USC

Course Outline

Code: ICT311
Title: Mobile App Development

School: Business
Teaching Session: Semester 2
Year: 2020
Course Coordinator: Dr Mingzhong Wang
Course Moderator: Dr Jacqui Blake

Please go to the USC website for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1 Description

There are more mobile devices on the planet than people. Mobile app development helps to unleash the full power of mobile devices, and push their usage into every corner of modern society. This course introduces students to important concepts and aspects in mobile application development on Java based Android phones, including UI design, data persistence, multimedia support, sensor management, multithreading, debug and test, and application publishing. Although the course is centred on Android, general principles of mobile app development discussed here can also be applied to other contexts.

1.2 Field trips, WIL placements or activities required by professional accreditation

N/A

2. What level is this course?

300 level Graduate - Independent application of graduate knowledge and skills. Meets AQF and professional requirements. May require pre-requisites and developing level knowledge/skills. Normally taken in the 3rd or 4th year of an undergraduate program.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

Specific Learning Outcomes On successful completion of this course, you should be able to:	**Assessment tasks** You will be assessed on the learning outcomes in task/s:	**Graduate Qualities or Professional Standards mapping** Completing these tasks successfully will contribute to:
Assess different techniques in mobile app development.	2 and 3	Knowledgeable.
Design the UI and databases for mobile apps regarding a given case description.	3	Creative and critical thinkers.
Develop mobile apps with the best industry practice for given requirements.	1 and 3	Problem solving.

5. Am I eligible to enrol in this course?

Refer to the USC Glossary of terms for definitions of "pre-requisites, co-requisites and anti-requisites".

5.1 Enrolment restrictions

Nil

5.2 Pre-requisites

ICT221 or SGD213

5.3 Co-requisites

Nil

5.4 Anti-requisites

Nil

5.5 Specific assumed prior knowledge and skills (where applicable)

N/A

6. How am I going to be assessed?

6.1 Grading scale

Standard – High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL)

6.2 Details of early feedback on progress

The first few weeks of practices include practical Android programming tasks that give instant feedback.

6.3 Assessment tasks

Task No.	Assessment Product	Individual or Group	Weighting %	What is the duration / length?	When should I submit?	Where should I submit it?
1	Artefact - Technical and Scientific	Individual	15%	1 app code	Week 4	Online Assignment Submission with Plagiarism check
2	Written Piece	Individual	35%	800 words	Week 8	Online Assignment Submission with Plagiarism check
3	Artefact - Technical and Scientific, and Written Piece	Individual	50%	1 app and 1000-word report	Week 13	Online Assignment Submission with Plagiarism check
			100%			

Assessment Task 1: Android coding

Goal:	To demonstrate your knowledge of working with mobile application development principles.
Product:	Artefact - Technical and Scientific
Format:	This is an individual assessment. You need to develop an app following the instructions and textbook.
Criteria:	• Development of the app to support all required functionalities

Assessment Task 2: Mid-semester test

Goal:	To demonstrate your knowledge of mobile application development.
Product:	Written Piece
Format:	This is an individual assessment. Answer a set of questions about big data analysis theory and practice.
Criteria:	• Assessment of various techniques in mobile app development.

Assessment Task 3: Mobile app development

Goal:	To develop a mobile application and advance your application creation skill set.
Product:	Artefact - Technical and Scientific, and Written Piece
Format:	This is an individual assessment. You will be given a case study and will develop a mobile application to suit the case study's functionality needs. An individual project incorporating the design, documentation and programming of Android code.
Criteria:	• Assessment of various techniques in mobile app development • Correct design of databases for the app • Appropriate design of UI for the app • Development of the app to support all required functionalities • Comprehensive and accurate explanation to the implementation and output

7. Directed study hours

This course will be delivered via technology-enabled learning and teaching. All lectures will remain in this mode for Semester 2 2020.

When government guidelines allow, students that elected on-campus study via the class selection process will be advised when on campus tutorials and practical sessions will resume.
Student workload is calculated at 12.5 learning hours per one unit.

Each week:
- 1 hour on-line lecture
- 1 hour interactive tutorial
- 1 hour digital content
- 9 hours independent study (including assessment work)

8. What resources do I need to undertake this course?

Please note that course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Blackboard site. Please log in as soon as possible.

8.1 Prescribed text(s) or course reader

Please note that you need to have regular access to the resource(s) listed below as they are required:

Author	Year	Title	Publisher
Phillips, B., Stewart, C., and Marsicano, K.	2017, 3rd ed	*Android Programming: The Big Nerd Ranch Guide*	Big Nerd Ranch Guides ISBN 978-0134706054

8.2 Specific requirements

N/A

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low.
It is your responsibility as a student to review course material, search online, discuss with lecturers and peers, and understand the health and safety risks associated with your specific course of study. It is also your responsibility to familiarise yourself with the University's general health and safety principles by reviewing the online Health Safety and Wellbeing training module for students, and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1 Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Blackboard, are electronically checked through SafeAssign. This software allows for text

comparisons to be made between your submitted assessment item and all other work that SafeAssign has access to.

10.2 Assessment: Additional requirements

Eligibility for Supplementary Assessment

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

a) The final mark is in the percentage range 47% to 49.4%
b) The course is graded using the Standard Grading scale
c) You have not failed an assessment task in the course due to academic misconduct

10.3 Assessment: Submission penalties

Late submission of assessment tasks will be penalised at the following maximum rate:

- 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task.
- 10% (of the assessment task's identified value) for the third day
- 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task.
- A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task.

Weekdays and weekends are included in the calculation of days late.
To request an extension, you must contact your Course Coordinator and supply the required documentation to negotiate an outcome.

10.4 Study help

In the first instance, you should contact your tutor, then the Course Coordinator. Additional assistance is provided to all students through Academic Skills Advisers. To book an appointment or find a drop-in session go to Student Hub.

Contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au

10.5 Wellbeing Services

Student Wellbeing Support Staff are available to assist on a wide range of personal, academic, social and psychological matters to foster positive mental health and wellbeing for your success. Student Wellbeing is comprised of professionally qualified staff in counselling, health and disability Services.

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, mental health issue, learning disorder, injury or illness, or you are a primary carer for someone with a disability, AccessAbility Services can provide assistance, advocacy and reasonable academic adjustments.

To book an appointment with either service go to Student Hub, email studentwellbeing@usc.edu.au or accessability@usc.edu.au or call 07 5430 1226

10.6 Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Administration of Central Examinations
- Deferred Examinations
- Student Academic Misconduct
- Students with a Disability

Visit the USC website:
http://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching

10.7 General Enquiries

In person:

- **USC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **USC Moreton Bay** – Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **USC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **USC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **USC Fraser Coast -** Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **USC Caboolture -** Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Appendix 1 Course content

Week # / Module #	What key concepts/content will I learn?	Directed Study Activities: teaching components
1	Course Overview	Please refer to Section 7 for details.
2	First Android App	Please refer to Section 7 for details.
3	Activity	Please refer to Section 7 for details.
4	UI Fragment	Please refer to Section 7 for details.
5	UI Recycler View	Please refer to Section 7 for details.
6	Dialogs and Toolbar	Please refer to Section 7 for details.
7	Storage	Please refer to Section 7 for details.
8	Intents	Please refer to Section 7 for details.
9	Locations and Maps	Please refer to Section 7 for details.
10	Multiple Threading	Please refer to Section 7 for details.
11	Services, Broadcasts, and Notifications	Please refer to Section 7 for details.
12	Assignment review	Please refer to Section 7 for details.
13	Course Summary	Self-directed study

Please note that the course activities may be subject to variation.

Mid Semester Break:
28th September 2020-4th October 2020 (Between Week 10 and Week 11)
Public Holidays
Queen's Birthday - Monday 5th Oct 2020 (Week 11)