PSYC12047 *Introduction to Data Analysis*
Term 2 - 2018

All details in this unit profile for PSYC12047 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

This unit will introduce you to preliminary concepts in statistics. The material covered in this unit will allow you to do research as part of your undergraduate and/or professional careers. The goal of this unit is to provide you with the skills to perform basic statistical analyses (e.g. t tests; ANOVA; chi-square; linear regression) as they apply in the health, human, and social sciences. It is a requirement of enrolment in the unit that you have competency at secondary level mathematics. Students lacking competency at secondary level (including basic algebra) are encouraged to contact the Academic Learning Centre (ALC) to discuss their options before enrolling in this unit.

Details

Career Level: *Undergraduate*
Unit Level: *Level 2*
Credit Points: *6*
Student Contribution Band: *7*
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 2 - 2018

- Adelaide
- Bundaberg
- Distance
- Rockhampton
- Townsville

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. **Online Quiz(zes)**
Weighting: 30%
2. **Portfolio**
Weighting: 40%
3. **Written Assessment**
Weighting: 10%
4. **Examination**
Weighting: 20%

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 Moodle feedback

Feedback

Many students have given positive feedback on the iterative assessment - stating this was crucial in helping them stay on top of the material

Recommendation

Maintain the strong role for iterative weekly assessment.

Feedback from Moodle feedback

Feedback

Improve the layout of the quizzes on the LHS panel of the Moodle site

Recommendation

There are many assessment involved, so navigation can be difficult. Suggest getting assistance from ITD on ensuring layout is in correct order, making it easier to find each one.

Feedback from Moodle feedback

Feedback

There were inconsistencies and errors on worksheets or assessment
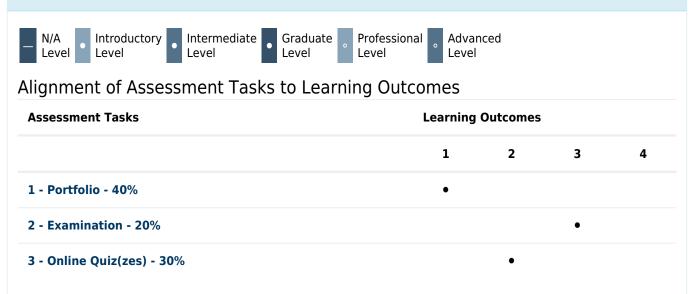
Recommendation

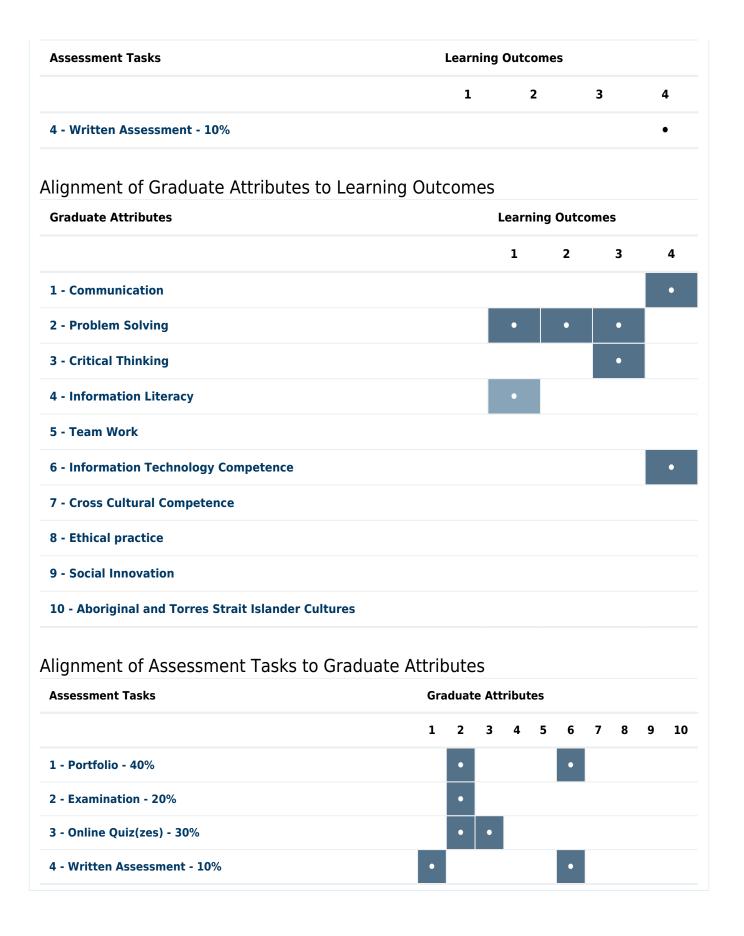Check worksheets thoroughly to ensure there are no errors or typographical issues.

Unit Learning Outcomes

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

1. Explain statistical procedures, including calculations
2. Apply statistical procedures.
3. Evaluate the use of statistics for research in the health, human, and social sciences
4. Utilise a data analysis software package, including the translation of statistical output into an APA style written summary

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level   ○ Introductory Level   ● Intermediate Level   ● Graduate Level   ○ Professional Level   ○ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	**2**	**3**	**4**
1 - Portfolio - 40%	●			
2 - Examination - 20%			●	
3 - Online Quiz(zes) - 30%		●		

Assessment Tasks	Learning Outcomes			
	1	2	3	4
4 - Written Assessment - 10%				•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
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 - Portfolio - 40%		•				•				
2 - Examination - 20%		•								
3 - Online Quiz(zes) - 30%		•	•							
4 - Written Assessment - 10%	•					•				

Textbooks and Resources

Textbooks
PSYC12047
Prescribed

Understanding Statistics in Psychology with SPSS
Edition: 7th edn (2017)
Authors: Howitt, D., & Cramer, D.
Pearson
Harlow , Essex , UK
ISBN: 9781292134215
Binding: Paperback

Additional Textbook Information

View textbooks at the CQUniversity Bookshop

IT Resources
You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- GNU PSPP (free statistics analysis program)

Referencing Style

All submissions for this unit must use the referencing style: American Psychological Association 6th Edition (APA 6th edition)
For further information, see the Assessment Tasks.

Teaching Contacts

Lisa Lole Unit Coordinator
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Schedule

Week 1 - 09 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to data analysis	1 and 2	-

Week 2 - 16 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
Data distributions & Describing our variables	3, 4, and 5	-

Week 3 - 23 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
Z-scores, Percentiles, and Probability	6 and 19	Online Quiz 1 AVAILABLE: Week 3 Monday (23 Jul 2018) 9:00 am AEST

Week 4 - 30 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic

Module/Topic	Chapter	Events and Submissions/Topic
Data relationships & How do I choose what test to use?	7	**Online Quiz** Due: Week 4 Monday (30 July 2018) 9:00 am AEST

Week 5 - 06 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
Correlation	8 and 11	Calculation Portfolio Task 1 AVAILABLE: Week 5 Monday (6 Aug 2018) 9:00 am AEST

Vacation Week - 13 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
-	-	**Calculation Portfolio** Due: Vacation Week Monday (13 Aug 2018) 9:00 am AEST

Week 6 - 20 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
Hypothesis testing	10, 12, and 20	Online Quiz 2 AVAILABLE: Week 6 Monday (20 Aug 2018) 9:00 am AEST

Week 7 - 27 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
Effect size and confidence intervals & Reporting our results	15, 16, and 17	Online Quiz 2 DUE: Week 7 Monday (27 Aug 2018) 9:00 am AEST; Calculation Portfolio Task 2 AVAILABLE: Week 7 Monday (27 Aug 2018) 9:00 am AEST

Week 8 - 03 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
Paired samples t-test	13	Online Quiz 3 AVAILABLE: Week 8 Monday (3 Sep 2018) 9:00 am AEST; Calculation Portfolio Task 2 DUE: Week 8 Monday (3 Sep 2018) 9:00 am AEST

Week 9 - 10 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
Independent samples t-test	14	Online Quiz 3 DUE: Week 9 Monday (10 Sep 2018) 9:00 am AEST; Calculation Portfolio Task 3 AVAILABLE: Week 9 Monday (10 Sep 2018) 9:00 am AEST

Week 10 - 17 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
Chi-square test	18	Calculation Portfolio Task 3 DUE: Week 10 Monday (17 Sep 2018) 9:00 am AEST

Week 11 - 24 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
One-way and two-way independent groups ANOVA	22, 23, and 25	Calculation Portfolio Task 4 AVAILABLE: Week 11 Monday (24 Sep 2018) 9:00 am AEST

Week 12 - 01 Oct 2018

Module/Topic	Chapter	Events and Submissions/Topic

		Calculation Portfolio Task 4 DUE: Week 12 Monday (1 Oct 2018) 9:00 am AEST;
Partial correlation & Simple regression	9 and 32	
		Computer Task Due: Week 12 Friday (5 Oct 2018) 11:55 pm AEST

Review/Exam Week - 08 Oct 2018

Module/Topic	Chapter	Events and Submissions/Topic

Exam Week - 15 Oct 2018

Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

Assessment Tasks

1 Online Quiz

Assessment Type
Online Quiz(zes)

Task Description
Online quizzes are to be taken in Weeks 3, 6, and 8; they will be open from 09:00 (AEST) Monday of these weeks, until 09:00 (AEST) on Monday of the following week.
Online tests are comprised of 20 multiple-choice questions, and you will have 20 minutes to answer these.

- Quiz 1 (held in Week 3) will cover material from Weeks 1 and 2
- Quiz 2 (held in Week 6) will cover material from Weeks 3, 4, and 5
- Quiz 3 (held in Week 8) will cover material from Weeks 6 and 7

You have one attempt at each quiz.

Number of Quizzes
3

Frequency of Quizzes
Other

Assessment Due Date
Week 4 Monday (30 July 2018) 9:00 am AEST
Quiz 1 is due 09:00am (AEST) on 30/07/2018; Quiz 2 is due 09:00am (AEST) on 27/08/2018; Quiz 3 is due 09:00am (AEST) on 10/09/2018

Return Date to Students
Week 4 Monday (30 July 2018)
Grades and feedback will be made available in Moodle immediately after each quiz closes (see DUE dates above).

Weighting
30%

Assessment Criteria
Each correct answer will be awarded half (0.5) a mark.

Referencing Style

- American Psychological Association 6th Edition (APA 6th edition)

Submission
Online

Learning Outcomes Assessed

- Apply statistical procedures.

Graduate Attributes

- Problem Solving
- Critical Thinking

2 Calculation Portfolio

Assessment Type
Portfolio

Task Description
Calculations are to be conducted online in Weeks 5, 7, 9, and 11.
They will be opened from 09:00 (AEST) Monday morning of the corresponding week, and will stay open until 09:00 (AEST) the following Monday.
You have one attempt for each week, in which you will have two (2) hours to complete the task.

Assessment Due Date
Vacation Week Monday (13 Aug 2018) 9:00 am AEST
Calculations 1 is due 09:00am (AEST) on 13/08/2018; Calculations 2 is due 09:00am (AEST) on 03/09/2018; Calculations 3 is due 09:00am (AEST) on 17/09/2018; Calculations 4 is due 09:00am (AEST) on 01/10/2018

Return Date to Students
Vacation Week Monday (13 Aug 2018)
Grades and feedback will be made available in Moodle immediately after each task closes (see DUE dates above).

Weighting
40%

Assessment Criteria
Each correct answer will be awarded one (1) mark.

Referencing Style

- [American Psychological Association 6th Edition (APA 6th edition)](#)

Submission
Online

Learning Outcomes Assessed

- Explain statistical procedures, including calculations

Graduate Attributes

- Problem Solving
- Information Technology Competence

3 Computer Task

Assessment Type
Written Assessment

Task Description
You will be required to run an analysis using computer-based statistics software, as well as interpret and report the results in APA format.

Assessment Due Date
Week 12 Friday (5 Oct 2018) 11:55 pm AEST

Return Date to Students
Exam Week Friday (19 Oct 2018)

Weighting
10%

Assessment Criteria
This assessment will be graded out of 10. Marks will be allocated, according to the following criteria:
1. Correct calculation of the given data (4 marks)
2. Results reported and interpreted correctly (4 marks)

3. Results written according to APA standards (2 marks)

Referencing Style

- [American Psychological Association 6th Edition (APA 6th edition)](#)

Submission
Online

Learning Outcomes Assessed

- Utilise a data analysis software package, including the translation of statistical output into an APA style written summary

Graduate Attributes

- Communication
- Information Technology Competence

Examination

Outline
Complete an invigilated examination.

Date
During the examination period at a CQUniversity examination centre.

Weighting
20%

Length
90 minutes

Exam Conditions
Closed Book.

Materials
Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).
Calculator - non-programmable, no text retrieval, silent only

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