Parsons School of Design
Communication Design
PSAM 3210, Web Advanced: Javascript, CRN 2158

Fall 2019
Fridays, 12:10pm – 2:50pm
6 East 16th Street, Room 1202

Lukas Eigler-Harding – eigll343@newschool.edu
Office Hours by Appointment Only
f19webadvanced.teachinginter.net

Course Description:
This course will focus on extending students' knowledge of code to web and cloud. Students will be learning JavaScript, the programming language of the Web. Students will be introduced to a variety of applications from server-side network programming, game development, and the creation of desktop and mobile applications.
We will look critically at the medium of software, dive into the cultural literature of web design, explore research and learning techniques, and develop a strong understanding for contemporary workflows and processes.

Learning Outcomes:
By the successful completion of this course, students will be able to:
● Independently compose programs for the web and other contexts using the JavaScript programming language
● Understand the affordances and limitations of using software as a medium
● Read, understand, and explain the source code of both their own and their classmate's projects
● Independently research and learn unfamiliar technical topics and code libraries, and successfully implement these topics and libraries into assignments
● Understand contemporary programming workflows and processes
● Engage in critical discussions around the design and construction of interfaces

Assessable Tasks:

This course consists of four primary assignments, in-class exercises, multi-format critiques, and take-home readings paired with in-class discussions. The assignments are listed below:

Assignment 1: Index

Duration: 1 week

● *My Website is a shifting house next to a river of knowledge. What could yours be?* by Laurel Schwulst

Take the Github page that you set up in today's class and convert it into a growing index of the work you will do for this class. As you design your index, consider what information is attached to each item (this might include the project title, date, brief, description, or screenshots), and what kind of information you want to include on the periphery (how is the site introduced? How do we know to whom the site belongs to?).

Think about how this index will grow and change in reaction to the projects you will add. Your index should be built responsively (work on desktop and mobile). The goal of this 1-week assignment is to build a dynamic system using only HTML/CSS.

Assignment 2: Pattern

Duration: 5 weeks with three stages (static pattern, animated pattern, and interface).

● *Toward Aesthetic Guidelines for Painting with the aid of a Computer* by Vera Molnar — consider her systematic approach to generating form.

● *Against Ordinary Language: The Language of the Body* by Kathy Acker — consider how what she describes relates to patterns, repetition, and design.

You will write a JavaScript program which uses loops and if statements to create a modular generative pattern. You will design at least one single pattern unit (a module) (think: div) that changes over the course of its output.

Your unit should iterate at least 100 times. With each iteration, your unit should somehow modify itself (content or css attributes: size, color, rotation, shape, texture). Your pattern should have at least 2 variables of change (ex: content, color), is allowed to repeat itself (i.e. be a pattern), and is allowed to be as abstract or literal as you want (it can tell a story, or it can be an exercise in form). The goal of this project is to use javascript to dynamically append HTML elements and programmatically alter their attributes. This project will also utilize javascript to explore techniques of animation and interactivity.

Assignment 3: Context

Duration: 3 weeks

● *On Weaving: Designing as Visual Organization* by Anni Albers, skim through her weaving patterns.

● *Benevolent Deception in Human Computer Interaction* by Eytan Adar, Desney S. Tan, and Jaime Teevan

You will create an interactive single-page website that utilizes asynchronous loading from at least one external data source (an API). This site will be designed with the goal to re-contextualize your

data source(s) and generate unique interface moments. On a technical level, this assignment will allow you to further develop an understanding for javascript-written interfaces and the components they are made of.

Assignment 4: Affordances
Duration: 6 weeks
● *Affordances and Design* by Don Norman.
● *The Berlin Key or How to Do Words with Things* by Bruno Latour
● *Framing Thoughtless Acts* by Jane Fulton Suri
This assignment is meant to expand a student's understanding of customized user experience and interactivity. Using your knowledge of Javascript so far, design and develop a linear relationship between a user's actions and the visual rendering of a site. Consider what information you store about the user and their behaviour (i.e. time-visited, mouse movement, time spent on site), and to what degree/in what form this information is relayed back to the user upon each visit.

Evaluation and Final Grade Calculation
This is a studio course: primary academic and constructive feedback is given in a critique-based setting. Students are expected to act with agency in the research and exploration of new topics. A mid-semester check-in will also inform students of their academic standing. Students not meeting required criteria will be notified at the teacher's discretion.

Below is the grade calculation:

In-class and Take-home Assignments	50%
Final Project	30%
In-class Participation and Attitude	20%
TOTAL	100%

Course Outline *(Subject to change)*

Class 1	Aug 30	● Introductions, Syllabus Review, Expectations ● Discussion: HTML/CSS Review ● Github Pages Set-up	● *Assignment 1: Index*
Class 2	Sept 6	🔴 *Assignment 1: Index,* Walk-around ● Fluid/Responsive CSS ● Lecture: Intro to Javascript (pt 1, variables, for loops and template literals) ● In-class *for loop* exercise	● *Assignment 2, Static*
Class 3	Sept 13	● *Assignment 2*, Review ● Lecture: Intro to Javascript (while, template literal)	● *Assignment 2, Static*
Class 4	Sept 20	● *Assignment 2*, Review ● Lecture: Intro to Javascript (pt 2, functions, timing)	● *Assignment 2, Animated*
Class 5	Sept 27	● Lecture: Javascript, Interactivity (DOM, querySelectors, eventListeners, Libraries) ● Groups: Assignment 2	● *Assignment 2, Interface*
Class 6	Oct 4	● Check-in: Assignment 2 ● Lecture + Exercise: Javascript Libraries ● Introduction: Javascript APIs (async, fetch)	● *Assignment 2, Finalize* ● *Assignment 3, Designs*
Class 7	Oct 11	🔴 Assignment 2, Final Critique ● Groups: Assignment 3 Design Selection ● Lecture + Exercise: Javascript APIs	● *Assignment 3, API Implementation*
Class 8	Oct 18	● Demo: Integrating Javascript APIs and Libraries ● Groups: Assignment 3 Feedback	● *Assignment 3, Refinement*
Class 9	Oct 25	● Individual Meetings: Mid Term Evaluations ● Lecture: Javascript (cookies and local servers) ● Assignment 3, Work Session/Check-in	● *Assignment 3, Finalize*
Class 10	Nov 1	🔴 Assignment 3, Final Critique	● *Assignment 4, Designs*
Class 11	Nov 8	● Small Groups: Assignment 4 Design Selection ● Javascript: Questions/Features	● *Assignment 4, Cookie Implementation*
Class 12	Nov 15	● Assignment 4, Work Session + Check-in ● Javascript: Questions/Features	● *Assignment 4, Development*
Class 13	Nov 22	● Assignment 4, WS + Course Evaluations	● *Assignment 4, Development*
Class 14	Dec 6	● Assignment 4, Work Session + Check-in	● *Assignment 4, Development*

Class 15	Dec 13	● Assignment 4, Final Critique	● *Submit Documentation*

Reading List
Toward Aesthetic Guidelines for Painting with the aid of a Computer by Vera Molnar
Against Ordinary Language: The Language of the Body by Kathy Acker
On Weaving: Designing as Visual Organization by Anni Albers
Framing Thoughtless Acts by Jane Fulton Suri
Benevolent Deception in Human Computer Interaction by Eytan Adar, Desney S. Tan, and Jaime Teevan
Affordances and Design by Don Norman
My Website is a shifting house next to a river of knowledge. What could yours be? by Laurel Schwulst

Additional readings may be added over the semester

Materials and Supplies
Students are expected to bring a laptop with a text editor (rec: Sublime Text) and Google Chrome installed.

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](#)
- [University Disabilities Service](#)

In keeping with the university's policy of providing equal access for students with disabilities, any student with a disability who needs academic accommodations are welcome to meet with me privately. All conversations will be kept confidential. Students requesting any accommodations will also need to contact Student Disability Service (SDS). SDS will conduct an intake and, if appropriate, the Director will provide an academic accommodation notification letter for you to bring to me. At that point, I will review the letter with you and discuss these accommodations in relation to this course.

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 with which

students and faculty should be familiar. Many areas require specific orientations or training before access is granted. Detailed information about the resources available, as well as schedules, trainings, and policies can be found at resources.parsons.edu.

Grading Standards

A student's final grades and GPA are calculated using a 4.0 scale.

> A [4.0] — Work of exceptional quality, which often goes beyond the stated goals of the course
> A- [3.7] — Work of very high quality
> B+ [3.3] — Work of high quality that indicates higher than average abilities
> B [3.0] — Very good work that satisfies the goals of the course
> B- [2.7] — Good work
> C+ [2.3] — Above-average work
> C [2.0] — 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- [1.7] — Passing work but below good academic standing
> D [1.0] — Below-average work that indicates a student does not fully understand the assignments;
> Probation level though passing for credit
> F [0.0] — Failure, no credit

Grade of 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.

Grade of Z

This grade is to be assigned to students who have never attended or stopped attending classes. Exceptions can be made if the student has completed enough work to warrant a grade (including a failing grade), and arrangements have been made with the instructor(s) and the Dean's Office prior to grade submission. The Z grade does not calculate into the student's GPA.

Grades of Incomplete

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 fall semester for 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 "F" by the Registrar's Office.

College, School, Program and Class Policies
A comprehensive overview of policy may be found under [Policies: A to Z](#). Students are also encouraged to consult the [Academic Catalog for Parsons](#).
Canvas
Use of Canvas may be an important resource for this class. Students should check it for announcements before coming to class each week.
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.

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.

Active Participation and Attendance
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.
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.
I will assess each student's performance against all of the assessment criteria in determining your final grade.

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 on the university website under Policies: A to Z. Resources regarding what plagiarism is and how to avoid it can be found on the Learning Center's website.

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

The New School (the "university") seeks to encourage creativity and invention among its faculty members and students. In doing so, the University affirms its traditional commitment to the personal ownership by its faculty members and students of Intellectual Property Rights in works they create. The complete policy governing Intellectual Property Rights may be seen on the university website, on the Provost's page.