

COURSE NUMBER: CSC1285 CREDITS: 3

COURSE TITLE: PREREQUISITES: CSCI 125

INTRODUCTION TO ANDROID MOBILE APP DEVELOPMENT

Weekly Hours: 3 Lecture: 1.5 Lab: 1.5 Total Hours: 3 Total Weeks: 13

COURSE DESCRIPTION: This practical course introduces Android application development for mobile devices. It is designed for students with a solid background in object-oriented programming in Java. Students will learn the fundamental concepts and terminology of Android application development and acquire skills to develop, debug and deploy mobile apps. They will be equipped with an understanding of version control systems and will get to know useful online resources for Android development that will empower them to expand their basic skills.

TEXTBOOK: no textbook.

LEARNING OUTCOMES:

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

- Explain the components of the Android platform.
- Use Android Studio as an IDE for Android app development.
- Design a responsive user interface for an Android app using material design principles.
- Develop interactive mobile apps.
- Use logging and the debugger for program development.
- Build an app with multiple activities.
- Create an Android project using persistent data.
- Develop an app with animations.
- Create services for background processing.
- Deploy an app to the Google Play Store.
- Use a version control system for software development.
- Expand their skills by researching adequate online resources.



COURSE CONTENT:

Week Topic

Week 1 The Android world

Android Studio

Week 2 Components of an Android app

Week 3 User interface design, XML

Week 4 Interactive apps

Debugging, logging

Week 5 Activities, intents

Week 6 Midterm Exam

Introduction to version control

Week 7 App bar, action bar

Week 8 List View, adapters, spinner

Week 9 Fragments, fragment life cycle

Week 10 Persistent data

Week 11 Animation

Week 12 Services

Week 13 Publishing an app

EVALUATION:

Participation 20%

(assignments and attendance)

3 Projects 20%

Midterm Exam 25%

Final Exam 35%

Total 100%

Coquitlam College Revised: July 2018



PLAGARISM, ACADEMIC HONESTY, AND EXAMS:

Students must hand in their own work in class assignments and projects. Passing on someone else's ideas, writings, or programs as one's own solutions in assignments, without citing the original source, is considered as plagiarism and as academic dishonesty. Those submissions will be marked as 0%.

Submissions of students who shared their work with other students (unless on team projects) will also be marked as 0%.

If a student misses an exam, a mark of 0% will be assigned unless there are extenuating circumstances. In such cases, the proportion of the grade assigned to the missed exam will be added to the proportion assigned to the final exam. The final exam will be held during the exam week. No consideration, except medical conditions, will be given to any student wishing to write the exam at any other time than the assigned one.

It is a student's responsibility to know and follow the college's policies regarding cheating on exams as outlined in the <u>student handbook</u>.

Unauthorized electronic devices such as calculators, smart phones, or smart watches are not allowed during exams according to the college's policy. A student who has an unauthorized electronic device on their person or around their desk is considered guilty of cheating and an "F" grade might be given for entire course.