

## **Intro to Mobile Programming for Journalists**

J339T – Unique ID: 07736

Fall 2013

**Class Room:** BMC 3.208

**Instructor:** Jeff Linwood

**Office hours:** Can meet in person by appointment.

**Cellphone:** 512-569-0253

**Email:** jlinwood@gmail.com

**Personal Twitter Account:** @jefflinwood

**Teaching Assistants:** Shuning Lu, shuninglu@utexas.edu, and Seokho Lee, walangmada@gmail.com

### **COURSE DESCRIPTION**

This class is an introduction to programming and software development for Apple's iPhone and iPad devices for journalism students. The class will be taught with the Objective-C language, which is the standard programming language for iPhones and iPads. No knowledge of software development is required before the class.

Students will work together in teams to create an app from an existing multimedia project that they can use in their portfolio.

Students may use multimedia projects they have created in other classes, or (with permission), produce an application for another student's project.

### **OBJECTIVES**

Students who complete all of the work for this course will have a high quality iOS (the iPhone and iPad operating system) mobile application featuring a multimedia project that they may submit to Apple's App Store at the end of the class.

To that end, they will:

- \* Become familiar with Apple's XCode development environment on the Macintosh platform.
- \* Understand mobile user experience patterns, and apply them to their applications
- \* Write Objective-C code that interfaces with Apple's application programming interfaces (APIs) to power their iOS applications
- \* Learn how to create a user interface for an iOS application using Storyboard
- \* Present their work

## **STRUCTURE**

**The class schedule is available as a separate document.**

### **Student Teams**

Students will pair up into two-person teams during the first week of class. If there are an odd number of students, there will be a three-person team, rather than a solo student. Only Mac computers (laptop or desktop) are able to run Apple's software development tools, so ideally each team will have at least one member with their own Mac. Students will have access to lab computers with the development tools during class hours, and during any open lab hours for the classroom.

### **Multimedia Project Selection for the iOS Application**

The first assignment for the class will be to choose an multimedia project to present as a mobile application. This class will not require students to create a project, so students may use an existing piece from their portfolio.

If they do not have a suitable project, they may work with the instructor to find another journalism student who has an project they would like to be produced into a mobile application. Students should choose a multimedia project that has multimedia components such as photos, illustrations, sounds, or video. All multimedia projects will need to be approved by the instructor as suitable for a mobile application project.

Important information – students will not be graded on the contents of the project, so it is perfectly acceptable to reuse a multimedia project from a previous class.

### **Mobile Application Project**

Each team will be developing a mobile application throughout the entire course. There will be five assignments related to this project that will be based on the topics covered in class. Each assignment will build on the work done in previous assignments, so students will be cumulatively developing a portfolio-class mobile app.

The assignments are:

- \* Beginning User Interface Development with Storyboard (Assignment 2)
- \* Integrating Multimedia (Assignment 3)
- \* Maps and Locations (Assignment 4)
- \* User Interface Customization (Assignment 5)
- \* Porting the app to the iPad/Final Presentation (Assignment 6)

Each assignment will have a grading rubric that explains how the project will be evaluated. During the class that an assignment is due, each team will present their assignments to the rest of the class in a short demo session. Teams will also be required to submit the source code for each assignment to the instructor. Grading will be based on the demo and the source code.

## **Final Presentation**

The last class of the semester will be the final presentation, and also the due date for the iPad assignment. Because we will have seen pieces of each team's mobile application for the previous four assignments, students will have a chance to show off their complete mobile applications.

Assignment deadlines will be in the schedule document.

## **Communication**

One of the most important parts of software development is to learn by helping others. The class will have a private Facebook group that the instructor, teaching assistant, and the students will use for in-class communication. Useful resources, articles, and software development questions can be shared and discussed on the Facebook group.

## **ASSIGNMENT POLICY**

**Each of the five assignments that form the iOS project will be due before class starts on that Tuesday. Students should submit their source code before class starts, and be prepared to give a short demo of their projects to the class.**

### **Late work**

All assignments turned in after deadline (the start of class on Tuesday) will be marked down 10 percentage points for the first 24 hours after the due time and then 10 percentage points for every 24 hours after that.

## **Grade Components**

### **Project Selection: 10%**

---

---

Multimedia Project Selection: 10 % (Assignment 1)

### **Mobile Application Development (Source Code and Demos): 90%**

---

---

Beginning UI Development with Storyboard: 15% (Assignment 2)

Integrating Multimedia: 15% (Assignment 3)

Maps and Locations: 15% (Assignment 4)

UI Customization: 15% (Assignment 5)

Porting the app to the iPad/Final Presentation: 30% (Assignment 6)

### **Grade scale:**

<b>Grade</b>	<b>Percentage</b>
A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D	60-69

### **Attendance**

The class does not have a required attendance policy, however the open lab period at the end of each class is an excellent time to get help from the instructor or teaching assistants.

### **Contacting the instructor**

The best way to get ahold of the instructor is email at [jlinwood@gmail.com](mailto:jlinwood@gmail.com). If you have questions about programming, post your question on the Facebook group as well. Students are encouraged to help other students out with their software development questions.

### **Other important information**

\* Your grades and the submission of your evaluations will be handled through Blackboard.

\* University Honor Code: All students are expected to abide by the University of Texas Honor Code, which reads: “The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.”

\* Students with Disabilities Please notify your instructor of any modification/adaptation you may require to accommodate a disability-related need. You will be requested to provide documentation to the Dean of Student's Office in order that the most appropriate accommodations can be determined. Specialized services are available on campus through Services for Students with Disabilities. <http://www.utexas.edu/diversity/ddce/ssd/>

\*Policy on Scholastic Dishonesty: The University defines academic dishonesty as cheating, plagiarism, unauthorized collaboration, falsifying academic records, and any act designed to avoid participating honestly in the learning process. Scholastic dishonesty also includes, but is not limited to, providing false or misleading information to receive a

postponement or an extension on a test, quiz, or other assignment, and submission of essentially the same written assignment for two courses without the prior permission of the instructor. By accepting this syllabus, you have agreed to these guidelines and must adhere to them. Scholastic dishonesty damages both the student's learning experience and readiness for the future demands of a work-career. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University.

[http://deanofstudents.utexas.edu/sjs/acint\\_student.php](http://deanofstudents.utexas.edu/sjs/acint_student.php). For the University's official definition of scholastic dishonesty, see Section 11-802, Institutional Rules on Student Services and Activities.

<http://registrar.utexas.edu/catalogs/gi08-09/app/gi08.appc03.html#sec-11-802-scholastic-dishonesty19>

\* Campus emergency information

<http://www.utexas.edu/safety/terms/>