Course Objectives/Course Outline
Spokane Community College

Course Title: Mobile Development III
Prefix and Course Number: CIS 219

Course Learning Outcomes:
By the end of this course, a student should be able to:

This course presents advanced concepts of creating Mobile Websites through the use of either Android Operating System Development and the Java Language or iPhone/iPad through the Objective-C language. In addition, the building of mobile application aware websites through standard Application Programming Interfaces (API) will be presented.

- Use advanced language coding techniques in Java or Objective-C.
- Utilize HTML5 and CSS3 for developing standards based website applications that are interactive with smartphone/tablets based applications
- Using TCP/IP to send/receive data to cloud applications
- Receiving data feeds from remote cloud based services
- Build advanced smartphone/tablet applications that utilize the native interface

Course Outline:
I. Introduction to TCP/IP Networking connections
    A. Setting up connections from the smart device to a remote service
    B. Reading and writing XML / JSON data streams
    C. Error checking and connection through WIFI and Phone networks
II. Creating a Web Service for use with mobile apps
    A. Establishing Web Based API's
    B. REST Standard API's
    C. Sending and Receiving JSON data packages
    D. Sending and Receiving XML data packages
III. Utilizing Existing Cloud-based API's
    A. Obtaining API keys
    B. Installing required libraries
    C. Connecting to services
    D. Reading the API documentation
    E. Utilizing the data in native applications.