classes regularly and promptly and in compliance with the standards stated in this course syllabus.

While attendance is just one aspect of active participation, absence from a significant portion of class time may prevent the successful attainment of course objectives. A significant portion of class time is generally defined as the equivalent of three weeks, or 20%, of class time. Lateness or early departure from class may be recorded as one full absence. Students may be asked to

withdraw from a course if habitual absenteeism or tardiness has a negative impact on the class environment.

Whether the course is a lecture, seminar or studio, faculty will assess each student's performance against all of the assessment criteria in determining the student's final grade.

#### Canvas

Use of Canvas will not be a part of this class. Communication will be over email.

## Delays

In rare instances, I may be delayed arriving to class. If I have not arrived by the time class is scheduled to start, you must wait a minimum of thirty minutes for my arrival. In the event that I will miss class entirely, a sign will be posted at the classroom indicating your assignment for the next class meeting.

#### **Electronic Devices**

The use of electronic devices (phones, tablets, laptops, cameras, etc.) is permitted when the device is being used in relation to the course's work. All other uses are prohibited in the classroom and devices should be turned off before class starts.

# Academic Honesty and Integrity

Compromising your academic integrity may lead to serious consequences, including (but not limited to) one or more of the following: failure of the assignment, failure of the course, academic warning, disciplinary probation, suspension from the university, or dismissal from the university. Students are responsible for understanding the University's policy on academic honesty and integrity and must make use of proper citations of sources for writing papers, creating, presenting, and performing their work, taking examinations, and doing research. It is the responsibility of students to learn the procedures specific to their discipline for correctly and appropriately differentiating their own work from that of others. The full text of the policy, including adjudication procedures, is found at http://www.newschool.edu/policies/# Resources regarding what plagiarism is

and how to avoid it can be found on the Learning Center's website: http:// www.newschool.edu/universitu-learning-center/student-resources/ The New School views "academic honesty and integrity" as the duty of every member of an academic community to claim authorship for his or her own work and only for that work, and to recognize the contributions of others accurately and completely. This obligation is fundamental to the integrity of intellectual debate, and creative and academic pursuits. Academic honesty and integrity includes accurate use of quotations, as well as appropriate and explicit citation of sources in instances of paraphrasing and describing ideas, or reporting on research findings or any aspect of the work of others (including that of faculty members and other students). Academic dishonesty results from infractions of this "accurate use". The standards of academic honesty and integrity, and citation of sources, apply to all forms of academic work, including submissions of drafts of final papers or projects. All members of the University community are expected to conduct themselves in accord with the standards of academic honesty and integrity. Please see the complete policy in the Parsons Catalog. Intellectual Property Rights: http://www.newschool.edu/policies/#