

SYLLABUS: MOBILE APP DEVELOPMENT

COURSE & INSTRUCTOR INFORMATION

Course

Course Prefix, Number, Section, Title: COSC 40043-XXX Mobile App Development

Semester and Year: Fall 202X

Number of Credits: 3

Course Component Type: Lecture

Class Location: TBD

Class Meeting Day(s) & Time(s): TBD

Instructor

Instructor Name: Dr. Bo Mei

Office Hours: TBD

Preferred Method of Contact: Email

Email: b.mei@tcu.edu

Response Time: Emails will be responded within 24 hours including weekends.

Final Evaluative Exercise & Important Dates

FINAL EXAM: TBD TBD AT TBD
MIDTERM EXAM: TBD TBD AT TBD
LAST DAY TO DROP: TBD
LAST DAY TO SELECT P/NC: TBD

Note for students: The syllabus is your first course reading. It provides an orientation to, overview of the flow, and expectations of the course. You should turn to the syllabus for details on assignments and course policies.

Student Resources & Policy Information

Click or scan QR code for resources to support you as a TCU student.

Please note section on [Student Access and Accommodation](#), [Academic Conduct & Course Materials Policies](#), and [Emergency Response & TCU Alert](#).



COURSE DESCRIPTION

Description

The course introduces Android app development using Kotlin. This is a project-based course with the focus on developing simple to moderately complex Android apps. Along the way, students will learn the important concepts of Kotlin programming as well as how to implement key Android features.

Prerequisites & Concurrent Enrollment

Successful completion of COSC 30403 Programming Language Concepts.

COURSE MATERIALS

Textbook: (Recommended, not required) Bryan Sills, Brian Gardner, Kristin Marsicano, Chris Stewart, *Android Programming: The Big Nerd Ranch Guide*, 5th Edition, ISBN: 978-0137645541

Lecture Files: Lecture files including sample code will be made available on TCU Online.

Device Information: Students **MUST** be able to access laptops to complete all projects. Students should also bring their laptops to **EVERY** lecture. The operating system can be Windows or macOS.

LEARNING OUTCOMES

1. Understand key Kotlin concepts.
2. Be able to use Kotlin to develop general programs.
3. Understand Android app development process.
4. Be able to make a development plan based on clients' requirements.
5. Know how to implement key Android features.
6. Know how to design user-friendly interfaces.
7. Be able to develop simple to moderately complex Android apps.
8. Apply the best practices when using Kotlin and building Android apps.

COURSE REQUIREMENTS

Assessments

Projects:

- There are seven projects. A project is typically to develop a specific app. Each app is only partially developed during the lectures, and the project submission is expected to be a complete app that meets all the requirements.

- Late projects are accepted with a penalty of 10% per calendar day up to a maximum of 5 days. Afterwards, the project is worth 0 points.
- Students are encouraged to share thoughts and ideas. However, a student should **NEVER** share his code to another student. It is **PROHIBITED** to even share one line of code.

Exams:

- Both exams are taken in the lecture classroom. The exams only contain programming questions, and students are asked to use their laptops to take the exams.
- Both exams are open book. Students can use the notes on paper and the notes stored locally on the laptops.
- The laptops **MUST** remain disconnected from the Internet except for downloading exam questions and submitting exam solutions.
- **ONLY** the final exam can be rescheduled. Graduating students **MUST** reschedule the final exam. For non-graduating students, rescheduling of the final exam is **ONLY** permitted to meet the 24-hour rule.

Grading Philosophy & Policy

Late Work: Late projects are accepted with a penalty of 10% per calendar day up to a maximum of 5 days. Afterwards, the assignment is worth 0 points.

Coupon System:

- Each student has **ONE** coupon for the semester, which can be applied to any assignment.
- If you receive a low grade for any reason, including but not limited to incorrect submission format, missed submission, incorrect files submitted, or incomplete work, you can email the professor with your updated submission and inform him that you would like to use the coupon.
- The professor will then regrade your emailed submission with a 20% penalty applied.

Make-Up Work:

- Make-up work will **ONLY** be permitted for two reasons: an official university absence or documented medical appointments.
- A student who has an official university absence must contact the instructor **BEFORE THE ABSENCE** to schedule a make-up of any assessment that will be missed.
- Because it is considered an infringement on student privacy for me to have access to student medical records, I cannot accept medical documentation to justify absences. If you have a legitimate reason for your absence and want to provide

verification, please access the Absence Documentation Form [here](#). Such medical-related absences will be rescheduled accordingly.

Extra Credits:

- Extra credits/work will **NOT** be given with no exceptions. This policy will be strictly enforced toward the end of the semester.
- The final course grades will **NOT** be curved with no exceptions.

Attendance: Attendance will not be taken. Students will be considered **RESPONSIBLE** for all material presented during their missed lectures.

Cheating and Plagiarism: Students are encouraged to share thoughts and ideas. However, a student should **NEVER** share his code to another student. It is **PROHIBITED** to even share one line of code.

Course Assignments & Final Grade

Assessment	Percent	Assessment	Percent
Project 1	3%	Project 5	12%
Project 2	6%	Project 6	12%
Project 3	6%	Project 7	12%
Project 4	9%	Final Exam	20%
Midterm Exam	20%		

Grading Scale: The final course grades will **NOT** be curved with no exceptions. Please also be aware that extra credits/work will **NOT** be given with no exceptions.

Grade	Score	Grade	Score
A	≥ 93	C	≥ 73 and < 77
A-	≥ 90 and < 93	C-	≥ 70 and < 73
B+	≥ 87 and < 90	D+	≥ 67 and < 70
B	≥ 83 and < 87	D	≥ 63 and < 67
B-	≥ 80 and < 83	D-	≥ 60 and < 63
C+	≥ 77 and < 80	F	< 60

COURSE SCHEDULE

This calendar represents current course plans. Plans may need to change to enhance the learning opportunities and will be communicated via emails or Announcements on TCU Online.

Week	Topic	Due
1	Getting Ready with Android Studio	
2	Kotlin Fundamentals	Project 1: People Counter App
3	Kotlin Fundamentals	
4	Developing the Age in Minutes app	Project 2: A General Kotlin Program
5	Developing the Calculator app	Project 3: Age in Minutes App
6	Developing the Calculator app	
7	Developing the Quiz app	Project 4: Calculator App
8	Midterm Exam	
9	Developing the Quiz app	
10	Developing the Paint app	Project 5: Quiz App
11	Developing the Paint app	
12	Developing the Paint app	
13	Developing the Weather app	Project 6: Paint App
14	Developing the Weather app	
15	<i>Thanksgiving Break</i>	
16	Developing the Weather app	Project 7: Weather App
17	Final Exam	