LAU
School of Arts and Sciences

Department of Computer Science & Mathematics

Course Name:	CSC 498X – Topics in CSC: Mobile Development
Class Time and Location	MWF 3:00 – 3:50 Online
Instructor	Charbel Daoud
Course Coordinator	
Course Co-coordinator	
Credits Hours:	3
Semester:	Fall 2020-2021

INSTRUCTOR

Email: charbel.daoud@lau.edu.lb
Office Hours: TR 08:00 – 10:00 (or by appointment)

CURRENT CATALOG DESCRIPTION

Today's applications are increasingly mobile. Computers are no longer confined to desks and laps but instead live in our pockets and hands. This course focuses on the development of advanced mobile applications using Android Platform. Students will learn the necessary skills for creating, simulating and deploying Android applications. The topics include: Android platform installation, user interfaces, data persistency, geo-locations, media handling, networking, services and deployment.

PREREQUISITE/CO-REQUISITE

Prerequisites: CSC245 – Objects and Data Abstraction

COURSE TYPE

Required ☒ **E**lective ☐ **S**elective **E**lective ☐

COURSE LEARNING OUTCOMES

At the completion of this course, the student will able to:
- Learn different programming technologies and techniques as applied to the development of mobile-based applications.
- Acquire practical skills in the development of software applications for mobile devices.
- Utilize emerging protocols, standards, technologies and tools in mobile application development.
- Examine and subdivide app functionality into properly designed components
- Plan, prepare and build an original Android app, from concept to working program
- Learn how to upload your App to Google Play Store.

TEXTBOOK

D. Griffiths and D. Griffiths, Head First Android Development 2nd Edition, O'Reilly Media, Inc., 2017

TOPICS COVERED IN THE COURSE

Week	Lecture / Activity	Notes
1	Setting up your laptop for Android Development	
2	Android Development: Getting Started	
3	Building First Android Interactive Apps	
4	Activities and Intents	
5	Activity Life-cycle	
6	User Interface & List Views and Adapters	
7	Fragments & Nested Fragments	
8	Action Bars & Navigation Drawers	
9	SQLite Database	

10	Cursors and AsyncTasks	
11	Services & Material Design	
12	Other technologies - Unity 3D, etc.	
13	Other technologies - iOS Development	
14	Other technologies – Flutter, etc.	

TEACHING/LEARNING METHOD

Lectures, hands-on-application in class, labs, project development individually and by student teams.

REFERENCES

K. Marsicano and C. Stewart, Android Programming: The Big Nerd Ranch Guide (3rd Edition)
https://www.bignerdranch.com/books/android-programming-the-big-nerd-ranch-guide/

B. Phillips, C. Stewart, K. Marsicano, B. Gardner, Android Programming: The Big Nerd Ranch Guide (4th Edition)
https://nerdranchighq.wpengine.com/books/android-programming-the-big-nerd-ranch-guide-4th/

COURSE GRADING AND PERFORMANCE CRITERIA (SUBJECT TO 5% VARIATION)

- Assignments   25%
- Project 1   20%
- Written exam   25%
- Final Project   30%

STUDENT CODE OF CONDUCT - ACADEMIC VIOLATIONS

The following table defines the sanction(s) associated with each violation. In some cases and when the violation is too general, a range of sanctions is set for the pertinent committee to choose from depending on the specifics of each case. As for the second offense, the set sanctions apply regardless whether the violation has taken place in the same course or a different one, within the same semester or not.

Code #	Violation	First Offense	Second Offense
Cheating			
2.2.1	Using material or equipment (including mobile phones, electronic tablets, i-pads, calculators, and other devices) that is not authorized by the instructor in an examination, project, or graded assignment	zero on the deliverable with a warning	F on the course with a warning
2.2.2	Cheating, copying, collaborating with or aiding another Student in a manner not permitted by the instructor on an examination, project, or other graded assignment	zero on the deliverable with a warning	suspension
2.2.3	Distributing or aiding in the distribution of previous exams without authorization of the instructor	double warning – suspension	suspension – expulsion
2.2.4	Stealing, reproducing, or circulating an examination or other graded assignment before it has been administered	suspension	expulsion
2.2.5	Impersonating another Student or allowing another Student to impersonate one's self during an examination, presentation, or other graded assignment	suspension for both	expulsion
2.2.6	Impersonating an assistant, staff member, or faculty member for the purpose of (a) proctoring examinations without authorization or permission or (b) obtaining confidential information regarding coursework or examinations	suspension – expulsion	expulsion

Code #	Violation	First Offense	Second Offense
2.2.7	Receiving, purchasing or selling a project, paper, or any academic document and presenting it as work other than that of the author	suspension – expulsion	expulsion
2.2.8	Submitting identical papers or coursework for credit in more than one class without the permission of the instructor	zero on the deliverable with a warning	F on the course with a warning
Plagiarism and Copyright Violations			
2.2.9	Failing to attribute language or ideas to their original source by not crediting the original author with an appropriate acknowledgement or citation	zero on the deliverable with a warning	F on the course with a warning
2.2.10	Using photocopied or electronic copies of textbooks, compact disks, films, music, online course materials, and other content beyond the fair use policy within University Premises	warning	double warning
2.2.11	Using copyrighted materials, including in written research reports and papers, without obtaining required permission, if any, from the rights holder	warning	double warning
Unauthorized Sale, Distribution, or Use of Course Materials			
2.2.12	Recording any lecture or presentation for personal use or public distribution without the prior consent of the course instructor. This applies to the unauthorized use of any medium including but not limited to mobile phones, electronic tablets, i-pads recorders, films, and other devices	warning	double warning
2.2.13	Selling academic materials by any Student, club, or group. This includes but is not limited to lectures, course recordings, class notes, and previous exams	warning	double warning

UNIVERSITY ATTENDANCE POLICY

Missing one third of classes implies that a student has to drop the course (It is the student's responsibility to drop the course).

WITHDRAWAL POLICY

- WI is equivalent to Early Withdrawal
- WP is equivalent to Withdrawal/Pass
- WF is equivalent to Withdrawal/Fail

1. A student who withdraws after the Drop/Add period and by the end of the 5th week of classes (10th day of classes for Summer Modules) will obtain a "WI" on that particular course.

The student may process such request directly through the Registrar's Office.

2. A student who withdraws from a course between the 6th week and the end of the 10th week of classes (18th day of classes for Summer Modules) will receive either a "WP" or a "WF". "WP" or "WF" will be determined by the instructor based on the achieved academic performance in that course till the time of withdrawal.

3. The "WI" and the "WP" will not count as a Repeat; whereas the "WF" will count as a Repeat.

4. "WI", "WP" and "WF" will not count towards the GPA calculation.

Deadline for the "WP" and "WF" withdrawal from courses: check university calendar (It is the student's responsibility to drop the course)
http://www.lau.edu.lb/academics/calendar

COURSE ONLINE EVALUATIONS

In order to improve the effectiveness of the educational process, all students are expected to submit their course evaluations by the last day of classes.

Students who fail to complete the evaluation of ALL registered courses by the set deadline:
1. will not be able to access their course grades from Banner or Portal until two weeks after the end of the final exams period; and
2. will not be able to request transcripts.

The anonymity of the process and the students will be maintained at all times.

TIPS FOR SUCCESS

Apply what you learn on time. Do NOT copy and paste code. Ensure that you become familiar with all the tools, techniques and concepts taught. Try to experiment with the new concepts. Always feel free to contact the instructor for further explanation or guidance.

ADDITIONAL REMARKS

Mobile development is constantly evolving. It is vital that you keep this in mind when you look up information from older textbooks or websites.

RELATIONSHIP BETWEEN COURSE OUTCOMES AND PROGRAM OUTCOMES

By the end of the course, the student will be able to develop an Android app; moreover, he/she will have the necessary skills and knowledge as to where to seek information about new tools and libraries.

ASSESSMENT PLAN FOR THE COURSE

Embedded (project assignments and exams)