Course Objectives/Course Outline
Spokane Community College

Course Title: Mobile V-IOS 2
Prefix and Course Number: CIS 222

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

- Develop applications that utilize native iOS device sensors and capabilities
- Create an application that uses appropriate Internet protocols to send and receive information using an external website
- Create websites that implement an API useful for mobile device applications
- Utilize existing cloud based services from an iOS application

Course Outline:

I. Creating applications that use large format images and mapping information
II. Utilizing Device Sensors in Native Applications
    A. Using Location Services in iOS
    B. Mapping Services in iOS

III. Introduction to TCP/IP Networking connections for iOS
    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

IV. Creating a Web Service for use with iOS 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

V. 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.
    F. Sending and Receiving information
    G. Developing an interactive 2 person application using Cloud server API