

# CIS 2818 – Mobile Application Development with Android Fall 2024 Syllabus

#### **Instructor Information**

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## **Course Information**

Meeting Days and Times: Asynchronous delivery, remote

Classroom Location: ONLINE

## **Course Catalog Description**

This course focuses on the design and implementation of wireless handheld application software on the Android platform for business and personal use. Students will use the Android Studio integrated development environment (IDE) to develop and test application software. Development techniques will focus on operational aspects of mobile devices that distinguish them from PCs and general computing platforms. Students will be required to complete computer-based assignments inside and outside of class.

### Course Prerequisites

CIS 1500 or consent of the instructor

#### Course General Education Outcomes

- Critical Thinking
- Information Literacy
- Quantitative Literacy

#### **Common Course Outcomes**

- Describe the system architecture of Android apps and how they are compiled and executed;
   Describe the structure of Android projects within a popular IDE, describe how the different types of content are created and managed, and illustrate how to use the debugger.
- Create layouts and widgets for Android apps; illustrate how themes, styles and preferences are used in Android apps.
- Create Android apps that use menus and action bar items; Create Android apps that use fragments.
- Describe how threads and asynchronous tasks are implemented in Android apps.
- Create code that will properly handle Android events; Create Android apps that use intents for passing data between multiple activities.
- Create Android apps that use data files.
- Create Android apps that use data resource adapters.
- Describe the Activity lifecycle, and how to save and restore state; Describe the lifecycle of Services (background tasks).
- Describe how to set up Android apps for use with maps and location services.

## Textbook and Supplementary Materials Required Text

Android Studio Giraffe Essentials – Kotlin Edition By Neil Smyth ISBN: 978-1951442774

## Supplemental Materials

Slides, notes, and other materials may be posted to D2L.

## Assessment Policies and Procedures

## Plagiarism and Cheating

It is college policy that no student shall engage in behavior which, in the judgment of the instructor of the class, may be construed as academic dishonesty. This may include, but is not limited to, plagiarism, presenting another individual's ideas, data, words, images, or other products without giving credit to the originator, or other forms of academic dishonesty, such as the acquisition (without permission) of tests or other academic materials and/or distribution of the same. This includes students who aid and abet, as well as those who attempt such behavior. (OCC Student Life Handbook)

## **Grading Policy**

I use a straight point system for this course.

Project 1: 100 pts
 Project 2: 125 pts
 Project 3: 125 pts
 Project 4: 200 pts

Mid-Term Exam: 100 ptsHomework: varies

**Grading Scale** 

Letter Grade	Percentage Scale	
А	94 to 100%	
A-	90 to 93.9%	
B+	86 to 89.9%	
В	83 to 85.9%	
B-	80 to 82.9%	
C+	76 to 79.9%	
С	73 to 75.9%	
C-	70 to 72.9%	
D+	66 to 69.9%	
D	63 to 65.9%	
F	Below 63%	

### N Mark (Grade) Non-Attendant Policy

This mark is awarded to students who, though registered, never attended class, did not officially drop, and (if an online or hybrid class) have no gradable work. Marks of "N" do not satisfy prerequisites and are non-transferable. This mark is not used in the calculation of GPA, but it may affect eligibility for financial aid. Instructors confirm non-attendance by the "N" Mark Report Date (found in MyOCC for each section) and then submit their "N" marks to the institution. Students who have received an "N" mark will not be permitted to enter the class, nor will the student be able to drop the class. After the "N" mark has been submitted, a change of grade will not be accepted for the student. For more information refer to OCC's Grading Policy.

## Late Policy

Please submit your completed assignment to the D2L under the appropriate assignment listed Assignments will be accepted up until midnight of the due date without penalty. Any assignment submitted after the due date will be considered late. A 5% deduction will be applied for every day that the assignment is late. After 5 business days, the assignment will no longer be accepted unless I approve such an exception. I reserve the right to wave any penalties due to extenuating circumstances. I encourage everyone to do their best to complete and upload their assignments on or before the due date.

## Student Policy and Support Information FERPA

Per the Family Educational Rights and Privacy Act (FERPA), college personnel are not allowed to release a student's personal information to anyone, including other students. Please read <u>Oakland Community</u> <u>College's FERPA policy</u> for more information.

#### Americans with Disabilities Act (ADA)

Students requiring special assistance (including those affected by the Americans with Disabilities Act) should contact the <u>ACCESS</u> office, which will inform the instructor of any special conditions pertaining to their learning.

### Academic Support Center

The <u>Academic Support Center</u> (ASC) provides programs and services that help OCC students to be successful in achieving their academic goals. They offer <u>tutoring</u>, Supplemental Instruction (SI), and study skill seminars.

### Technology Appropriate Use Regulations (TAUR)

Information technology resources (computers; voice, video and data networks; electronic data and information) are provided by Oakland Community College to its faculty, staff, administration and students in support of the College mission. Users of the information technology resources will abide by applicable federal and state laws and the College's regulations governing the use of these resources and will use them in support of activities directly related to duties and assignments. Please read <a href="Oakland">Oakland</a> <a href="Community College's Technology Appropriate Use Regulations">Community College's Technology Appropriate Use Regulations</a> (TAUR) for more information.

### **Public Safety**

The Oakland Community College Department of Public Safety is committed to providing the students, faculty, staff, and visitors with a safe and secure environment. Please read <u>Oakland Community College's Public Safety</u> website for more information.

## Course Schedule

**Disclaimer:** This schedule is subject to change if necessary circumstances deem a change. I will give you reasonable notice for any revisions.

Week	Date (week of)	Topics	Readings	Assignments
1	8/26/2024	Course Intro; syllabus;	1-8	Install Android Studio
2	9/2/2024	Android architecture; apps; Kotlin	9-15	
3	9/9/2024	Android architecture; apps; Kotlin (cont'd)	9-15	
4	9/16/2024	Kotlin; activity life cycle	16-21	
5	9/23/2024	Layouts; instant run; event handling	22-32	Project 1 Assigned
6	9/30/2024	Layouts; instant run; event handling	22-32	
7	10/7/2024	Fragments; study for Mid-Term	37-38	
8	10/14/2024	Catch-up and Study for mid-term	No new materials	Project 2 Assigned
9	10/21/2024	Mid-Term Exam held asynchronously;  Jetpack	39-44	
10	10/28/2024	Navigation, overflow menu, transitions	47-48	
11	11/4/2024	Floating action bar; snackbar; RecyclerView; CardView	51; 54-55	Project 3 Assigned
12	11/11/2024	Floating action bar; snackbar; RecyclerView; CardView	51; 54-55	
13	11/18/2024	Intents, etc;	57-59	Project 4 Assigned
14	11/25/2024	Thanksgiving Recess		
15	12/2/2024	Instructor's choice		
16	12/9/2024	Instructor's choice		