USC

COURSE OUTLINE

ICT700 Systems Analysis

Course Coordinator: Pethigamage Perera (pperera@usc.edu.au)   **School:** School of Science, Technology and Engineering

2021 | Semester 1

| USC Southbank | ON CAMPUS | Most of your course is on campus but you may be able to do some components of this course online. |
| Online | ONLINE 1 | You can do this course without coming onto campus. |

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

This course introduces you to a range of concepts used in the analysis and design of complex information systems. You will gain practical skills and understanding of modelling systems from the object perspective as well as an understanding of the approaches that can be used when undertaking an agile approach to a project. Deciding whether to custom build or buy software as well as software deployment approaches are included.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
ON CAMPUS			
Lecture	1hr	Not applicable	Not Yet Determined
Tutorial/Workshop	2hrs	Not applicable	Not Yet Determined
ONLINE 1			
Tutorial/Workshop – Interactive zoom tutorial	2hrs	Not applicable	11 times
Online – Pre-recorded concept videos and associated activity	1hr	Not applicable	12 times

1.3. Course Topics

Week	Topic
1	Introduction to Systems Development and the Role of the Systems Analyst
2	The Traditional Approach to Requirements
3	Investigating System Requirements
4	Identifying User Stories and Use Cases
5	Domain Modelling
6	Use Case Modelling
7	Foundations for Systems Design and Defining the System Architecture
8	Designing the User Interface
9	Approaches to System Development and Project Management
10	Object Orientated Design: Fundamentals
11	Object Orientated Design: Use Case Realization
12	Deploying the New System

2. What level is this course?

700 Level (Specialised)

Demonstrating a specialised body of knowledge and set of skills for professional practice or further learning. Advanced application of knowledge and skills in unfamiliar contexts.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES	GRADUATE QUALITIES
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...
1 Understand and justify the selection of the most appropriate system development approach for the project.	Knowledgeable Creative and critical thinker
2 Evaluate object oriented approaches in advanced system analysis and design in a business context.	Creative and critical thinker Engaged
3 Communicate the choice and use of systems analysis and design in a professional and business context.	Empowered Engaged
4 Design UML models for systems using object oriented approaches in a business context.	Creative and critical thinker Engaged

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. Pre-requisites

Must be enrolled in a postgraduate program.

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

5.4.   Specific assumed prior knowledge and skills (where applicable)

Not applicable

6.   How am I going to be assessed?

6.1.   Grading Scale

Standard Grading (GRD)

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

6.2.   Details of early feedback on progress

Weekly practice tests will be made available on Blackboard for formative feedback.

6.3.   Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Examination	Individual	20%	50 minutes	Week 5	Online Test (Quiz)
All	2	Examination	Individual	45%	2 hours	Week 8	Online Test (Quiz)
All	3	Report	Individual	35%	2,000 words	Week 11	Online Assignment Submission with plagiarism check

All - Assessment Task 1:   Mid-semester examination

GOAL:	To demonstrate knowledge and technical skills in system analysis and design using object-oriented approaches.	
PRODUCT:	Examination	
FORMAT:	A 50-minute examination comprising questions from the information obtained during workshop activities, lecture material and any additional readings.	
CRITERIA:	**No.**	**Learning Outcome assessed**
	1 Application of knowledge of systems analysis and design	1
	2 Use of advanced object-oriented approaches	1 2

All - Assessment Task 2:   Examination

GOAL:	To demonstrate knowledge of the systems analysis and design concepts	
PRODUCT:	Examination	
FORMAT:	A two (2) hour exam. The exam questions will be based on workshop activities, lectures and readings specified during the lecture series.	
CRITERIA:	**No.**	**Learning Outcome assessed**
	1 Demonstration of knowledge of the systems analysis and design concepts.	1
	2 Evaluation of the chosen approach(s) for the given case	2

All - Assessment Task 3: Written report

GOAL:	To demonstrate knowledge of Systems Analysis and Design concepts and ability to draw UML models from a case study.
PRODUCT:	Report
FORMAT:	You are required to write a report that includes an outline of systems requirements for an information systems solution to a business case study. This report will discuss methodologies and include models of the solution using unified modelling language.
CRITERIA:	

No.		Learning Outcome assessed
1	Analysis of a business case study	**1** **2**
2	Communication of technical information inn a clear and cohesive report	**3**
3	Advanced systems analysis and design using appropriate models	**4**
4	Justification of the recommendations based on the requirements for business system solution	**2**

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Directed study hours may vary by location. Student workload is calculated at 12.5 learning hours per one unit.

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

Please note: 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. Resources may be required or recommended.

REQUIRED?	AUTHOR	YEAR	TITLE	PUBLISHER
Required	Satzinger, JW, Jackson, RB & Burd SD	2016	Systems Analysis and Design: in a changing world	Cengage Learning

8.2. Specific requirements

Not applicable

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is your responsibility 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 and to familiarise yourself with the University's general health and safety principles by reviewing the online induction training 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:

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

10.3. Assessment: Submission penalties

Late submission of assessment tasks may 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 to negotiate an outcome.

10.4. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the Learning Advisers web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au.

10.5. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to Student Hub, email studentwellbeing@usc.edu.au or call 07 5430 1226.

10.6. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, , injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, AccessAbility Services can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to Student Hub, email AccessAbility@usc.edu.au or call 07 5430 2890.

10.7. 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

10.8. 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
Email: studentcentral@usc.edu.au