Parsons The New School for Design

Design And Technology Creative Coding: Advanced PGTE 5566; CRN 3912 Fall 2014 7:00 PM 6 East 16th St. Room 1208

Patrick Proctor proctorp@newschool.edu Appointments by email

Course Description This class is an introduction to programming using the Macintosh, UNIX or DOS operating system. Students will learn how to compile basic executable files and be given a strong grounding in applications development. The class will also cover basic IDE and development environment issues as well as platform specific development concerns. Students interested in pursuing programming projects for thesis are highly encouraged to take this class.

Course Outline

WEEK 1	08/28/14	Introduction, Syllabus Handed Out, Course Curriculum Solidifies	Students set up personal work stations for multiple development environments.
WEEK 2	09/04/14	Creative Frameworks: Differences, Similarities, Strengths, And Weaknesses	Weekly Coding Assignment
WEEK 3	09/11/14	Image And Video Manipulation	Weekly Coding Assignment
WEEK 4	09/18/14	Camera Vision And Video Analysis	Weekly Coding Assignment
WEEK 5	10/02/14	Kinect Hacking and Application	Midterm Project Proposals
WEEK 6	10/09/14 (To Be Rescheduled)	Present Midterm Proposals, Intro to OpenGL And 3D Environments	Midterm Project Work
WEEK 7	10/16/14	Midterm Project Presentations	Weekly Coding Assignment
WEEK 8	10/23/14	Audio Analysis and Synthesis	Weekly Coding Assignment
WEEK 9	10/30/14	Object Oriented Programming Concepts	Weekly Coding Assignment
WEEK 10	11/06/14	Physics Systems	Weekly Coding Assignment
WEEK 11	11/13/04	Node.js and Websockets	Final Project Proposals
WEEK 12	11/20/14	Final Project Proposals, Android Development and Creative Frameworks	Final Project Work
WEEK 13	12/25/14	Thanksgiving Week: Student Final Project Meetings	Final Project Progress Report
WEEK 14	12/04/14	Final Project Updates and Help Session	Final Project Work
WEEK 15	12/11/14	Final Project Presentations	N/A

Learning Outcomes

1. Understanding of multiple advanced audio/video topics in creative coding

- 2. Understanding of the differences between multiple creative coding frameworks
- 3. Increased programming skill, including OOP principles
- 4. Applied use of creative coding frameworks to personal projects
- 5. Ability to approach new libraries and plug ins with ease

Assessable Tasks

Class Participation Weekly Coding Assignments Midterm Project Final Project

Final Grade Calculation

Participation	10%
Attendance	10%
Weekly Assignments	20%
Midterm Project	20%
Final Project	40%
TOTAL	100%

Required Reading

TBD

Recommended Reading

TBD

Resources

Materials and Supplies

Personal computer with capability to comfortably run modern creative coding frameworks.

Grading Standards

- A Work of exceptional quality
- A- Work of high quality
- B+ Very good work
- B Good work; satisfies course requirements

Satisfactory completion of a course is considered to be a grade of B or higher.

- B- Below-average work
- C+ Less than adequate work
- C Well below average work
- C- Poor work; lowest possible passing grade
- F Failure
- GM Grade missing for an individual

Grades of D are not used in graduate level courses.

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

Faculty members may fail any student who is absent for a significant portion of class time. A significant portion of class time is defined as three absences for classes that meet once per week and four absences for classes that meet two or more times per week. During intensive summer sessions a significant portion of class time is defined as two absences. Lateness or early departure from class may also translate into one full absence.

• Blackboard or Canvas

Use of Blackboard 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

Use of electronic devices (phones, tablets, laptops) 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/.