Syllabus

Course Title: Introduction to iOS Mobile Development: Layout, Touch & Gestures, Storyboards & Segues, and iPad & Universal Apps	**Course Number** (If applicable): ITSE1370AB

COURSE DESCRIPTION: This is the second of a series of three courses that explores developing applications for iOS based devices such as iPhone, iPod Touch and iPad. Course will provide an overview of iOS development from use of current iOS SDK, to design of applications and industry business practices. Prior programming experience in either C or an Object-Oriented Programming language is required for this course.

Note: There is a "Final Exam" to assess student learning across the three courses (ITSE1370AA, ITSE1370AB, ITSE1370AC) occurs at the end of the series of courses which makes up Lesson 6 in ITSE1370AC.

PREREQUISITES: ITSE1370AA Introduction to iOS Mobile Development: Overview, iTunes, Xcode, Objective-C, and Cocoa

REQUIRED MATERIALS: Mac with OS (Lion or Mountain Lion) capable of running Xcode.

ADDITIONAL RESOURCES (if applicable):

LEARNING OUTCOMES/COMPETENCIES:
1.0 Create basic template-based iOS applications using current iOS SDK.
2.0 Create user interfaces for the iPhone/iPod Touch and iPad that follow Apple Human Interface Guidelines.
3.0 Create multi-view applications using storyboards.
4.0 Describe development cycle and approval process for iOS applications.
5.0 Evaluate iOS applications from the iTunes App Store.

COURSE ASSESSMENT:

Grading Scale

Category	Points
Quizzes	28
Practices	30
Final Grade	**58**

Percentage	Grade
90-100	A
80-99	B
70-79	C

60-69	D	
Below 60	F	

COURSE SCHEDULE:

Lesson	Lesson Title & description	Learning Outcomes	Assignment
1.	Views and Auto Layout	1. Explain why view hierarchy is important. 2. Differentiate between a parent (superview) and a child (subview). 3. Determine where a view goes in the view hierarchy. 4. Define first responder. 5. Define the role of the responder chain. 6. Determine if a UI element was able to trigger actions. 7. Define the following terms: auto layout, constraint. 8. Explain adding an icon to a project. 9. Explain creating constraints between parent and child views. 10. Explain creating constraints between two views in same level of view hierarchy.	Quiz 1
2.	Touches and Gestures	1. Differentiate between gestures, touches and taps. 2. Define gesture recognizer, event and responder chain. 3. Classify the category to which taps, touches, swipes, and pans belong. 4. Identify the different methods used in multi-touch architecture. 5. Match each gesture recognizer with its corresponding gesture.	Practice - Pic a Picture Quiz 2
3.	Storyboards and Segues	1. Define: xib file, Interface Builder, storyboard, segue, and transition effect. 2. Compare the use of xib files to the use of storyboards in iOS applications. 3. Identify how a transition effect is added on a series of storyboard views using Interface Builder. 4. Identify how a storyboard view is set as the first scene in an app. 5. Create an application that uses storyboards with multiple scenes and uses transition effects between scenes.	Practice— Storyboards Quiz 3
4.	iPad and Universal Apps	1. Identify the hardware differences between versions of iPad. 2. Identify UI elements available when creating iPad applications including split view controller, modal and popups.	Practice—Web Lookup Quiz 4

| | | 3. Differentiate universal app, iPad app, and iPhone app design differences.
4. Explain the steps in setting up a universal app.
5. Identify advantages of creating a universal app.
6. Identify disadvantages of creating a universal app.
7. Explain the file naming conventions used to recognize retina versus non-retina images.
8. Identify the file type preferred by iOS devices for image and icon files. | |