

INFT2051: Mobile Application Programming

Singapore PSB

Trimester 1 - 2024 (Singapore)



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

OVERVIEW

Course Description	This course builds on students' basic programming skills to develop the knowledge and skills used to develop applications utilising touch interfaces, mobile platforms and event-driven programming.
Academic Progress Requirements	Nil
Assumed Knowledge	INFT2012 Application Programming OR SENG1110 Object Oriented Programming.
Contact Hours	Singapore PSB Computer Lab Face to Face On Campus 2 hour(s) per week(s) for 12 week(s) starting Week 2 Lecture Face to Face On Campus 2 hour(s) per week(s) for 12 week(s) starting Week 1
Unit Weighting	10
Workload	Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.

COURSE OUTLINE

CONTACTS

Course Coordinator	Singapore PSB Dr Jacqueline Bailey Jacqueline.D.Bailey@newcastle.edu.au +61 2 4913 8780 Consultation: By Email
Teaching Staff	Other teaching staff will be advised on the course Canvas site.
School Office	School of Information and Physical Sciences SR233 Social Sciences Building Callaghan CESE-SIPS-Admin@newcastle.edu.au +61 2 4921 5513

SYLLABUS

Course Content	<ul style="list-style-type: none">• Software development and programming• Mobile technologies• Touch-based and emerging human-computer interfaces• Introduce cloud-related resources for using in mobile applications
Course Learning Outcomes	<p>On successful completion of this course, students will be able to:</p> <ol style="list-style-type: none">1. Organise and plan the development of mobile applications for deployment on mobile technologies2. Design and develop a robust, aesthetic, and intuitive user-interface that applies the concepts of touch-driven applications3. Implement and deploy robust mobile apps to a mobile device using iterative development and testing methodologies4. Apply their knowledge of effective mobile app design and demonstrate their understanding of the challenges of implementing these designs
Course Materials	<p>Lecture Materials:</p> <p>Lecture slides and content made available through Canvas.</p> <p>Multi-Media Resource:</p> <ul style="list-style-type: none">- Online resources will be used throughout the courses. Links to used resources will always be provided in Canvas. <p>Recommended Reading:</p> <ul style="list-style-type: none">- Weekly readings and exercises advised online through Canvas.

COMPULSORY REQUIREMENTS

In order to pass this course, each student must complete ALL of the following compulsory requirements:

Course Assessment Requirements:

- Assessment 3 - Final Examination: Pass requirement 40% - Must obtain 40% in this assessment item to pass the course.

Students whose overall mark in the course is 50% or more, but who score less than 40% in the compulsory item and thus fail to demonstrate the required proficiency, will be awarded a Criterion Fail grade which will show as FF on their formal transcript. However, students in this position who have scored at least 25% in the compulsory assessment item will be allowed to undertake a supplementary 'capped' assessment in which they can score at most 50% of the possible mark for that item.

ASSESSMENTS

This course has 3 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Project Drafts	Proposal in Week 3, Progress Report Week 7	Combination	20%	1, 2
2	Final Project	Week 12	Combination	50%	1, 2, 3
3	Final Examination*	Formal Exam Period	Individual	30%	4

* This assessment has a compulsory requirement.

Late Submissions

The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

Assessment 1 - Project Drafts

Assessment Type

Presentation

Purpose

In this assignment, students present their vision for a project that will use the tools and techniques taught in the course.

In Week 3, students will make a 2-3 minute "Idea Pitch" Presentation - from here students can form groups of 2-3 people if desired, these will be done live in the lab sessions. In Week 7, students will make a pre-recorded presentation of the progress made so far - this must include code that the students have written.

Description

Maps to Course Learning Outcomes: 1 and 2

Weighting

20%

Length

Please refer to the assignment specifications.

Due Date

Proposal in Week 3, Progress Report Week 7

Submission Method

Online

Assessment Criteria

See Rubrics on Canvas.

Return Method

Online

Feedback Provided

Online

Assessment 2 - Final Project

Assessment Type

Project

Purpose

In this assignment students design, document, and build a project using the tools and techniques taught in the course.

Description

Maps to Course Learning Outcomes: 1, 2, 3

Weighting

50%

Length	Please refer to the assignment specifications.
Due Date	Week 12
Submission Method	Online
Assessment Criteria	See Rubric on Canvas.
Return Method	Online
Feedback Provided	Online

Assessment 3 - Final Examination

Assessment Type	Formal Examination
Purpose	Formal Examination
Description	Maps to Course Learning Outcomes: 4
Weighting	30%
Compulsory Requirements	Pass requirement 40% - Must obtain 40% in this assessment item to pass the course.
Due Date	Formal Exam Period
Submission Method	Formal Exam
Assessment Criteria	Demonstrated knowledge and skills needed to develop, deploy and effectively use mobile applications.
Return Method	Not Returned
Feedback Provided	No Feedback
Opportunity to Reattempt	Students WILL be given the opportunity to reattempt this assessment.

ADDITIONAL INFORMATION

Grading Scheme This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

*Skills are those identified for the purposes of assessment task(s).

Communication Methods Communication methods used in this course include:

- Canvas Course Site: Students will receive communications via the posting of content or announcements on the Canvas course site.
- Email: Students will receive communications via their student email account.

Course Evaluation	Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.
Oral Interviews (Vivas)	As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the Oral Examination (viva) Procedure . In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the Student Conduct Rule .
Academic Misconduct	All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to https://policies.newcastle.edu.au/document/view-current.php?id=35 .
Adverse Circumstances	The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where: <ol style="list-style-type: none">1. the assessment item is a major assessment item; or2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;3. you are requesting a change of placement; or4. the course has a compulsory attendance requirement. Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at: https://policies.newcastle.edu.au/document/view-current.php?id=236
Important Policy Information	The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at https://www.newcastle.edu.au/current-students/respect-at-uni/policies-and-procedures that support a safe and respectful environment at the University.

This course outline was approved by the Head of School on 1st December 2023. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.

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GRADUATE PROFILE STATEMENTS

The following table illustrates how this course contributes towards building the skills students will need to work in their profession.

Level of capability

- Level 1 indicates an introduction to a topic at a university level
- Levels 2 and 3 indicate progressive reinforcement of that topic
- Level 4 indicates skills commensurate with a graduate – entry to professional practice
- Level 5 indicates highly specialist or professional ability

	University of Newcastle Bachelor of Information Technology Graduate Profile Statement	Taught	Practised	Assessed	Level of capability
1	Demonstrate a comprehensive understanding of the discipline of information technologies with an emphasis on net-centric applications, information management, and user requirements for ethical professional practice.	Y	Y	Y	3
2	Apply critical reasoning and systems thinking to understand and support the operation and constraints of contemporary enterprises and their dynamic environment.	Y	Y	Y	3
3	Work independently and collaboratively to locate, manage and organise information and resources and apply evidence-based methodologies to create, modify and maintain designs and design solutions.	Y	Y	Y	5
4	Use creativity, problem solving skills, project management skills and technical expertise to analyse, interpret, evaluate and generate solutions to complex technical and organisational problems.	Y	Y	Y	5
5	Demonstrate professional judgement and responsibility by communicating information technology principles, practices, standards to specialist and non-specialist audience clearly and persuasively.	Y	Y	Y	3