

Course Alignment Matrix

Originating College: Collin College

Course Title: Introduction to iOS Mobile Development: Layout, Touch & Gestures, Storyboards & Segues, and iPad & Universal Apps

Course Number: ITSE1370AB

Recommended Text/Materials: Mac with OS (Lion or Mountain Lion) capable of running XCode

Competencies (these can be from the institution, national standards, industry standards, etc.)	Lesson(s)/Modules presented & assessed	Associated Open Resources & Development Ideas (Optional - this column is helpful when the document is used as a course design worksheet for new development)
1.0 Create basic template-based iOS applications using current iOS SDK.	1, 3, 4	
2.0 Create user interfaces for the iPhone/iPod Touch and iPad that follow Apple Human Interface Guidelines.	1, 2, 4	
3.0 Create multi-view applications using storyboards.	3, 4	
7.0 Knowledge of iPhone and iPad development environment	4	
9.0 Prioritize and handle multiple tasks	2, 3, 4	
10.0 Excellent analytical and creative problem-solving skills	2, 3, 4	
11.0 Work independently on assigned tasks	2, 3, 4	
13.0 Design a user interface	4	



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Lesson/ Module	Topics	Lesson Objectives	Assessment & Points	Competencies/Learning Outcomes
1	Views and Auto Layout	<ol style="list-style-type: none"> 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 6 (10 pts)	1.0, 2.0
2	Touches and Gestures	<ol style="list-style-type: none"> 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 (10 pts) Quiz 7 (8 pts)	2.0, 9.0, 10.0, 11.0



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3	Storyboards and Segues	<ol style="list-style-type: none"> 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 (10 pts) Quiz 8 (5 pts)	1.0, 3.0, 9.0, 10.0, 11.0
4	iPad and Universal Apps	<ol style="list-style-type: none"> 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. 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. 	Practice—Web Lookup (10 pts) Quiz 9 (5 pts)	1.0, 2.0, 3.0, 7.0, 9.0, 10.0, 11.13.0



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