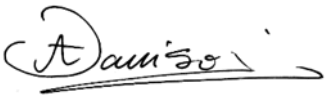
Approved by Chair:



Aug 21, 2022

Signature

COURSE SECTION INFORMATION

COMP3074 Mobile App Development I

Teacher's Name: Przemyslaw Pawluk

Email: ppawluk@georgebrown.ca

Phone: 416-415-5000 x6642

Office: C467

Out of Class Assistance

All academic inquiries will be replied to within three business days.

Course Code: COMP3074

Course Section:

Academic Year: 2022-2023

Term: Fall 2022

LIST OF TEXTBOOKS AND OTHER TEACHING AIDS:

Required:

- Android: https://books.goalkicker.com/AndroidBook/
- React Native: https://books.goalkicker.com/ReactNativeBook/

Recommended Resources/References

- http://developer.android.com/index.html
- https://reactnative.dev/docs/getting-started

Detailed Evaluation System

Assessment Tool:	Description:	Outcome(s) assessed:	EES assessed:	Date / Week:	% of Final Grade:
Lecture quizzes	Quizzes covering last topics discussed in the lecture and lab	1-7	1-7	Week 2-14	10
Lab Exercises	Grade calculated based on atKlass and submissions	1-7	1-10	Week 1-14	10
Lab test 1	In-class programming task	1-3, 7	2-5,7,10	Week 7	10
Lab test 2	In-class programming task	1, 4-7	2-5,7,10	Week 12	10
Assignment 1	Take-home assignment covering basic functionality in Android	1-3, 7	2-5,7,10	Week 3 (due week 5)	10
Assignment 2	Take-home assignment extending functionality of A1	1, 4-7	2-5,7,10	Week 5 (due week 9)	10
Project	Team project that covers multiple topics and requires incremental work.	1-7	1-11	Due week 14	20
Final Exam	Multiple choices, along with coding questions.	1-7	1-7	Week 15	20
TOTAL:					**100%**

Learning Schedule / Topical Outline (subject to change with notification)

TOPICAL OUTLINE

Week	Topic / Task	Outcomes	Content / Activities	Resources
1	Intro to the course Android SDK and Tools Java vs Kotlin Android – Basics Activities and Services	1-3	Lecture/Lab	Android Ch 1,2, 3, 34, 45 Lecture notes
2	Intents, Broadcast, Resources Building UI in Android Layouts and Views Unit tests	2-3	Lecture/Lab	Android Ch 4 – 22, 43 Lecture notes

3	Fragments vs Activities	2-3, 7	Lecture/Lab	Android Ch 42 Lecture notes
4	Data storage (Files, Preferences and Database)	2-3, 7	Lecture/Lab	Android Ch 50, 149, 228 Lecture notes
5	Location services in Android, GPS, Security	2-3, 7	Lecture/Lab	Android Ch 82, 239 Lecture notes
6	Accessing sensors and camera	2-3, 7	Lecture/Lab	Android Ch 53, 54 Lecture notes
7	App testing and publishing	2-3, 7	Lecture/Lab	Android Ch 251-254 Lecture notes
8	INTERSESSION WEEK			
9	Introduction to web technology? Tools configuration Introduction to React Native app development. JS review Creating components in React Native Building a React Native application	4-6	Lecture/Lab	React Native Ch 1, 2, 3, 4, 14 Lecture notes
10	Basic UI components Implementing google map component in react native app. Access data from web	4-6	Lecture/Lab	React Native Ch 5, 6, 7, 11, 12, 17 Lecture notes
11	Implementing Styles in React Native Different types of styles. Exporting styles objects Reusing styles Flexbox and Layouts	4-6	Lecture/Lab	React Native Ch 8 Lecture notes
12	Data Storage, AsyncStorage and security issues	4-7	Lecture/Lab	Lecture notes
13	Navigation and Structure in React Native Applications Project Structure Application Screens Reusable Components	4-7	Lecture/Lab	React Native Ch 26, 27 Lecture notes
14	Redux and Maintaining State. React Native app developing using Expo component.	4-6	Lecture/Lab	React Native Ch 6 Lecture notes

15	**Exam** Presentation of projects in the lab

Please note: this schedule may change as resources and circumstances require.

For information on withdrawing from this course without academic penalty, please refer to the College Academic Calendar: **http://www.georgebrown.ca/Admin/Registr/PSCal.aspx**