Master Course Syllabus ROCK VALLEY COLLEGE

Computers & Information Systems Division CIS Department

CIS 280

Programming iOS Apple Mobile Devices

PCS Code - 1.2

IAI -None

COURSE DESCRIPTION

Prerequisite: CIS 180 or CIS 276

Introduces programming simple iOS mobile device applications using Cocoa and Objective C. Students will learn basic Objective C concepts, iPad programming basics, and use the SDK environment on Apple Macintosh computers with OS X as a development platform. Design concepts and programming tools will be integrated with an emphasis on developing and deploying iPad applications.

Credits:	4	Lecture:	3	Lab: 2	

Method(s) of Delivery (mark all that apply): Face to Face__X_ Online__X_ Hybrid____

STUDENT LEARNING OUTCOMES

	Communicate effectively.
	Integrate technology into all fields of knowledge and expression.
X	Demonstrate competency in critical thinking.
	Respect and work effectively with persons of diverse backgrounds and abilities.
	Demonstrate the behaviors of ethical and socially responsible citizens.
	Demonstrate personal wellness.

This course addresses the following student learning outcome(s). The student will be able to:

COURSE OBJECTIVES

Upon successful completion of this course, the student will be able to:

- 1. Use Objective-C Programming Language, including its basic syntax and use in iPad OS app development.
- 2. Use a Macintosh computer with Mac OS 10.6 or greater with the Xcode development environment.
- 3. Create applications that run iOS on Apple mobile devices.
- 4. Customize a user interface (UI) using the Cocoa Touch class library.

5. Construct UI with components such as T Views, Navigation Controllers, Tab Views, buttons, labels, and text fields.

COURSE TOPIC OUTLINE

Topics to be covered may include some or all of the following:

- 1. Getting Started with iOS 5 Programming
- 2. Writing Your First Hello World! Application
- 3. Understanding Views, Outlets, and Actions
- 4. Exploring the Different View Controllers
- 5. Enabling Multi-Platform Support for the iPhone and iPad
- 6. Handling Keyboard Inputs
- 7. Supporting Screen Rotations
- 8. Displaying and Persisting Data Using the Table View
- 9. Using Application Preferences
- 10. File Handling
- 11. Database Storage Using SQLite
- 12. Programming iCloud
- 13. Performing Simple Animations and Video Playback
- 14. Accessing Built-In Applications
- 15. Accessing the Sensors
- 16. Package and Deploying to Apple App Store

METHOD(S) OF STUDENT ASSESSMENT

Student assessment methods may include some or all of the following:

- 1. Quizzes and tests (objective and hands-on)
- 2. Computer assignments
- 3. Demonstration
- 4. Class participation
- 5. Small group exercises
- 6. Discussion

REQUIRED READINGS AND SUPPLIES

Beginning iOS 5 Application Development, Wrox Press; ISBN: 978-1-1181-4425-1 or most recent edition Mac Computer (OS X v10.6.8 or later)

iPad 3

Flash drive or other portable storage device

RECOMMENDED READINGS AND SUPPLIES

DATE SUBMITTED

September 27, 2012

REVIEW DATES

September 27, 2012