

Course Syllabus: CSE 3203 Overview of Mobile Systems

Kennesaw State University

Jack Zheng, **Fall 2018**
Last updated: Aug 10, 2018

Note

This syllabus provides a general guideline for the conduct of this course. However, deviations may be necessary and students will be notified during the semester.

Course Description

This course introduces fundamental issues of mobile systems, including technology components, platforms, application development, user experience, and security. The course sets a foundation for more specialized mobile application development courses.

Learning outcomes

1. Review basic elements of a mobile ecosystem.
2. Explain major technical features of mobile systems including connectivity, hardware, and software.
3. Compare major mobile app development approaches, platforms, and tools.
4. Discuss relevant mobile app development issues including user experience and security.
5. Develop native mobile apps.

The course is also the introductory course in the Mobile and Web Track of the BSIT degree.

Course features (**fall 2018**)

- Develop Android apps using Android Studio 3

Prerequisites

- Official requirement: CSE 1302, CSE 1312 or IT 1324 (Java)
- Strongly recommended: IT 3203 Introduction to Web Development (BSIT)

Class meet time and location

Online (3-0-3)

Instructor

Dr. Jack G. Zheng, Associate Professor, IT Department

Office: J-383

Email: gzheng@kennesaw.edu (**preferred**) Phone: 470-578-5036

Office hours: W 1:30-6:30PM (5-6:30PM in office), and by appointment

Email Policy

1. Email is a great way of communication if you write the email subject like this:

CSE3203 – [put your real subject here]

Emails will be responded within the next business day if the subject line conforms to the format above, and directly sent to my KSU email account above.

2. Per FERPA regulation, please use your university email to communicate with instructors. This can verify your identity and protect privacy. I reserve the right not to reply to any email that I cannot verify the sender's identity.

Emails without a proper subject line or unverified sender address are likely to be categorized as spam, and are NOT guaranteed to receive a reply.

Teaching style and belief

Generally I follow the principles of active learning, which emphasizes on learners' active participation and exploration. Please get more details here:

- <http://zheng.kennesaw.edu/teaching/teaching-belief.cshtml>
- <http://zheng.kennesaw.edu/teaching/student-comments.cshtml>

Course Conduct

Course content/topics

The course content is basically organized as learning modules. Please see the attached schedule document for details.

1	Introduction	Overview of the mobile ecosystem
2	Connectivity	Connection types and features
3	Hardware	Device types, hardware components and features
4	Mobile OS	Mobile platform and OS
5	App Dev	App store, app development platforms
6	Mobile Web	Mobile web technologies and development
7	User Experience	Mobile user experience
8	Security	Mobile security
D1	Android Dev 1	Introduction
D2	Android Dev 2	Basic UI, layout
D3	Android Dev 3	Input/output controls
D4	Android Dev 4	Web view

Each module provides a study guide with detailed learning objectives, readings, and tasks. It's critical to follow these study guides. The time to complete each module varies. Generally, modules are designed on an average of 8 to 10 hours to complete (for most of the people who have met the prerequisites), depending on individual background and prior experiences. Generally all module tasks should be completed within one week from the corresponding class date, however, some **required readings/research tasks** must be completed **by the planned class date**. Please follow the study guides closely.

Grading

Item	Points
Test (2)	20
Labs/assignments (6)	60
Project	20
<i>Total</i>	<i>100</i>

Total Points	Grade
=>90	A
=>80	B
=>70	C
=>60	D
<60	F

More details about each item will be provided in separate documents in dedicated content sections in D2L. Generally all grades should be available within 10 days from the due date.

Course Materials and Resources

Course websites: D2L Brightspace

- It's important to know how to use this learning management system for: following learning modules, submitting assignments, checking grades and feedback, downloading files, participating discussion boards, etc.
- Please check the course site regularly for important announcements and other issues.

Learning materials

- Required textbook: none. This course is part of the Affordable Learning Georgia Textbook Transformation Grants (around 10 proposal 334 https://www.affordablelearninggeorgia.org/about/r10_grantees/) which aim

to lower the cost of learning materials. All materials presented in this course are free to students. All readings are assigned in each learning module.

- Recommended references and resources:
 - Will be provided in each module.

Required software/hardware

- Android Studio 3 (also on CSE lab computers) <https://developer.android.com/studio/>
- Smart phone/tablet (Android) – the computer lab have limited number of devices for lease.
- Other software: software that can open PDF files and ZIP files.

Other readings and resources

- Other readings and resources will be suggested and posted for each week (module). Check D2L regularly.

General Class Policies for all of Dr. Jack Zheng's Courses

!! Please view the separate document online at <https://goo.gl/G0Qd83> or request a copy by email.

University Policies

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