

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

J339T – Unique ID: 08015

J395 - Unique ID: 08240

Fall 2014

**Class Room:** BMC 3.208

**Instructor:** Jeff Linwood

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

**Email:** jlinwood@gmail.com

**Personal Twitter Account:** @jefflinwood

### **COURSE DESCRIPTION**

This class is an introduction to user interface design, programming and software development for Apple's iPhone and iPad devices for journalism students. The class will be taught with the Swift language, which is a beginner-friendly programming language for iPhones and iPads from Apple. No knowledge of software development is required before the class.

Students will work together in teams to create an app throughout the course of the semester.

### **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 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 Swift 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.

### **Existing Mobile Application Review**

The first assignment for the class will be to explore existing mobile applications in the field of journalism and review them for usability and functionality. This assignment will be in the form of a short paper.

### **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)
- \* Users and Data Storage with Parse (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.

### **Graduate Students Only**

In addition to the above coursework (shared with the undergraduate section), graduate students in the class will be required to submit a short essay (1,500 - 2,500 words) about privacy concerns with mobile applications for users. This assignment will be due by the last day of class.

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) 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%**

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Multimedia Project Selection: 10 % (Assignment 1)

#### **Mobile Application Development (Source Code and Demos): (90% undergraduates, 80% graduate students)**

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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%, undergraduates, 20% graduate students) (Assignment 6)

#### **Graduate Students Only: Essay 10%**

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Essay: 10 % (Assignment 7)

### **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/>