CS 233: Mobile Phone Programming  Fall 2018

**Instructor:** Dr. Yanxia Jia  
**Room & Times:** BOYER 08, MWF 1:30 pm – 2:35 pm  
**Instructor Coordinates:**  
   Office: Boyer Hall, Room 333.  
   Phone: x4021.  
   E-mail: jia@arcadia.edu

**Office hours:**  
- MF 2:45 ~ 3:45pm; TR: 9am ~ 10am  
- By appointment.

**Course Description:**

This course will be a study of fundamental concepts, design strategies, tools and APIs to create mobile phone applications on the open Android platform. Topics include the mobile software development process, design of mobile user interfaces, data storage, networking, location and mapping, multimedia and graphics.

**Prerequisites:**

- C or above in CS-202 or instructor’s approval

**Textbook and materials:**

  o (You can get this book in pdf form for a total of $20.00 at: [https://commonsware.com/Android/](https://commonsware.com/Android/) Most of the examples that I use come from this book).  
  o Errata: [https://commonsware.com/Android/errata](https://commonsware.com/Android/errata)  
  o Source code: [https://github.com/commonsguy/cw-omnibus](https://github.com/commonsguy/cw-omnibus)

- Online resources:  

- Online books:  
  o If you apply for an ACM student membership ($19/year), you will be able to access hundreds of online Android books [http://www.acm.org/membership/student/benefits](http://www.acm.org/membership/student/benefits)
• The web!

Class Attendance:

You are expected to attend classes regularly. Should you have to miss a class meeting, please contact me to notify me of your absence prior to the class, and it is your responsibility to find out what has been taught that day and make up the work. In case of emergency, please contact me by E-mail or phone as soon as you can.

Technology Policies

You will be using lab computers for online reading of course-related information or solving in-class practice problems. Any other use of these computers (e.g., surfing non-course-related sites and playing games) and the use of cell phones is strictly prohibited. Place your phone on mute before you come to class. Violating this policy will negatively impact your participation grade.

Assignments and Final Project

You will see two types of assignments: individual assignments and group assignments. For individual assignment, you are expected to work on your own. For group assignments, you and another student will work together as a group. Be sure to check out the academic honesty section to understand what is allowed and what is not.

There will be a final group project, which includes a project presentation.

- Your programs must follow the Java style guidelines on Canvas.

- Submitted code must be free of compile errors; otherwise, it will receive a very low grade.

- If this is a group assignment, one submission is enough for each group, but be sure to add a comment listing all group members in the beginning part of your program.

- For programming assignments, zip up the following and submit it to Canvas.
  o The whole project folder
  o Screenshots of the results of your program, (as shown on the emulator screen)
  o Other documents if required.

The zip File name should indicate your name and the assignment number, for example, JohnSmith_Programming1.zip. Please do not send your .zip file by Email to me -- it will be blocked by the Email system because of the .class files in it. If you need to see me for help with a specific assignment, please also submit it to blackboard. You can have multiple submissions for each assignment.
Late Policies

Late programming assignments will receive a 10% deduction per day (24 hours) up to two days (48 hours). Assignments submitted later than 48 hours after the due date will receive a grade of 0.

Programming assignments take time. Please start early and ask for help if needed. Do not wait until the day before the deadline to ask for help!

Evaluation

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Academic Honesty

You are expected to adhere to the code of academic honesty of Arcadia University. All work must be your own. You may discuss the main ideas of a given assignment with other students, but you must write actual solutions by yourself. For group assignments, group members can share information within the group.

The following behaviors are absolutely not allowed:
- copying another student’s/group’s code, even if you modify it.
- sharing your code with another student/group.

If you want to use code from previous semesters or other code resources, such as example programs, found on the Web as part of your solutions, be sure to contact me for approval. If the instructor approves it, then you must add reference links of the code source in the beginning of your program.

If two people in an individual assignment or two groups in a group assignment share the same code or a significant amount of implementation details, both parties will be considered as conducting plagiarism. Please keep in mind that inadvertent plagiarism is plagiarism. If you are not sure, check with your instructor. Finally, I reserve the right to ask you to explain your code to me.
**Tentative Schedule:**

Week 1  Introduction
Week 2~4  User Interface
Week 5 ~ 6  Threads and Android Life Cycle
Week 7 ~ 8  Networking
Week 9  Location & Maps
Week 10 ~ 11  Data Storage
Week 12 ~ 14  Advanced Topics

**Important Dates**

Course changes-drop/add  Aug. 29 – Sept. 12
Undergraduate course withdrawal with adviser’s approval (W)  Sept. 13 – Nov. 13
Undergraduate course withdrawal by petition (WP/WF if approved)  Nov. 14 – Dec. 18
Priority-registration for Spring 2019:  Oct. 29 – Nov. 9
Summer 2019 registration opens for all students  Dec. 3
Reading day – no classes or final exams  Dec. 11

Final Presentation days  Dec. 10 (M) (class time) & Dec. 12 (W) (1pm ~ 4pm)

**Title IX Statement (a New Federal Requirement)**

Arcadia University is committed to assuring a safe and productive educational environment for all students. In order to meet this commitment and to comply with Title IX of the Education Amendments of 1972 and guidance from the Office for Civil Rights, the University requires faculty members to report incidents of sexual violence shared by students to the University’s Title IX Coordinator. The only exceptions a faculty member’s reporting obligation are when incidents of sexual violence are communicated by a student during a classroom discussion, in a writing assignment for a class, or as part of a University-approved research project.

Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at [https://www.arcadia.edu/university/policies-guidelines/title-ix](https://www.arcadia.edu/university/policies-guidelines/title-ix).