

COSC 2324.01 Mobile Computer Game Development (Hybrid)

Semester: Fall 2017
Time: W 11:30-12:25
Building/Room: Maes 103
Instructor: Dr. Tim Roden
Office: Maes 96
E-mail: Tim.Roden@lamar.edu (Preferred contact method)
Phone: 409-880-2179
Campus Office Hours: T 9:30-12:45, F 11:15-12:30 or by appointment
Virtual Office Hours: Students in online courses may email the instructor anytime. The instructor will answer all email received Monday through Friday within one day (usually the same day). For email received during weekends, the instructor will respond by the following Monday.

Description

This course is an introduction to mobile game development using the Android operating system. Prior programming experience, especially in Java, is required. Topics include graphics, audio, user interfaces and development tools.

Prerequisite COSC 1337 (Grade of 'B' or better)

Recommended (not required) Text

Annuzzi, et. al. (2016) Introduction to Android Application Development, 5th Edition, Addison Wesley.

Recommended

The Android emulator is a program that runs on PC, Macintosh and Linux. Programs created by students in the course must run successfully in the emulator. The instructor will grade student submissions by using the emulator. However, the instructor highly recommends students consider purchasing an actual Android device (handheld or tablet) as this will make it easier to develop and test homework assignments.

Grading

Assignments 100% (all assignments weighted equally)
Final semester grade: A=90%, B=80%, C=70%, D=60%, F=below 60%

Grades will typically be posted within one week of the deadline of an assignment. You may view your posted grades in Blackboard.

Assignments

Assignments are due on the designated due date. Late assignments will be penalized 20%. Assignments will not be accepted later than 3 calendar days after the due date. Assignments will be submitted through Blackboard-hosted email. In the case of any Blackboard outages, assignments can be emailed to the instructor at Tim.Roden@lamar.edu. However, when using this method, students must use the Lamar email software (do not send from another email tool such as Gmail, etc.). Assignments are considered late if they are submitted after midnight on the due date. The last assignment of the semester cannot be turned in late.

Attendance Policy

It is recommended that students log in to Blackboard daily and check for any announcements or other posted material.

The Campus Closure Policy

In the event of an announced campus closure in excess of four days due to a hurricane or other disaster, students are expected to login to Lamar University website's homepage (www.lamar.edu) for instructions about continuing courses remotely.

Academic Honor Code

Students are encouraged to study together and brainstorm about assignments. However, all work turned in on assignments and exams must be done individually. Copying work from another student or allowing your work to be copied by someone else is considered a breach of academic honesty. Students are expected to observe university and departmental policies regarding academic honesty (see http://www.cs.lamar.edu/department_honesty.php). Any breach of these policies may result in a grade of 'F' for an assignment, up to and including a grade of 'F' for the entire course.

Academic Accommodations

Lamar University is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center (DRC) is located in the Communications building room 105. Office staff coordinates with students who have disabilities to provide and/or arrange reasonable accommodations.

If you have, or think you may have, a disability (e.g., mental health, attentional, learning, chronic health, sensory, or physical), please contact the DRC at 409-880-8347 or drc@lamar.edu to arrange a confidential appointment with the Director of the DRC to explore possible options regarding equitable access and reasonable accommodations.

If you are registered with DRC and have a current letter requesting reasonable accommodations, please contact the instructor early in the semester to review how the accommodations will be applied in the course.

IT Support

The Lamar IT Department offers support for a variety of computing-related issues. See their website at: <http://students.lamar.edu/it-services-and-support/index.html>

Drop Dates

See the Academic Calendar, <http://events.lamar.edu/index.html>

Student Learning Outcomes

Students who successfully complete the course will be able to demonstrate the ability effectively to use the following techniques:

- Identify, install and evaluate development software for Android.
- Create application software for an Android device using a high level programming language.
- Create multimedia content suitable for use in an Android program.
- Author an Android application program that demonstrates 2D graphics.
- Author an Android application program that demonstrates audio playback.
- Author an Android application program that demonstrates interactive user input.

Lecture Topics

The list of lecture topics below is tentative, and subject to change and adaptation.

Topic Description

- 1 Introduction
- 2 Development Environment & First Application
- 3 Activities
- 4 Resources and Views
- 5 Creating an Interactive Application
- 6 Audio and Device Rotation
- 7 Intents
- 8 Dialogs
- 9 Preferences
- 10 2D Graphics
- 11 Multi-threading
- 12 Creating Art Assets for Android
- 13 2D Game
- 14 App Distribution

Emergency Procedures

Many types of emergencies can occur on campus; instructions for severe weather or violence/active shooter, fire, or chemical release can be found at:

<http://www.lamar.edu/about-lu/administration/risk-management/index.html>. Following are procedures for the first two:

Severe Weather:

- Follow the directions of the instructor or emergency personnel.
- Seek shelter in an interior room or hallway on the lowest floor, putting as many walls as possible between you and the outside.
- If you are in a multi-story building, and you cannot get to the lowest floor, pick a hallway in the center of the building.
- Stay in the center of the room, away from exterior walls, windows, and doors.

Violence/Active Shooter (CADD):

- **CALL** - 8-3-1-1 from a campus phone (880-8311 from a cell phone). Note: Calling 9-1-1 from either a campus phone or cell phone will contact Beaumont City Police Dispatch rather than University Police.
- **AVOID**- If possible, self-evacuate to a safe area outside the building. Follow directions of police officers.
- **DENY**- Barricade the door with desks, chairs, bookcases or any other items. Move to a place inside the room where you are not visible. Turn off the lights and remain quiet. Remain there until told by police it is safe.
- **DEFEND**- Use chairs, desks, cell phones or whatever is immediately available to distract and/or defend yourself and others from attack.