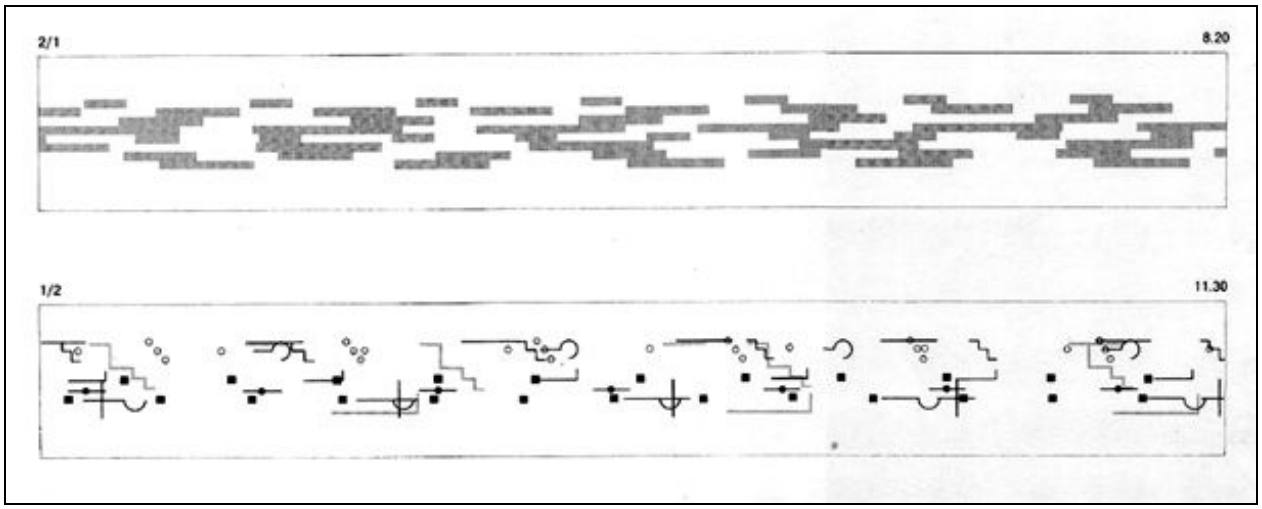
Parsons School of Design / The New School
School of Art, Media, and Technology
3648 - PUCD 2035 - Section E, 3 credits
Creative Computing, Fall 2017



Brian Eno, *Music For Airports*

course logistics:

Classroom: 6 East 16th Street, room 1205

Class time: Tuesdays, 9:00am - 11:40am

Instructor: Sam Galison // galisons@newschool.edu

Office hours: by appointment

Last day to add this course: **Sunday, September 10**

Last day to drop this course: **Sunday, October 1**

Last day to withdraw online: **Monday November 6**

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 objectives:

This course is crafted to facilitate the creation of a richly developed and compelling creative-technical portfolio. You'll learn the tools and practices needed to make interactive and computational work, but you'll also learn how to critically assess the work of your peers and of creative practitioners "in the wild" through the study of the history and theory behind current technological trends. We will build a common vocabulary for discussing and critiquing computational aesthetics, while at the same time covering the core skill set of contemporary front-end development and creative code.

Technically, this class will cover:

- Strategies for creating a responsible file management system and an efficient software development workflow
- Project management and open-source development practices using Github
- Desktop (native) software development in Processing, a popular open-source platform for learning how to write code – Processing is based on the Java language
- Platform-agnostic software development on the web, including HTML, CSS, and Javascript
- Design strategies and current best practices for creating compelling digital work
- The conceptual frameworks necessary for critically engaging with the history, theory, and aesthetics underpinning contemporary digital work

final grade evaluation:

Weekly assignments	25%
Reading responses	15%
Midterm	10%
Final	20%
Attendance + participation	30%
Total	100%

course structure and schedule:

We meet 15 times: every Tuesday at 9am except Tuesday, November 21. Attendance is mandatory.

There will be readings (text, artwork, web projects, and other media) most weeks, with a 1 paragraph response to the reading posted to Canvas by the start of class.

There are quick one-week projects in this class most weeks – the goals with these small projects are to learn by doing, build up your portfolio, and inspire future work.

These short assignments will culminate in two significant projects: a midterm and a final project.

All assignments must be pushed to your github **before the start of class.** Here's a refresher on how to do that if you forget: http://rogerdudler.github.io/git-guide/

Course schedule:

Dates, assignments, and readings subject to change.

week	in class	assignment	reading	due this day
8.29.17	introductions, logistics, software setup	generative drawing (hand), setup	Reas et al.: Form + Code ch. 1, Ryoji Ikeda	
9.5.17	github review; programming basics	generative drawing (programmatic)	Turing: Computing Machinery and Intelligence	- response - generative drawing - 1st github commit
9.12.17	github review; iteration	loop loop	Radiolab: Loops, Steve Reich: Music for 18 Musicians	- response - generative drawing
9.19.17	arrays and basic interactivity	midterm	Ford: What Is Code	- response - loop loop
9.26.17	work day			- response
10.3.17	midterm critique		The Johnny Cash Project	midterm
10.10.17	web introduction: writing html	hypertext	Paul La Farge: Luminous Airplanes	- response
10.17.17	html: images and media; intro to css	erasure	Amaranth Borsuk: Deletionist + Aesthetics of Erasure	- response - hypertext
10.24.17	more complex css; intro to javascript	array of twelve	Burnham: Systems Aesthetics, Walter De Maria: The Broken Kilometer	- response - erasure
10.31.17	programming in javascript	representation of place (psychological or geographic)	Lethem: The Ecstasy of Influence, Chris Milk: The Wilderness Downtown	- response - array of twelve
11.7.17	objects in javascript	individuality among multitudes	Tiziana Terranova: Network Culture (excerpt)	- response - representation of place
11.14.17	tbd based on need	final	William Kentridge: In Praise of Shadows	- response - individuality among multitudes
11.21.17	no class			
11.28.17	in-progress critique			- response - work in progress
12.5.17	work time / course eval			
12.12.17	final critique			final project

grading standards:

A student's final grades and GPA are calculated using a 4.0 scale. Please note that while both are listed here, the 4.0 scale does not align mathematically with the numeric scale based on percentages of 100 points.

A [4.0; 95 – 100%]	Work of exceptional quality, which often goes beyond the stated goals of the course
A- [3.7; 90 – <95%]	Work of very high quality
B+ [3.3; 87 – <90%]	Work of high quality that indicates higher than average abilities
B [3.0; 83 – <87%]	Very good work that satisfies the goals of the course
B- [2.7; 80 – <83%]	Good work
C+ [2.3; 77 – <80%]	Above-average work
C [2.0; 73 – <77%]	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; 70 – <73%]	Passing work but below good academic standing
D [1.0; 60 – <70%]	Below-average work that indicates a student does not fully understand the assignments; Probation level though passing for credit
F [0.0; 0 – <60%]	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 Registrar's Office.

attendance, preparedness, and materials:

Attendance:

Three absences will result in a failing grade.

Three latenesses equals one absence.

This is a technical course. Assigned projects are based on in-class demonstrations, and each week is designed to build on concepts from previous weeks. If you miss class, you'll be missing crucial information that you'll need to successfully complete this course. **Therefore, if you miss three classes worth of work, you're missing a fifth of the course as a whole and will fail the class.**

From the university:

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.

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. Active participation also means detaching from social media, texting, and unrelated web content for the duration of class time.

Preparedness:

All work is due **at the start of class** on the day it's due. We will critique work in its state at that point. All work must be committed and pushed to your github repository in its final form BEFORE you arrive in class. "Final form" means we should be able to download and run your work without any additional fiddling.

You are responsible for all assignments, even if you 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.

Equipment requirements:

Come to class with something to write/draw with, something to write/draw on, and a laptop (not phone or tablet) that has enough charge to last the duration of class (2h40m). The latest build of Mac OS is recommended, but all operating systems will be supported. All software used in the course is free. We will be working in Processing, Sublime Text, and Chrome; I can't promise I can help you figure out issues with other software.

university, divisional, and class policies:

Canvas:

Use of Canvas may be an important resource for this class. Please 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.

Writing Style:

The required style guide for all Parsons classes is the Chicago Manual of Style.

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, either I will email you or a sign will be posted at the classroom indicating your assignment for the next class meeting.

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:

https://www.newschool.edu/provost/accreditation-policies/

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.

note to students:

By choosing to remain in this class, you agree to abide by the standards set forth in this syllabus.

In addition to the guidelines in this syllabus, all students are expected to adhere to all New School, Parsons, and AMT policies.