Parsons School for Design
Art, Media, and Technology

Creative Computing

PUCD2035; CRN 5417
Spring 2016
Tuesdays, 3:50pm – 6:30pm
Parsons 2 W 13th, room 802

Alison Abreu-Garcia
abreugaa@newschool.edu
Office hours are by appointment.

Course Description

This course will introduce students to the building blocks of creative computing within the visual and media environment. Students will learn to create dynamic images, type and interfaces, that can translate into print, web and spatial forms. Through weekly problems, students will learn programming fundamentals that translate in virtually all programming platforms. Primary software platform: JavaScript.

Course Outline

WEEK 1	1/26	Introduction, Syllabus Handed Out	Assignment: Drawing Due: 2/2
WEEK 2	2/2	Data types, Repetition	Assignment: 100 things Due: 2/9
WEEK 3	2/9	Logic, mouse	Assignment: Interaction Due: 2/16
WEEK 4	2/16	Interaction part 2, keyboard	Assignment: Input Due: 2/23
WEEK 5	2/23	Functions, scope	Assignment: Refactoring Due: 3/1
WEEK 6	3/1	Events, Objects	Assignment: Paint Due: 3/8
WEEK 7	3/8	Images, Video, Sound	
WEEK 8	3/15	Midterm	
WEEK 9	3/22	No class: spring break	
WEEK 10	3/29	Storytelling	Assignment: Storytelling Due: 4/5
WEEK 11	4/5	Tools	Assignment: Barometer Due: 4/12
WEEK 12	4/12	Games	Assignment: Game Due: 4/19

WEEK 13	4/19	Final project intro	Assignment: final project proposal Due: 4/26
WEEK 14	4/26	Final project working session	
WEEK 15	5/3	Final project working session	
WEEK 16	5/10	Final Project Presentations	

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

Assessable Tasks

- Drawing: Create a representation drawing using p5 shape and color methods
- 100 things: create a drawing that has 100 elements
- Interaction: Create an interactive drawing using the mouse as an input
- Input: Create an interactive drawing using the keyboard as an input
- Refactoring: reorganize your code into functions
- Paint: create your own brush strokes using p5.js
- Storytelling: create a three part interactive story
- Barometer: Create an interactive weather webpage that uses live weather data
- Games: Create a game. It should be hard to win.
- Final Project: You will propose and create a program that is either an interactive story, a tool, or a game.

Final Grade Calculation

Participation/Attendance	20%
Classwork	25%
Homework	25%
Final Project	30%
TOTAL	100%

Late assignments will be docked 10%.

Required Reading

There is no specific textbook for the course, but I may occasionally assign readings that will be discussed in the following class. Readings will be posted to the class website

Resources
Links to resources will be posted to the class website.

Materials and Supplies
Students are required to bring their laptop and charger to each class.

Grading Standards
Within the context of this class, programming will be treated as both an extension of design (in a visual sense), and as a form of design in its own right. You should approach each project with intentionality and purpose.

Undergraduate

A [4.0; 96–100%]
Work of exceptional quality, which often goes beyond the stated goals of the course

A- [3.7; 91 –95%]
Work of very high quality

B+ [3.3; 86–90%]
Work of high quality that indicates substantially higher than average abilities

B [3.0; 81–85%]
Very good work that satisfies the goals of the course

B- [2.7; 76–80%]
Good work

C+ [2.3; 71–75%]
Above-average work

C [2.0; 66–70%]
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; 61–65%]
Passing work but below good academic standing

D [1.0; 46–60%]
Below-average work that indicates a student does not fully understand the assignments;
Probation level though passing for credit

F [0.0; 0–45%]
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:

> Undergraduate students: 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.

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.

> ● 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 the 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 by the instructor 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.

Members of the faculty are expected to provide syllabi in which course objectives and assessment criteria are described, in writing, at the beginning of the term. The syllabus should also articulate how attendance is assessed with respect to active participation.

At Parsons, attendance and lateness are assessed as of the first day of classes. Students who register after a class has begun are responsible for any missed assignments and coursework. Students who must miss a class session should notify the instructor and arrange to make up any missed work as soon as possible. A student who anticipates an extended absence should immediately inform the faculty and his or her program advisor. Advance approval for an extended absence is required to ensure successful completion of the course. Withdrawal from the course may be recommended if the proposed absence would compromise a student's ability to meet course objectives.

Finally, faculty are asked to notify the student's advisor for any student who misses two consecutive class sessions without explanation or who otherwise miss a significant portion of class time. Following two absences, students may be asked to speak with their advisor to review any impediments to their successful performance in class and, if so, to provide confirmation to the faculty member that such a conversation took place.

Religious Absences and Equivalent Opportunity
Pursuant to Section 224-a of the New York State Education Laws, any student who is absent from school because of his or her religious beliefs will be given an equivalent opportunity to register for classes or make up any examination, study, or work requirements which he or she may have missed because of such absence on any particular day or days. The student must inform the instructor at the beginning of the course of any anticipated absences due to religious observance.

● 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
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.

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. 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.

● Student Disability Services (SDS)
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 meet with Jason Luchs in the Office of Student Disability Services, who will conduct an intake, and if appropriate, provide an academic accommodation notification letter to you to bring to me. SDS assists students with disabilities in need of academic and programmatic accommodations as required by the Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Federal Rehabilitation Act of 1973. http://www.newschool.edu/studentservices/disability/.