

INFO6050: Process Analysis and Problem Solving

Callaghan, Online and Sydney Elizabeth Street
Trimester 3 - 2023



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

OVERVIEW

Course Description	This course introduces tools and techniques used to observe, understand and describe workflows and processes within organisations. Students then utilise traditional and emerging techniques to identify problems and opportunities for improvement within these workflows and processes.
Academic Progress Requirements	Nil
Requisites	This course replaces INFO6040. If you have successfully completed INFO6040 you cannot enrol in this course.
Contact Hours	<p>Callaghan Computer Lab Face to Face On Campus 2 hour(s) per week(s) for 12 week(s) starting Week 2</p> <p>Online Activity Online 2 hour(s) per week(s) for 12 week(s) starting Week 1</p> <p>Online Online Activity Online 2 hour(s) per week(s) for 12 week(s) starting Week 1</p> <p>Tutorial Online 2 hour(s) per week(s) for 12 week(s) starting Week 1</p> <p>Sydney Elizabeth Street Computer Lab Face to Face On Campus 2 hour(s) per week(s) for 12 week(s) starting Week 2</p> <p>Online Activity Online 2 hour(s) per week(s) for 12 week(s) starting Week 1</p>
Unit Weighting Workload	10 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 **Callaghan**
eugene lutton
eugene.lutton@newcastle.edu.au
Consultation: Please Email for Consultation
Email Subject header: INFO6050 / Callaghan or Online or Sydney / Reason for email

Teaching Staff **Sydney:**
Dr Teuku Geumpana
Teuku.Geumpana@newcastle.edu.au

Other teaching staff will be advised on the course Canvas site.

School Office **School of Information and Physical Sciences**
SR233, Social Sciences Building
Callaghan
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9am-5pm (Mon-Fri)

SYLLABUS

Course Content

1. Process Analysis, fact finding techniques and process documentation tools.
2. Identifying opportunities and problems in the context of achieving business goals.
3. Problem Solving Techniques including, but not limited to, group facilitation, brainstorming, process analysis, BPR, best practice, quality review, Delphi rounds and mindmapping.
4. Creation of high quality business reports (both online and using more traditional approaches).

Course Learning Outcomes

On successful completion of this course, students will be able to:

1. Gather information on workplace processes and procedures, and document these in a clear and unambiguous manner.
2. Demonstrate expertise in using a set of tools and techniques that allow them to identify and clearly explain the strengths and weaknesses within these processes and procedures.
3. Use innovative problem-solving approaches to define improvements and alternatives to present methods.
4. Work within groups in ways that create synergies and facilitate high quality outcomes in each of the areas above.

Course Materials

Lecture Materials:

- PowerPoint lecture notes will be made available prior to the lecture each week. Additional readings will be posted on Canvas.

Recommended Text:

- Paul and Cadle (editors), Business Analysis 3+ edition. (4th edition Ebook can be accessed via link in course readings)
- Collins, Drake, Deacon, Business Analysis Techniques: 99 Essential Tools for Success , 9781780172736 (can be accessed via link in course readings)

COMPULSORY REQUIREMENTS

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

Course Assessment Requirements:

- Assessment 3 - Formal Exam:
- "Minimum Grade / Mark Requirement
- Students must obtain a specified minimum grade / mark 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."

SCHEDULE

Week	Week Begins	Topic	Learning Activity	Assessment Due
1	21 Aug	Introduction Please note this is an indicative course topic schedule	Online Activity	
2	28 Aug	Business Analysis Process Intro to Modelling	Computer labs commence: Discussion of lecture and activity/reading	
3	4 Sep	Strategy Analysis	Discussion of lecture and activity/reading	
4	11 Sep	Information Gathering	Discussion of lecture and activity/reading	Assessment 1 Friday
5	18 Sep	Stakeholder Analysis	Discussion of lecture and activity/reading	
6	25 Sep	Investigation	Discussion of lecture and activity/reading	
7	2 Oct	Modelling Public Holiday on the Monday	Discussion of lecture and activity/reading	
8	9 Oct	Critical thinking	Discussion of lecture and activity/reading	
9	16 Oct	Critical thinking	Discussion of lecture and activity/reading	
10	23 Oct	Group Critical thinking	Discussion of lecture and activity/reading	Assessment 4 Friday
11	30 Oct	Innovation	Discussion of lecture and activity/reading	
12	6 Nov	Revision		Assessment 2 Friday
Examination Period				

ASSESSMENTS

This course has 4 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Essays/Written Assignments	Week 4: 11:59 pm Friday 15 September 2023	Individual	15%	1, 2, 3, 4
2	Group/tutorial participation and contribution	Progressively during the Trimester Week 1: Commencing Monday 21 August 2023 Week 12: Final Submission: 11.59pm Friday 10 November 2023	Individual	25%	1, 2, 3
3	Formal Exam*		Individual	35%	1, 2, 3
4	Case Study	Week 10: 11:59pm Friday 27 October 2023	Individual	25%	1, 2, 3, 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 - Essays/Written Assignments

Assessment Type	Essay
Purpose	The Report is designed to provide the opportunity for the student to use the academic and professional literature to investigate and analyse a contemporary issue of Business Analysis. The research and findings is presented in a written report.
Weighting	15%
Due Date	Week 4: 11:59 pm Friday 15 September 2023
Submission Method	Online On Canvas
Assessment Criteria	Provided on Canvas
Return Method	Not Returned
Feedback Provided	Online - Once all assessments are marked.

Assessment 2 - Group/tutorial participation and contribution

Assessment Type	Tutorial / Laboratory Exercises
Purpose	The purpose and benefit of these activities is to provide students with the opportunity to research concepts presented in lectures, class or current ideas, and to reflect on their learning outcomes. In addition, this activity will provide the opportunity to undertake peer-to-peer reviews in forum activities. Each forum activity will have an opening and closing date. The final submission will take the form of a reflective journal, which will include the activities, peer reviews and reflections on the weekly activities as noted in the weekly lab notes. It is expected that you develop your journal as the course progresses.
Weighting	25%
Due Date	Progressively during the Trimester Week 1: Commencing Monday 21 August 2023 Week 12: Final Submission: 11.59pm Friday 10 November 2023
Submission Method	Online
Assessment Criteria	Provided on Canvas
Return Method	Not Returned
Feedback Provided	Online - Once all assessments are marked.

Assessment 3 - Formal Exam

Assessment Type	Formal Examination
Weighting	35%
Compulsory Requirements	Minimum Grade / Mark Requirement - Students must obtain a specified minimum grade / mark 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."
Due Date	In exam period
Submission Method	Online
Assessment Criteria	Correctness of Answers
Return Method	Not Returned
Feedback Provided	No Feedback
Opportunity to Reattempt	Students WILL be given the opportunity to reattempt this assessment.

Assessment 4 - Case Study

Assessment Type	Case Study / Problem Based Learning
Purpose	In the case study, students are presented with details of business systems and through systematic fact finding and documentation, identify operational issues and suggest ways to enhance these systems via a written report.
Weighting	25%
Due Date	Week 10: 11:59pm Friday 27 October 2023
Submission Method	Online Final Submission: Canvas- assignment link
Assessment Criteria	See Canvas
Return Method	Not Returned
Feedback Provided	Online - Once all assignments have been marked.

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	Failure to satisfactorily achieve learning outcomes. If all

	(FF)	compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.
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*Skills are those identified for the purposes of assessment task(s).

Attendance

Attendance/participation will be recorded in the following components:

- Computer Lab (Method of recording: (Method of recording: Class roll marked in class))

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.
- Face to Face: Communication will be provided via face to face meetings or supervision. Face to face is related to discussions in labs (online or on campus)

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.

As a result of student feedback, the following changes have been made to this offering of the course:

- Revised course content

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:

1. the assessment item is a major assessment item; or
2. 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; or
4. 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/no-room-for/policies-and-procedures> that support a safe and respectful environment at the University.

Graduate Profile Statement

Graduate attribute	University of Newcastle Master of IT Graduate Profile Statements	Taught	Practised	Assessed	Level of capability
1	Identify and analyse complex problems within information technology and design solutions to these problems at a highly skilled level	Y	Y	Y	4
2	Depth of technical information in at least one facet of information technology sufficient for a career in information technology together with the capacity to continue developing relevant knowledge, skills and expertise throughout their careers	Y	Y	Y	4
3	Manage projects in aspects of information technology relevant to their field of study, including the ability to develop, manage and participate at all levels in team environments	Y	Y	N	3
4	Professionalism and ethics in the context of the global information technology industry	Y	Y	N	3
5	Communicate effectively through a range of verbal, written and/or presentation skills at an advanced level	Y	Y	Y	4
6	Apply knowledge and skills to plan and execute a substantial capstone experience or a research-based project and/or piece of scholarship	N/A	N/A	N/A	N/A

This course outline was approved by the Head of School. 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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