Creative Coding iOS, Spring 2014 -- Syllabus
Parsons The New School for Design
Design and Technology Department

Spring 2014
Tuesday 12:10-2:50
Room 1202

Instructor: Yury Gitman
University Email: gitmany@newschool.edu
Office Hours: before class by appointment.
Class website: canvas

Description:
This class is an introduction to programming using the Macintosh and xCode. Students will learn how to write iOS games and applications. The class will also cover object oriented programming, iOS frameworks, and platform specific development concerns. Special focus will be put developing applications in the mobile gaming space. Students interested in pursuing programming projects for thesis are highly encouraged to take this class.

Schedule:

WEEK 1	1/28	Introduction, Syllabus Handed Out. Review Course and Material. My First App Introduced
WEEK 2	2/4	My First App, Objective-C, OOP Setup Developer Accounts for Students
WEEK 3	2/11	My First App, Data Object
WEEK 4	2/18	SpriteKit Intro: SKScenes, Sprites, PhysicsWorld, SKActions, Particles, SKLabels UITouchEvents
WEEK 5	2/25	SpriteKit Physics, Gravity, Collisions, Joints
WEEK 6	3/4	SpriteKit Physics, More with Joints Gesture Recognisers: Swipe, Pinch, Rotate
WEEK 7	3/11	SpriteKit, Sounds, Score, SKLabels, Scene Transitions. Game Prototype 1
WEEK 8	3/18	Performance Concerns, Leveling Up, Game

		Prototype 2
spring break	3/25	Spring Break
WEEK 9	4/1	CoreMotion, Game 2 Proposal
WEEK 10	4/8	Multi-player Mode, GameKit Game 2 Prototype
WEEK 11	4/15	More Multi-player Mode, GameKit Game 2 Multi-Player Prototype
WEEK 12	4/22	Even More Multi-player Mode, GameKit Game 2 Multi-Player Prototype
WEEK 13	5/29	Final Sounds, Graphics, Scoring Game 2 Multi-Player Prototype
WEEK 14	5/6	Class Playtesting
WEEK 15	5/13	Presentation of Documentation and Final Prototype

Learn Outcomes:
By the successful completion of this course, students will be able to:
1) Program stand-all iOS applications and games.
2) Understand the Object Oriented Programming.
3) Command a mastery xCode and it's debug and performance tools. of the Arduino Language and development environment.
4) Understand the interplay of electronics and human interaction.

Assessable Tasks:
Grades will be assessed by the quality of homework assignments, the midterm, and the final assignment.
Project should function electronically and engage users.

Required Text:
1)
Accessed from: developer.apple.com
2)
iOS Games by Tutorial, Ray Wenderlich

Recommended Texts
iOS Components and Frameworks, Richter Keely

Ojbective-C Programmer's Reference, Oliveira
Lynda.com

Final Grade Calculation
Participation /Attendance 33%
Project 1 (Midterm)   33%
Project 2 (Final)   34%
TOTAL   100%

Parsons-Wide Grading Standards:

F
Failing grades are given for required work that is not submitted, for incomplete final projects or for examinations that are not taken (without prior notification and approval). Make-up work or completion of missed examinations may be permitted only with the approval of the instructor and the program director.

D
The paper adheres to all of the general guidelines of formatting, page-length, and the minimum terms of the assignment. Written work receiving a "D" grade may be a simple restatement of fact or commonly-held opinion. These kinds of papers also will tend to put forward obviously contradictory or conflicting points of view. "D" papers may also have serious organizational and grammatical errors in evidence, which may or may not impede the reader's ability to understand the author's point.

C/C+
These are average papers. They will demonstrate some success in engaging with the assigned readings or material. The paper will show that the student can identify and work with key terms and passages in a text and apply them to ideas and examples found in other texts, or other outside material. Additionally, the paper will demonstrate effort in the areas of analysis and critical thinking by posing an interesting problem or question. Typical of a "C/C+" paper, however, is that the original problem or question, once asked, does not move the paper forward. Often, there is no real solution given, or there is a variety of possible solutions put forward without a clear sense of where the author's commitment lies. "C/C+" papers may also have significant organizational, grammatical and/or editorial errors in evidence. These errors may periodically impede the reader's ability to understand the author's point, or may lead to a paper that seems repetitive or circular.

B/B+
These are very good papers. The "B/B+" paper does everything a "C/C+" paper does, but offers a sustained and meaningful structure to a critical endeavor that is more complex than a paper at the "C/C+" level. What also distinguishes a "B/B+" paper is the author's ability to offer a unique insight, to ask questions of primary or secondary source material, and/or to set up a debate between texts or points of view. The author's point of view is clear and an argument is sustained fairly consistently throughout the paper. "B/B+" papers are logically organized, and also respond to the assignment in thoughtful and distinctive ways. Although minor grammatical and editorial errors may be present, they are under control and do not impede meaning or clarity in the paper.

A
These are exceptionally good papers that go above and beyond the expectations and requirements set forth in the assignment. They demonstrate substantial effort and achievement in the areas of critical thinking and scholarship. They also demonstrate considerable interpretive connections between concrete ideas or textual moments, a high level of analysis, and flexibility of argument. The argument or point of view that is offered is consistent throughout the paper, and governs the use and interpretation of all examples, and primary and/or secondary source material. "A" papers are very well organized, and are free of grammatical and editorial errors.

Given these criteria, the majority of papers in your class can be expected to fall in the "C" to "B+" range. Although minus grades are not included here, you may, of course, assign them at your discretion. Generally, minus grades are used in those cases where a student has fallen just short of achieving all the

elements characterizing a paper in a particular grade range.

I
A grade of I (Incomplete), signifying a temporary deferment of a regular grade, may be assigned when coursework has been delayed at the end of the semester for unavoidable and legitimate reasons. Incomplete grades are given only with the written approval of the instructor and the program director. The Request for an Incomplete Grade form must be filled out by the student and instructor prior to the end of the semester.

For undergraduate students, if a grade of incomplete is approved, outstanding work must be submitted by the seventh week of the following Fall semester (for Spring and Summer courses) or by the seventh week of the following Spring semester (for Fall courses). Otherwise, a grade of I will automatically convert to a permanent unofficial withdrawal (WF) after a period of four weeks. For graduate students, the maximum deadline for completion of an incomplete is one year though a shorter period may be imposed at the discretion of the instructor.

Divisional, Program and Class Policies [You should include the following headings with the recommended text. In addition, you should include any other policies you may have.]

- Responsibility
  Students are responsible for all assignments, even if they are absent. Late papers, failure to complete the readings assigned for class discussion, and lack of preparedness for in-class discussions and presentations will jeopardize your successful completion of this course.

- Participation
  Class participation is an essential part of class and includes: keeping up with reading, 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
  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.

- Academic Integrity
  This is the university's Statement on Academic Integrity: "Plagiarism and cheating of any kind in the

course of academic work will not be tolerated. Academic honesty 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 instructors and other students). These standards of academic honesty and citation of sources apply to all forms of academic work (examinations, essays, theses, computer work, art and design work, oral presentations, and other projects)."

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.

Every student at Parsons signs an Academic Integrity Statement as a part of the registration process. Thus, you are held responsible for being familiar with, understanding, adhering to and upholding the spirit and standards of academic integrity as set forth by the Parsons Student Handbook.

Guidelines for Written Assignments
Plagiarism is the use of another person's words or ideas in any academic work using books, journals, internet postings, or other student papers without proper acknowledgment. For further information on proper acknowledgment and plagiarism, including expectations for paraphrasing source material and proper forms of citation in research and writing, students should consult the Chicago Manual of Style (cf. Turabian, 6th edition). The University Writing Center   also provides useful on-line resources to help students understand and avoid plagiarism. See http://www.newschool.edu/admin/writingcenter/.

Students must receive prior permission from instructors to submit the same or substantially overlapping material for two different assignments. Submission of the same work for two assignments without the prior permission of instructors is plagiarism.

Guidelines for Studio Assignments
Work from other visual sources may be imitated or incorporated into studio work if the fact of imitation or incorporation and the identity of the original source are properly acknowledged. There must be no intent to deceive; the work must make clear that it emulates or comments on the source as a source. Referencing a style or concept in otherwise original work does not constitute plagiarism. The originality of studio work that presents itself as "in the manner of" or as playing with "variations on" a particular source should be evaluated by the individual faculty member in the context of a critique.

Incorporating ready-made materials into studio work as in a collage, synthesized photograph or paste-up is not plagiarism in the educational context. In the commercial world, however, such appropriation is prohibited by copyright laws and may result in legal consequences.

● 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 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. At that point I will review the letter with you and discuss these accommodations in relation to this course. Mr. Luchs' office is located in 79 Fifth Avenue, 5th floor. His direct line is (212) 229-5626 x3135. You may also access more information through the University's web site at http://www.newschool.edu/studentservices/disability/.