

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: ITP 226

Credits: 4

Course Title: Mobile Java Android Development

Course Description:

Provides the necessary design and programming skills required for developing applications on mobile devices (smartphones, tablets, etc.), utilizing the Java-based Android Development Kit to create Android applications from concept to business model to final product. Prerequisite: ITP 120 (Java) or another object-oriented programming language. Lecture 4 hours per week.

General Course Purpose:

This course serves as an elective for the Information Technology Systems AAS degree.

Course Prerequisites/Corequisites:

Prerequisite: ITP 120 (Java) or another object-oriented programming language

Course Objectives:

Upon successfully completing the course, the student will be able to

1. Apply the syntax of the Java Android language.
2. Explain object-oriented programming concepts.
3. Develop programs for mobile Java platforms using a Java IDE.
4. Recognize the core frameworks needed in Android applications.
5. Translate the Java Android documentation.
6. Utilize the APIs, patterns, and widgets for developing applications.
7. Design effective user interfaces for mobile devices.
8. Design, develop, and deploy a mobile application.

Major Topics to be Included

1. Introduction to Android OS
2. The Android Activity Lifecycle
3. How to Develop Android Applications Using Freely Available Tools
4. Survey of the Android Activities, Views, and Widgets
5. Using SQLite to Persist Application Data
6. Development of a Fully Functional Android Application of Your Own Design

Effective Date of Course Content Summary: January 1, 2014