KENNESAW STATE UNIVERSITY

SYLLABUS
COLLEGE OF COMPUTING AND SOFTWARE ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE
CS 4322/02: MOBILE SOFTWARE DEVELOPMENT
ACADEMIC TERM: SPRING 2023

Course Information

Class meeting time: T/R 12:30pm -1:45pm
Location: Atrium Building 215B

Instructor Information

Name: Lingyan Wang
Email: lwang40@kennesaw.edu
Office Location: Atrium Building Room J-305 (Marietta Campus)
Office Hours: 9:30am-10:30am(TTR)or by appointment.
Preferred method of communication: email via D2L.

Course Description

Catalog Description:

Coverage of software development for the Android Mobile Application Platform. Topics include UI Design for Mobile Apps, Resource Management for Mobile Apps, and Deployment of Mobile Apps.

Prerequisites: CS3410 and CS4306

Credit Hours: 3-0-3

Course Materials

Required Texts: None

Reference Web Resources:
1) https://developer.android.com/courses/android-development-with-kotlin/course?utm_source=dac&utm_medium=website&utm_campaign=edu
2) https://developer.android.com/courses/android-basics-kotlin/course

Learning Outcomes

After successful completion of this course, a student will be able to:

1. Use Android Development Environment and Platforms
2. Design a user interface for a mobile device
3. Use Android Development Libraries to develop mobile apps
4. Test mobile apps

Course Requirements and Assignments

Homework, quizzes, and exams will be given numerical scores. These scores will be averaged at the end of the semester using the following weighting:

Assignment	Points, percentage or measurement
Lab Assignments	**35%**
Exams/Quizzes	**25%**
Project	**35%**
Participation	**5%**

Homework Submission: Copying or paraphrasing codes from other sources or other students will be considered a violation of the Student Code of Conduct. Due dates for homework assignments will be specified on the homework themselves. **No late submission is accepted.**

Lab Assignment Submission: each lab assignment is required to be accomplished in the corresponding lab session. **No late submission is accepted.**

Evaluation and Grading Policies

All assignments will be given numerical scores and collected through Desire2Learn. Letter grades will be determined by ranking the numerical averages of all students in the class. Cut-off points for grades will depend on the performance of the class as a whole; however, they will be no higher than 90 (A), 80 (B), 70 (C), and 60 (D).

Grading Scale:	
A	90% - 100%
B	89% - 80%
C	79% - 70%
D	69% - 60%
F	59% or below

I will round up grades if they are > or = .5 or above, for example, an 89.6 is an A, but 79.2 is a C.

Course Policies

Feedback in a Timely Manner: The instructor will ONLY reply to e-mails that are sent using D2L email system. Please allow your instructor 24-48 hours before replying back to your email.

Attendance Policy: Regular attendance is expected; please notify me in advance if you will be unable to attend because of business travel or other valid reason. If a student misses 2 or more than 2 classes, the student's final grade may be decreased.

Homework Submission: Copying or paraphrasing codes from other sources or other students will be considered a violation of the Student Code of Conduct. Due dates for homework assignments will be specified on the homework themselves. **No late submission is accepted.**

Quiz/Exam Policy: In most cases, quizzes will be administered during the first 10-20 minutes of class. Students who are late to class on a day when a quiz is administered will not be given extra time to complete the quiz. Makeup quizzes/exams **WILL NOT** be given without provable evideance.

Electronic Devices and Classroom Behavior Policy: In order to minimize the level of distraction, all beepers and cellular phones must be on quiet mode during class meeting times. Students who wish to use a computer/PDA for note taking need prior approval of the instructor since key clicks and other noises can distract other students. Recording of lectures by any method requires prior approval of the instructor. Students using a laptop in class should not check their email, browse the web, or in other way detract from the focus of the class.

Students are reminded to conduct themselves in accordance with the Student Code of Conduct (KSU Student Code of Conduct, Section III), as published in the Undergraduate and Graduate Catalogs. Every KSU student is responsible for upholding the provision. Students who are in violation of KSU policy will be asked to leave the classroom and may be subject to disciplinary action by the University.

Tutoring: The College of Computing and Software Engineering offers some tutoring services for certain courses. If this applies to your course, you may want to include this resource for your students. Tutoring info can be found here: http://ccse.kennesaw.edu/ccselabs/ccse-tutoring.php.

Faculty Conversations:
In preparation for the conversations with CS faculty about the research process/method, students must complete assigned background reading. There will articles or book chapters assigned per class. In addition to the assigned articles or chapters, students should review the background information on the professor.

Withdrawal Policy

The last day to withdraw without academic penalty is March 14, 2023. Ceasing to attend class or oral notice thereof DOES NOT constitute official withdrawal from the course. Students who simply stop attending classes without officially withdrawing usually are assigned failing grades. Students wishing to withdraw after the scheduled change period (add/drop) must obtain and complete a withdrawal form from the Academic Services Department in the Registrar's Office.

Acquiring Final Grades

In an effort to better utilize our technology resources, Kennesaw State University has instituted the reporting of end of term grades by phone. This is in addition to the web version of grades, which has been in effect for several terms. Students may call 770-420-4315 and select Option Number 4 to secure their end of term grades. With this new development, printed grade reports will not be mailed at the end of the term. Students needing verification of grades or enrollment should request either an official transcript or enrollment verification through the Office of the Registrar.

Academic Integrity

Every KSU student is responsible for upholding all provisions of the Student Code of Conduct, as published in the Undergraduate and Graduate Catalogs. The Code of Conduct includes the following:

- Section II of the Student Code of Conduct addresses the University's policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to University materials, misrepresentation/falsification of University records or academic work, malicious removal, retention, or destruction of library materials, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the University Judiciary Program, which includes either an "informal" resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct's minimum one semester suspension requirement.
- Students involved in off-campus activities shall not act in a disorderly or disruptive fashion, nor shall they conduct any dangerous activity.
- Students involved in off-campus activities shall not take, damage or destroy or attempt to take, damage or destroy property of another.

Frequently students will be provided with "take-home" exams or exercises. It is the student's responsibility to ensure they fully understand to what extent they may collaborate or discuss content with other students. No exam work may be performed with the assistance of others or outside material unless specifically instructed as permissible. If an exam or assignment is designated "no outside assistance" this includes, but is not limited to, peers, books, publications, the Internet and the WWW. If a student is instructed to provide citations for sources, proper use of citation support is expected.

Additional information can be found at the following locations:
- http://www.apa.org/journals/webref.html
- http://bailiwick.lib.uiowa.edu/journalism/cite.html
- http://www.indiana.edu/~wts/wts/plagiarism.html
- http://www.virtualsalt.com/antiplag.htm

Department or College Policies

Students are expected to be aware that the Computer Science department has certain policies in place that govern practices within the department including:

1. "B" or better grade is required for CS 1321/L and CSE 1322/L and their equivalent transfers. All courses used toward any undergraduate degree in the computer science must be completed with an assessed performance grade of "C" or better. This means that all prerequisite courses from the CS Department must have been completed with a "C" or better in order for a student to enter the next course in a sequence.

2. All requests for course overloads must be made through the College advising office and with the approval of the Program coordinator and department chair. The instructor of any course is not permitted to authorize course overloads.

3. All requests for prerequisite bypasses must be made through the College advising office and with the approval of the Program coordinator and department chair. The instructor of any course is not permitted to authorize course overwrites.

4. All students are encouraged to register their current choice of major using the department major change process. Students who are not recorded under their intended major may find that they may be limited from registering for courses they require to complete their intended program of study.

Institutional Policies

Please visit each of the following links for Institutional policies.

Federal, BOR, & KSU Course Syllabus Policies:

https://curriculum.kennesaw.edu/resources/federal_bor_ksu_student_policies.php

Student Resources:

https://curriculum.kennesaw.edu/resources/ksu_student_resources_for_course_syllabus.php

Academic Integrity Statement:

https://scai.kennesaw.edu/codes.php

KSU Student Resources

This link contains information on help and resources available to students:

https://curriculum.kennesaw.edu/resources/ksu_student_resources_for_course_syllabus.php

Course Schedule

Course Topics and Outline

1. Intro to Kotlin
2. Intro to Android
3. Android App Architecture
4. Android App Design
5. Data and Security

Week/Date	Topic	Quiz/Exam	Lab Assignment	Project
1	First day of class Introduction Kotlin Basics		Lab 1	
2	Funcitons		Lab 2	
3	Classes and Objects		Lab 3	
4	Build your first Android App	Exam#1	Lab 4	
5	Layouts		Lab 5	
6	App Navigation		Lab 6	
7	Activity and Fragment Lifecycle	Exam#2	Lab 7	
8	Project Middle Update			Midterm Report
9	Spring Break			
10	App Arch (UI Layer)		Lab 8	
11	App Arch (Persistence Layer)		Lab 9	
12	Advanced RecyclerView user cases		Lab 10	
13	Connect to the Internet		Lab 11	
14	Repository pattern and WorkManager		Lab 12	
15	App UI Design	Exam#3	Lab 13	
16	Data Driven and Security	Exam#4		Final Report

Final Exam Time: Project Final Presentation

Disclaimer

The course syllabus provides a general plan for the course. Deviations may be necessary.