Course Number: K910

Course Name: Introduction to iPhone and iPad Apps

Course Clock Hours: 120 Clock Hours

Course Prerequisites: K900

Course Co-requisites: None

Course Contact Information: www.cie-wc.edu faculty@cie-wc.edu
http://cie-wc.edu/Student-services-policies.aspx 1-800-243-6446 (216) 781-9400 (216) 781-0331 (fax)

Course Description: This course sequentially builds on topics that include using shortcuts and cheat sheets to create apps professionally, using iPhone's touch screen and accelerometer, and getting your computer set up for iPhone and iPad iOS 5 application developments. As the student moves through the course, they will gain a working understanding of the basic tools used for programming because of the repetitive practices. The student will become accustomed with creating iPad apps and learning how to make iPhone apps easy and practical.

Course Objectives: Upon the completion of this course the student will be able to:
- Setup for iPhone and iPad application development
- Learn to style applications for appearance and ease of navigation
- Use the iPhone’s touch screen and accelerometer
- Utilize shortcuts and cheat sheets to reduce application development time
- Gain a more developed understanding of the basic tools of programming

Course Readings: The required readings will be drawn from a textbook published by Apress. The author is Dr. Rory Lewis. The title of the textbook is iPhone and iPad Apps for Absolute Beginners, iOS 5 Edition (ISBN 9781430236023). Students should complete the required readings and solve all problems in the exercise sections before continuing to the next topic.

Student Evaluation, Grading and Assessment: Each of the ten lessons concludes with an examination; all examinations are open book. The examinations consist of multiple-choice questions (MCQs) that measure cognitive learning levels. The minimum passing score of 70% must be achieved but if the score is less than 70%, the examination must be retaken to earn a passing score of 70% for the lesson. The ten examination scores are averaged together and constitute the course grade.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
<th>Ten Examinations</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>93% - 100%</td>
<td>A</td>
<td></td>
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<tr>
<td>86% - 92.9%</td>
<td>B</td>
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<tr>
<td>78% - 85.9%</td>
<td>C</td>
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<tr>
<td>70% - 77.9%</td>
<td>D</td>
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**Course Schedule:** You should complete the following lessons in the order shown in the table. It is best to complete 1-2 lessons per week to maintain your schedule.

<table>
<thead>
<tr>
<th>Lesson Number</th>
<th>Title of Lesson</th>
<th>Topics Covered</th>
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</thead>
</table>
| 9031C         | Getting Started                                      | • Introduce the procedures to register as a developer  
• Discuss the hardware and software necessary for iOS development  
• Cover the basic building blocks and path for iOS application development |
| 9032C         | Blast Off                                           | • Setup the various iOS device emulators  
• Run the application on both simulated and actual devices |
| 9033C         | Keep On Trucking                                    | • Continue building the previously developed application into an interactive app  
• Create a user interface  
• Explore further the concept of methods |
| 9034C         | Buttons and Labels                                  | • Introduces process and procedures for Buttons and Labels  
• Introduces Pointers and Properties  
• Add actions to buttons |
| 9035C         | Touches                                              | • Insert images onto the View frame  
• Write code for controlling the image size  
• Work with background image |
| 9036C         | Switches                                             | • Introduce model for tabbed application  
• Cover modes or aspect fit versus aspect fill  
• Explore the difference between compile-time and runtime |
| 9037C         | Storyboards                                          | • Introduce concept development through use of storyboards  
• Work with segue for transitions  
• Establish and evolve View Controller content |
| 9038C         | Debugging                                            | • Introduce and explore debugging tools  
• Write application with incorrect code  
• Crash the application to experience best procedures for debugging |
| 9039C         | Mapkit and Storyboarding                            | • Expand storyboarding through the introduction of MapKit  
• Manage the memory usage of storyboard objects  
• Parsing information from MapKit to the application |
| 9040C         | Mapkit and Tables & Storyboarding to Multimedia Platforms | • Continue expansion of storyboard through the use of MapKit  
• Add tables to the ViewController  
• Add multimedia to the storyboard and the application  
• Finalizing the application for general use |