C-S 418/518 Mobile Application Development in Android
Spring 2018

Section: 01  T Th 12:40pm – 2:05pm Wing 218

Instructor: Dr. Mao Zheng
Wing 217, Tel: 785-6808, Email: mzheng@uwlax.edu

Office Hour: 1:30pm – 3:00pm on Mondays, and Wednesdays
Or set an appointment by email

Course Website: http://cs.uwlax.edu/~zheng/CS518Spring18/

Course Objective: This course provides an introduction to the concepts and techniques of application development for Android mobile devices. The course prerequisite is CS340 and a junior standing.

Textbook: This course does not have any textbook, but if you would like to have a physical book to learn more about Android, here are two books that are recommended:

• Android Programming: The Big Nerd Ranch Guide, by Bill Phillips and Brian Hardy
• Professional Android Application Development, by Reto Meier

Learning Outcomes:
At the end of this course, you will be able to:
• Understand the design constraints of mobile devices
• Develop Android apps in Android Studio utilizing memory management, user interface widgets, data handling, network techniques, URL loading, and GPS and motion sensing.
• Evaluate different techniques in Android development

Course Expectations:
This course is heavily programming project oriented. Creativity, exploration and persistency are expected in order to successfully complete the projects. Please come to class to ask questions and to share ideas and resources. The graduate students are required to evaluate the strengths and weakness of different techniques in the final project.
Assessment of Learning:

Projects 70%
Mid-Term: final project proposal 10%  Thursday March 22
Final Exam 20%  Tuesday May 8@2:30pm - 4:30pm

Course Contents (may not following exact order)

Android Basics,
GUI Widget & Layout,
Activity Lifecycle
Intent
Thread
Notifications
Service & Broadcast
Fragment
File/Storage & State/Preference
Database
Maps
2D Graphics

Attendance and Participation:
To be successful in this course, you need to start working on your course project as soon as possible. The project deliverables are connected with lecture contents. Hence your class attendance and participation are very important for this course.

Late Projects, Missed Quizzes / Exams
Project deliverables are due on the dates given in the project description.
For extenuating circumstances that impact your ability to meet deadlines or participate in class activities, you are responsible for alerting me as soon as possible.

Project deliverables will not accepted after the due date, no make-up test or exam will be given except for University-excused absences.

Grading Scale

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Our Legal Obligations to You

Sexual Misconduct

As an employee of the University of Wisconsin-La Crosse, I am a mandated reporter of sexual harassment and sexual violence that takes place on campus or otherwise affects the campus community. This means that if I receive detailed or specific information about an incident such as the date, time, location, or identity of the people involved, I am obligated to share this with UWL’s Title IX Coordinator http://www.uwlax.edu/affirmative-action/ in order to enable the university to take appropriate action to ensure the safety and rights of all involved. For students not wishing to make an official report, there are confidential resources available to provide support and discuss the available options. The contact in Student Life is Ingrid Peterson, Violence Prevention Specialist, (608) 785-8062, ipeterson@uwlax.edu. Please see http://www.uwlax.edu/sexual-misconduct for more resources or to file a report.

Religious Accommodations

Per the UWL Undergraduate and Graduate Catalogs http://catalog.uwlax.edu/undergraduate/aboutuwlax/#accommodation-religious-beliefs “any student with a conflict between an academic requirement and any religious observance must be given an alternative means of meeting the academic requirement. The student must notify the instructor within the first three weeks of class (within the first week of summer session and short courses) of specific days/dates for which the student will request an accommodation. Instructors may schedule a make-up examination or other academic requirement before or after the regularly scheduled examination or other academic requirement.”

Students with Disabilities

Any student with a documented disability (e.g. ADHD, Autism Spectrum Disorder, Acquired Brain Injury, PTSD, Physical, Sensory, Psychological, or Learning Disability) who needs to arrange academic accommodations must contact The ACCESS Center (165 Murphy Library, 608-785-6900, ACCESSCenter@uwlax.edu) and meet with an advisor to register and develop an accommodation plan. In addition to registering with The ACCESS Center, it is the student's responsibility to discuss their academic needs with their instructors.

You can find out more about services available to students with disabilities at The ACCESS Center website: http://www.uwlax.edu/access-center
Veterans and Active Military Personnel

Veterans and active military personnel with special circumstances (e.g., upcoming deployments, drill requirements, disabilities) are welcome and encouraged to communicate these, in advance if possible, to me. For additional information and assistance, contact the Veterans Services Office. [http://www.uwlax.edu/veteran-services/](http://www.uwlax.edu/veteran-services/).

Students who need to withdraw from class or from the university due to military orders should be aware of the military duty withdrawal policy [http://catalog.uwlax.edu/undergraduate/academicpolicies/withdrawal/#military-duty-withdrawal-university](http://catalog.uwlax.edu/undergraduate/academicpolicies/withdrawal/#military-duty-withdrawal-university).