

 Lebanese American University	COE	593
School of Engineering	COE Application (required)	3 credits
Department of Electrical and Computer Engineering	TTh 12:30 PM – 1:45 PM	ELRC 6101
Course syllabus	Dr. Wissam F. Fawaz	Fall 2019

1. Course Description and Course Prerequisite

This course allows COE/ELE graduates to acquire the technical skills that are required to match a specific industry-related need. In particular, it exposes students to the techniques, which can improve their chances of gaining employment in jobs aligned with the considered need. This exposure is reinforced by an extensive hands-on experience that is brought into classroom through small-scale projects pertaining to problems inspired from the identified need. This year, the COE application course will dig into mobile device programming. More specifically, the main emphasis will be placed on the development of mobile applications targeting the Android mobile platform.

Course prerequisites: Fourth Year standing

2. Course Objectives

At the conclusion of the course, students will be able to:

- Understand the structure of an Android application.
- Develop applications catering for real-life needs.
- Gain a breadth of knowledge for developing applications with Android SDK
- Build applications for Android phones using the Java programming language.
- Deploy applications to the Android Market.

3. Contribution of course to meeting the professional component

Professional Component	Credits
Mathematics and Basic Sciences	0
Engineering Topic	3
General Education	0

4. Relationship of course to student outcomes

SO (1): *An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics*

5. Course Outline

- File Management
- Event-driven Programming
- Android User Controls
- Activities and Intents
- Data Persistence
- Location-based Services
- Networking

6. Required tools / software / skills

Java Development Kit (JDK), Eclipse and Android Studio.

7. Textbook[s]

Android How to Program with an Introduction to Java, by Paul and Harvey Deitel, 3rd edition, Pearson, 2016.

8. Additional References

Wei-Meng Lee, *Beginning Android 4 Application Development*, John Wiley & Sons, 2012.
 Reto Meier, *Professional Android 4 Application Development*, John Wiley & Sons, 2012.

9. Schedule of Exams & Grading Percentage

Quizzes/projects:	25%
Midterm Exam:	35%
Final:	40%

10. Course Policies

Cheating is considered to be a very serious breach of the cheating policy of the faculty and will not be tolerated. Students are expected to submit their own solutions to all programming projects. Solutions must be handed in at the beginning of the class in which they are due. Late submissions will not be accepted.

11. General Comments

Instructor: Dr. Wissam FAWAZ Email: wissam.fawaz@lau.edu.lb
 Office: 103, Bassil Bldg, ext: 2414
 Office Hours: TTh from 08:00 am – 09:30 am & 11:00 am – 12:30 pm
 and W from 10:00 am – 12:00 pm
 Course webpage: http://www.wissamfawaz.com/coe_application.htm

12. General Rules & Regulations

- A student can miss no more than the equivalent of 2 weeks of instruction. Students who exceed the allowed number of absences must withdraw from the course; otherwise, the course grade will be recorded as "F".
- Plagiarism: students caught cheating on an exam receive a grade of Zero on the exam in the first cheating attempt and a warning. Students caught cheating for the second time in the same course receive an F grade in the course and a second warning. A grade of zero on an exam resulting from cheating must be counted in the student's course grade. The zero cannot be dropped in computing the final grade in case the instructor has a policy of allowing students to drop their worst exam grade.
- Any student who receives three warnings will be suspended.
- 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:
 - 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
 - will not be able to request transcripts.
 The anonymity of the process and the students will be maintained at all times.

13. Person(s) who prepared this description and date of preparation

Dr. Wissam Fawaz prepared this syllabus in August 2019.