

**ACTIVE COURSE FILE**

\*Curricular Area: COMPUTER INFORMATION  
SYSTEMS

Course Number: 2840

Course Title: iPhone/iPod Application Development

Semester Credit Hours: 4

Clinical Hours: 0

Lecture Hours: 4

Lab Hours: 0

Course description to appear in catalog:

Introduces iPhone/iPod Application Programming environment and use of Apple's Software Development Kit to develop and deploy applications on iPhone/iPod. Overview of Objective C, Cocoa Touch, User Interface framework, and use of various API's to build applications. Students will leave this class with knowledge to write simple iPhone/iPod applications.

Repeatable for credit: Yes

Pre-Enrollment Criteria:

Prerequisite: CIS 2541 C++ Language Programming or consent of instructor

A. General Course Objectives:

**Upon successful completion of the course the student should be able to do the following:**

1. Explain the process of compiling and executing Objective C language programs
2. Describe Objective C language data types, operators, expressions, and flow control structures
3. Demonstrate the use of Objective C functions, arrays, strings, and classes
4. Apply the Cocoa and Cocoa Touch frameworks that form the development layer for the Macintosh operating system
5. Use Xcode, an Integrated Development Environment, to develop, test, and debug applications
6. Design and deploy simple applications on the iPhone/iPod
7. Describe the standards used for iPhone/iPod application GUI design
8. Describe the program interface with the address book, audio, and video features in the iPhone/iPod
9. Explain issues surrounding wireless network security
10. Apply 3D graphic capabilities built into newer generations of iPod/iPhone

B. Topical Outline:

1. Introduction to Apple's software development environment
2. Introduction to Objective C and review of Object Oriented principles
3. Overview and use of User Interface Framework
4. Development of images in iPod/iPhone
5. Wi-Fi/network detection and Wi-Fi usage on iPod/iPhone
6. Audio/Video API usage, record/edit audio/video, control audio interruptions
7. Use of notification APIs
8. Core location and mapping on iPhone/ipod
9. Accelerometer API and usage
10. Address book API and usage
11. Multitasking on iPhone

C. Methods of Evaluating Students:

1. Methods of evaluation may include one or more of the following: programming assignments, major project, participation, exams, and attendance.

MARY ANN ZLOTOW      05-19-2010  
Initiator                      Date

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Division Dean                      Date

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Sponsor                      Date