Parsons School of Design
School of Art Media and Technology
BFA Communication Design

Creative Computing
PUCD2035; CRN 3647
FALL 2017
Tuesday 9:00 – 11:40am
6 E 16th Street, Room 1206

Or Zubalsky
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Office hours by appointment only

Course Description
Creative Computing 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.

Learning Outcomes
By the successful completion of this course, students will be able to:
1.   Demonstrate knowledge of fundamental programming concepts
2.   Develop several visual & interactive projects
3.   Objectively present their design process and workflow
4.   Integrate a variety of media elements into their projects
5.   Problem solve with other students through reading other students' code
6.   Demonstrate the ability to research and learn unfamiliar technical topics.
7.   Concept projects that use code in a creative way
8.   Research historic and current design precedents to contextualize their work.
9.   Evaluate how typography and its variables are applied to interactive systems to facilitate orientation, support usability and create consistency.

Course Outline

Week	Topic	Assignments
W01: August 29th	Syllabus review, On instructions	Do What?
W02: September 5th	Environment setup, Server/Client	Expressive Text
W03: September 12th	Introduction to HTML	Non-Linear Narrative Pt. 1
W04: September 19th	Introduction to CSS	Non-Linear Narrative Pt. 2
W05: September 26th	CSS as drawing tool	Web Composition Pt. 1, Archive
W06: October 3rd	CSS states and transitions	Web Composition Pt. 2
W07: October 10th	Introduction to Javascript	Web Composition Pt. 3
W08: October 17th	Logic patterns and loops	Research presentation
W09: October 24th	Research presentations	Revise archive
W10: October 31st	Working with external data	Interface: proposal
W11: November 7th	Events and input/output	Interface: prototype
W12: November 14th	Prototype presentations	Interface: 1st draft
W13: November 28th	Work session	Interface: 2nd draft
W14: December 5th	Work session / Field trip	Interface: Final draft
W15: December 12th	Final project presentations	Archive containing all files

Assignments

01 Do What? Due September 5th
Write a program that would produce a formal composition. The program
should be written as a set of simple instructions, which could be executed by
a classmate, friend, or family member, without any additional guidance by you.
Execute the program yourself and document the result. Ask three different
people to execute it as well and document their result. Compare the results and
make notes regarding how they are similar or different. Make a small change to
your initial program and rewrite it. This time, be specific about your goals and
note down how you would like the results to differ. Repeat the first steps using
the new program and document the results.

02 Expressive Text Due September 12th
Compose a piece of writing using only plain text that is meant to be
experienced on a browser. Lay out the text so the experience of reading changes
based on scrolling through it. Upload your file to your remote directory.

03 Non-Linear Narrative Due September 19th / September 26th
Use HTML to create a multipage non-linear narrative. Each step in the narrative
should link to at least other two pages, with at least fifteen pages in total.
The following week add both common styles and page-specific styles with CSS.
Consider how the organization, content, linking, and design can shape the story
that you want to tell.

04 Web Composition Due October 3rd / October 10th / October 17th
Using a combination of HTML, CSS and Javascript, create an interactive composition . Every week will build upon the work done in the previous week and add to it. For the first iteration use CSS shapes to create a representation of an existing image. For the second iteration do research around the kind of interaction you would like to develop, and implement it with :hover and :active states. For the third intuition, create interchangeable states to the composition that are triggered with Javascript.

05 Research Presentation Due October 24th
Do independent research on a topic related to JavaScript. Create a resource documenting your topic, explaining it, and demonstrating it with original code. Present the research topic and demo to the class.

06 Archive Due December 12th, milestones on October 3rd / October 31st
Organiize all assignment files and deliverables in a single website with cohesive style and clear navigation.

07 Final project: Interface Due December 12th, milestones in previous 4 weeks
Using a combination of HTML, CSS, and Javascript, design and develop an experimental interface that uses data from a publicly available API. Consider the nature of the data that is being used and the kind of experience you might want someone to have with it.

Grading

Participation / Attendance	30%
In class and take home assignments	50%
Final Project	20%
Total	100%

Readings
Vera Molnar, Artist Statement
Sol Lewitt, Paragraphs on Conceptual Art
Jorge Luis Borges, Garden of the Forking Paths
Rune Madsen, Programming Design Systems
John Puckett, HTML and CSS
Paul Ford, What is Code?
Karl Gerstner, Designing Programs
Alexander R. Galloway, The Interface Effect
Zara Rahman, 2016: A Year of Data-Driven Confusion
Maciej Ceglowski, The Moral Economy of Tech

Materials and Supplies
Please come to class with a fully charged laptop, charger, notebook and a pen.

Resources

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

• The University (and associated) Libraries: http://library.newschool.edu
• The University Learning Center: http://www.newschool.edu/learning-center
• University Disabilities Service: www.newschool.edu/student-disability-services/

In keeping with the university's policy of providing equal access for students with disabilities, any student with a disability who needs academic accommodations is 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 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.

Grading Standards

A   Work of exceptional quality, which often goes beyond the stated goals of the course

A-   Work of very high quality

B+   Work of high quality that indicates higher than average abilities

B   Very good work that satisfies the goals of the course

B-   Good work

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

D   Below-average work that indicates a student does not fully understand the assignments; Probation level though passing for credit

F   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. 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.

Grade of 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.

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 Office of the Registrar.

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.

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 may be an important resource for this class. Students should check it for announcements before coming to class each week.

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/university-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/#