



# COIT11226 Systems Analysis

## Term 3 - 2018

Profile information current as at 25/04/2024 03:59 am

All details in this unit profile for COIT11226 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

### General Information

#### Overview

In this unit, you will develop skills in the planning, selection, and analysis phases of the systems development lifecycle (SDLC). Topics include feasibility studies, fact-finding techniques, system modelling, project planning, and user requirements.

#### Details

Career Level: *Undergraduate*

Unit Level: *Level 1*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

#### Pre-requisites or Co-requisites

There are no requisites for this unit.

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

#### Offerings For Term 3 - 2018

- Brisbane
- Distance
- Melbourne
- Sydney

#### Attendance Requirements

All on-campus students are expected to attend scheduled classes - in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

#### Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

## Class and Assessment Overview

### Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

### Class Timetable

#### [Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

#### [Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

### Assessment Overview

#### 1. **Written Assessment**

Weighting: 20%

#### 2. **Written Assessment**

Weighting: 40%

#### 3. **Examination**

Weighting: 40%

### Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

## CQUniversity Policies

**All University policies are available on the [CQUniversity Policy site](#).**

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

## Previous Student Feedback

### Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

#### Feedback from Have Your Say survey

##### Feedback

Students find it hard to understand each specific task in Assignment 2.

##### Recommendation

Assignment 2 will be more clearly worded and more carefully reviewed to ensure it helps the students better understand each specific task.

#### Feedback from Have Your Say survey

##### Feedback

Students did not realise that there were individual assignment forums as they were not shown with the other forums. They asked to make it explicit within the moodle home page.

##### Recommendation

Assignment forums will be made explicit within the Moodle home page. Further, the teaching staff will encourage all students to post any assignment related question to the related assignment forum for help and advice any time during the term.

## Unit Learning Outcomes

### On successful completion of this unit, you will be able to:

1. Describe, discuss and apply fact-finding, feasibility study, project planning, and user requirements techniques
2. Model the existing system/environment using appropriate techniques
3. Document the analysis phase of the systems development lifecycle by preparing analysis and user requirements reports.

Australian Computer Society (ACS) recognises the Skills Framework for the Information Age (SFIA). SFIA is in use in over 100 countries and provides a widely used and consistent definition of ICT skills. SFIA is increasingly being used when developing job descriptions and role profiles.

ACS members can use the tool MySFIA to build a skills profile at

<https://www.acs.org.au/professionalrecognition/mysfia-b2c.html>

This unit contributes to the following workplace skills as defined by SFIA. The SFIA code is included:

- Information Analysis (INAN)
- Business Analysis (BUAN)
- Data Analysis (DTAN)
- Systems Design (DESN)

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes		
	1	2	3
<b>1 - Written Assessment - 20%</b>	•		•

Assessment Tasks	Learning Outcomes		
	1	2	3
2 - Written Assessment - 40%		•	•
3 - Examination - 40%	•	•	

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes		
	1	2	3
1 - Communication	•	•	•
2 - Problem Solving	•	•	•
3 - Critical Thinking	•	•	•
4 - Information Literacy	•	•	•
5 - Team Work			
6 - Information Technology Competence	•	•	•
7 - Cross Cultural Competence			
8 - Ethical practice	•		•
9 - Social Innovation	•		
10 - Aboriginal and Torres Strait Islander Cultures			

### Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Written Assessment - 20%	•		•	•				•	•	
2 - Written Assessment - 40%	•	•	•			•		•		
3 - Examination - 40%	•	•	•					•	•	

## Textbooks and Resources

### Textbooks

COIT11226

#### Prescribed

##### **Modern Systems Analysis and Design**

8th edition (2017)

Authors: Joseph S. Valacich, Joey F. George

Pearson Higher Ed USA

New York , New York , United States of America

ISBN: 9781292154145

Binding: Paperback

#### **Additional Textbook Information**

Students can purchase the Modern Systems Analysis & Design, Global Edition (8e) eBook via this link:

<http://www.pearson.com.au/9781292154152> for \$60. With eBooks you can:

search for key concepts, words and phrases

make highlights and notes as you study

share your notes with friends

eBooks are downloaded to your computer and accessible either offline through the Bookshelf (available as a free download), available online and also via the iPad and Android apps.

Upon purchase, you will receive via email the code and instructions on how to access this product.

Time limit

The eBooks products do not have an expiry date. You will continue to access your digital eBook products whilst you have your Bookshelf installed.

However, if you still prefer a paper text, copies will still be available at the CQUni Bookshop

here: <http://bookshop.cqu.edu.au> (search the Unit code)

[View textbooks at the CQUniversity Bookshop](#)

### IT Resources

#### **You will need access to the following IT resources:**

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- MS Office or equivalent software
- MS Project
- MS Visio
- For CQUniversity Student Emails and Moodle Forums, all students must always check university emails and read all types of forum messages

## Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Sanjay Jha** Unit Coordinator

[s.jha@cqu.edu.au](mailto:s.jha@cqu.edu.au)

## Schedule

**Week 1 - 05 Nov 2018**

Module/Topic	Chapter	Events and Submissions/Topic
The Systems Development Environment	Chapter 1 from the textbook	

#### Week 2 - 12 Nov 2018

Module/Topic	Chapter	Events and Submissions/Topic
Managing the Information Systems Project Object-Oriented Analysis and Design: Project Management	Chapter 3 from the textbook Appendix of Chapter 3 from the textbook	

#### Week 3 - 19 Nov 2018

Module/Topic	Chapter	Events and Submissions/Topic
Identifying and Selecting Systems Development Projects	Chapter 4 from the textbook	

#### Week 4 - 26 Nov 2018

Module/Topic	Chapter	Events and Submissions/Topic
Initiating and Planning Systems Development Projects	Chapter 5 from the textbook	

#### Vacation Week - 03 Dec 2018

Module/Topic	Chapter	Events and Submissions/Topic

#### Week 5 - 10 Dec 2018

Module/Topic	Chapter	Events and Submissions/Topic
Determining System Requirements	Chapter 6 from the textbook	

#### Week 6 - 17 Dec 2018

Module/Topic	Chapter	Events and Submissions/Topic
Structuring System Process Requirements Object-Oriented Analysis and Design: Use Cases	Chapter 7 from the textbook Appendix 7A from the textbook	

#### Week 7 - 02 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
Structuring System Data Requirements Object-Oriented Analysis and Design: Object Modeling-Class Diagrams	Chapter 8 from the textbook Appendix of Chapter 8 from the textbook	<b>System Development and Planning</b> Due: Week 7 Thursday (3 Jan 2019) 9:00 pm AEST

#### Week 8 - 07 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
Object-Oriented Analysis and Design: Activity Diagrams Object-Oriented Analysis and Design: Sequence Diagrams Business Process Modeling	Appendix 7B from the textbook Appendix 7C from the textbook Appendix 7D from the textbook	

#### Week 9 - 14 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
Designing Databases	Chapter 9 from the textbook	

#### Week 10 - 21 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
Designing Forms and Reports	Chapter 10 from the textbook	

#### Week 11 - 28 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic

System Implementation  
Maintaining Information Systems

Chapter 13 from the textbook  
Chapter 14 from the textbook

**System Analysis: Techniques and Models** Due: Week 11 Thursday (31 Jan 2019) 9:00 am AEST

### Week 12 - 04 Feb 2019

Module/Topic	Chapter	Events and Submissions/Topic
Unit Review	No New Topics	

### Exam Week - 11 Feb 2019

Module/Topic	Chapter	Events and Submissions/Topic
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## Term Specific Information

Unit Coordinator Sanjay Jha  
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Email : s.jha@cqu.edu.au  
Tel : 02 93245064

## Assessment Tasks

### 1 System Development and Planning

#### Assessment Type

Written Assessment

#### Task Description

This is an individual assessment item. You are assumed to have been appointed as a systems analyst right after you completed your study. For the purpose of assessment 1, you recently commence a system development project. Your role is to analyse the Project Case Study supplied to you, identify critical elements, undertake the tasks and develop a report about systems analysis.

For your tasks, you are expected to document the tasks within the project in a report. In your report, for each task (enriching graphical diagrams are welcome) you explain:

- Discussion on given methodology towards system development
- What you will plan as your project work breakdown structure and timeline
- Show you project work breakdown structure and schedule as a Gantt Chart
- Cost-Benefit analysis

You will be required to use software, such as Microsoft Excel and Microsoft Project, to answer some questions. See Moodle for the expected written assessment format.

This assignment will be submitted online through Moodle unit website.

**The case study will be included in Assignment-1 on the Moodle unit website.**

#### Assessment Due Date

Week 7 Thursday (3 Jan 2019) 9:00 pm AEST

Late submissions are subject to the university late submission penalty policies.

#### Return Date to Students

Week 9 Thursday (17 Jan 2019)

Within 2 weeks of the due date or within 2 weeks of submission (whichever is the later)

#### Weighting

20%

#### Assessment Criteria

This assessment consists of multiple questions, each marked separately based on the followings.

- **Correctness:** the answer should be technically correct, not contain errors; justifications should explain the correct advantages and benefits while also touch on disadvantages; and
- **Clarity:** explanations, formatting and diagrams should be clear, consistent and relevant.

Marking Criteria:

- Discussion on Methodology towards System Development - 28 Marks
- Project Timeline of the Information System Project - 10 Marks
- Gantt Chart - 30 Marks
- 5-Year Cost/Benefit Analysis - 32 Marks

Assessment 1 marking criteria is accessible on Moodle unit website which will include details information on how it will be assessed.

### Referencing Style

- [Harvard \(author-date\)](#)

### Submission

Online

### Submission Instructions

Submit by clicking appropriate assessment submission link on Moodle unit website.

### Learning Outcomes Assessed

- Describe, discuss and apply fact-finding, feasibility study, project planning, and user requirements techniques
- Document the analysis phase of the systems development lifecycle by preparing analysis and user requirements reports.

### Graduate Attributes

- Communication
- Critical Thinking
- Information Literacy
- Ethical practice
- Social Innovation

## 2 System Analysis: Techniques and Models

### Assessment Type

Written Assessment

### Task Description

Both the Assessments 1 and 2 are related to the same project case study. Assessment 2 follows on from Assessment 1. Assessment 2 requires you to apply techniques and models to complete tasks in systems development, specifically during systems analysis. Techniques in this assessment refers to information gathering techniques. You will need to select, justify or use different techniques to identify, analyse and specify requirements. Models may include use cases, domain class models, activity diagrams, system sequence diagrams and others. There will be multiple questions on different topics, and you will be expected to submit an individual written assessment containing answers using model diagrams. You will be required to use software such as Microsoft Visio to answer some questions. You are to complete the following tasks in the order given based on the case study provided to you on the Moodle unit website:

**Task 1.** Investigating Healthstone hospital Information System (HHIS)

**Task 2.** Modelling Healthstone hospital Information System (HHIS)

- Use Case Diagrams
- A Class Diagram
- An Activity Diagram
- A System Sequence Diagram

This assignment will be submitted online through Moodle unit website.

**The case study will be provided on the Moodle unit website.**

### Assessment Due Date

Week 11 Thursday (31 Jan 2019) 9:00 am AEST

Late submissions are subject to the university late submission penalty policies.

### Return Date to Students

Thursday (14 Feb 2019)

Within 2 weeks of the due date or within 2 weeks of submission (whichever is the later)

### Weighting

40%

### Assessment Criteria

This assessment consists of multiple questions, each marked separately based on the followings.

- **Correctness:** the answer should be technically correct, not contain errors; justifications should explain the correct advantages and benefits while also touch on disadvantages; and
- **Clarity:** explanations, formatting and diagrams should be clear, consistent and relevant.

Marking Criteria:

- Introduction - 10 Marks
- Task 1. Investigating Healthstone Hospital Pharmacy Information System (HHPIS) - 20 Marks
- **Task 2.** Modelling Healthstone Hospital Pharmacy Information System Information System (HHPIS)
  - Use Case Diagrams - 14 Marks
  - A Class Diagram - 14 Marks
  - An Activity Diagram - 14 Marks
  - A System Sequence Diagram - 14 Marks
- Conclusions and Recommendations - 10 Marks
- References - 4 Marks

Assessment 2 marking criteria is accessible on Moodle unit website which will include details information on how it will be assessed.

### Referencing Style

- [Harvard \(author-date\)](#)

### Submission

Online

### Submission Instructions

Submit by clicking appropriate assessment submission link on Moodle unit website.

### Learning Outcomes Assessed

- Model the existing system/environment using appropriate techniques
- Document the analysis phase of the systems development lifecycle by preparing analysis and user requirements reports.

### Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Technology Competence
- Ethical practice

## Examination

### Outline

Complete an invigilated examination.

### Date

During the examination period at a CQUniversity examination centre.

### Weighting

40%

### Length

180 minutes

### Minimum mark or grade

Students must pass the exam with 20% or higher from the total exam mark to pass this unit.

### Exam Conditions

Closed Book.

### Materials

Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

## Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

### What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

### Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

### Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

### What can you do to act with integrity?



#### Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



#### Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



#### Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem