PSYC12047 *Introduction to Data Analysis*
Term 2 - 2019

Profile information current as at 12/10/2024 04:32 pm

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 career/s. 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, etc.), as they apply in the health, human, and social sciences. It is a recommendation 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 - 2019

- Adelaide
- Bundaberg
- Online
- 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: 40%
2. **Portfolio**
Weighting: 50%
3. **Written Assessment**
Weighting: 10%

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 Unit evaluations and personal email correspondence with students

Feedback

Students provided positive feedback on the structure and delivery of the lectures. Specifically, they found the 'what, why, how' approach easy to follow. They also said they appreciated the step-by-step explanations and demonstrations of calculation steps for each statistical test.

Recommendation

Continue the practical approach to the theoretical and calculation aspects of the unit.

Feedback from Unit evaluations

Feedback

Students generally appreciated the iterative assessment schedule of the unit, and noted that this approach helped them to stay on top of the content and focus their learning efforts effectively.

Recommendation

Continue the iterative assessment schedule.

Feedback from Moodle forums and email correspondence

Feedback

Feedback was given concerning the amount of time given for the Online Quizzes; specifically, they advised that they would appreciate an extra five minutes reading time (i.e., in addition to the 20 minutes) for each quiz.

Recommendation

Include a five-minute reading time for each of the Online Quiz assessment tasks, in order to enable students to familiarise themselves with the questions.

Unit Learning Outcomes

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

1. Explain and evaluate different statistical methods and procedures
2. Apply statistical procedures, methods and calculations
3. Translate statistical output into a summary, formatted in APA style.

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
1 - Online Quiz(zes) - 40%	•		•
2 - Portfolio - 50%		•	
3 - Written Assessment - 10%	•	•	•

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 - Online Quiz(zes) - 40%		•		•						
2 - Portfolio - 50%		•				•				
3 - Written Assessment - 10%	•		•	•		•				

Textbooks and Resources

Textbooks

PSYC12047

Prescribed

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

Additional Textbook Information
Paper copies can be purchased from the CQUni Bookshop here: http://bookshop.cqu.edu.au (search on the Unit code)
eBook copies can be purchased from the publisher's website here: https://pearson.com.au/9781292134253

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 - 15 Jul 2019

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

Week 2 - 22 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Data distributions & Describing our variables	3, 4, and 5	**Online Quiz #1** AVAILABLE: Week 2 Wednesday (24 Jul. 2019) 9:00 am AEST

Week 3 - 29 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic

Z-scores, Percentiles, & Probability	6, 10, and 19	**Calculation Portfolio #1** AVAILABLE: Week 3 Wednesday (31 Jul. 2019) 9:00 am AEST **Online Quiz** Due: Week 3 Wednesday (31 July 2019) 9:00 am AEST
Week 4 - 05 Aug 2019		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
Data relationships & What test to use?	7	**Online Quiz #2** AVAILABLE: Week 4 Wednesday (7 Aug. 2019) 9:00 am AEST **Calculation Portfolio** Due: Week 4 Wednesday (7 Aug 2019) 9:00 am AEST
Week 5 - 12 Aug 2019		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
Hypothesis testing & Reporting our results	12, 15, and 20	**Online Quiz #2** DUE: Week 5 Wednesday (14 Aug. 2019) 9:00 am AEST **Online Quiz #3** AVAILABLE: Week 5 Wednesday (14 Aug. 2019) 9:00 am AEST
Vacation Week - 19 Aug 2019		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
-	-	-
Week 6 - 26 Aug 2019		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
Correlation	8 and 11	**Online Quiz #3** DUE: Week 6 Wednesday (28 Aug. 2019) 9:00 am AEST **Calculation Portfolio Task #2** AVAILABLE: Week 6 Wednesday (28 Aug. 2019) 9:00 am AEST
Week 7 - 02 Sep 2019		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
Simple regression & Partial correlation	9 and 32	**Calculation Portfolio Task #2** DUE: Week 7 Wednesday (4 Sept. 2019) 9:00 am AEST **Online Quiz #4** AVAILABLE: Week 7 Wednesday (4 Sept. 2019) 9:00 am AEST
Week 8 - 09 Sep 2019		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
Related samples *t*-test	13	**Online Quiz #4** DUE: Week 8 Wednesday (11 Sept. 2019) 9:00 am AEST **Calculation Portfolio #3** AVAILABLE: Week 8 Wednesday (11 Sept. 2019) 9:00 am AEST
Week 9 - 16 Sep 2019		
Module/Topic	**Chapter**	**Events and Submissions/Topic**

Unrelated samples *t*-test	14	**Calculation Portfolio #3** DUE: Week 9 Wednesday (18 Sept. 2019) 9:00 am AEST **Calculation Portfolio #4** AVAILABLE: Week 9 Wednesday (18 Sept. 2019) 9:00 am AEST
Week 10 - 23 Sep 2019		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
Chi-square test	18	**Calculation Portfolio Task #4** DUE: Week 10 Wednesday (25 Sept. 2019) 9:00 am AEST **Calculation Portfolio Task #5** AVAILABLE: Week 10 Wednesday (25 Sept. 2019) 9:00 am AEST
Week 11 - 30 Sep 2019		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
One-way and *two-way* independent groups ANOVA	22, 23, and 25	**Calculation Portfolio Task #5** DUE: Week 11 Wednesday (2 Oct. 2019) 9:00 am AEST
Week 12 - 07 Oct 2019		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
Effect size & Confidence intervals	16 and 17	**Computer Task** Due: Week 12 Wednesday (9 Oct 2019) 9:00 am AEST
Review/Exam Week - 14 Oct 2019		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
-	-	-
Exam Week - 21 Oct 2019		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
-	-	-

Assessment Tasks

1 Online Quiz

Assessment Type
Online Quiz(zes)

Task Description
Online quizzes will be open from 09:00 (AEST) on the Wednesday of Weeks 2, 4, 5, and 7.

The ones available in Weeks 2, 4, and 7 will be due one week from opening, i.e., at 09:00 (AEST) on the Wednesdays of Weeks 3, 5, and 8; the one due available in Week 5 will close two weeks from opening, at 09:00 (AEST) on the Wednesday of Week 6 (i.e., Online Quiz # 3 is not due in Vacation Week).

Online tests are comprised of 20 multiple-choice questions, and you will have 25 minutes to answer these.

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

You have one attempt at each quiz.

Number of Quizzes
4

Frequency of Quizzes
Other

Assessment Due Date
Week 3 Wednesday (31 July 2019) 9:00 am AEST

Quiz #1 is due 09:00am (AEST) on 31/07/2019; Quiz #2 is due 09:00am (AEST) on 14/08/2019; Quiz #3 is due 09:00am (AEST) on 28/08/2019; Quiz #4 is due 09:00am (AEST) on 11/09/2019

Return Date to Students
Week 3 Wednesday (31 July 2019)

Grades and feedback will be made available in Moodle immediately after each quiz closes (see DUE dates above).

Weighting
40%

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

Submission Instructions
These timed quizzes are to be taken via the Moodle site.

assessmentOutcome

- Explain and evaluate different statistical methods and procedures
- Translate statistical output into a summary, formatted in APA style.

assessmentGradAttribute

- Problem Solving
- Information Literacy

2 Calculation Portfolio

Assessment Type
Portfolio

Task Description
Calculation Portfolios will be open from 09:00 (AEST) on the Wednesday of Weeks 3, 6, 8, 9, and 10.

All are due one week from opening, i.e., at 09:00 (AEST) on the Wednesdays of Weeks 4, 7, 9, 10, and 11, respectively.

You have one attempt for each Calculation Portfolio task, for which you will have two (2) hours to complete it.

Assessment Due Date
Week 4 Wednesday (7 Aug 2019) 9:00 am AEST

Calculation task #1 is due 09:00am (AEST) on 07/08/2019; Calculation task #2 is due 09:00am (AEST) on 04/09/2019; Calculation task #3 is due 09:00am (AEST) on 18/09/2019; Calculation task #4 is due 09:00am (AEST) on 25/09/2019; Calculation task #5 is due 09:00am (AEST) on 02/10/2019

Return Date to Students
Week 4 Wednesday (7 Aug 2019)

Grades and feedback will be made available in Moodle immediately after each task closes (see DUE dates above).

Weighting
50%

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

Referencing Style

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

Submission
Online

Submission Instructions
These timed calculation tasks are to be taken via the Moodle site.

assessmentOutcome

- Apply statistical procedures, methods and calculations

assessmentGradAttribute

- Problem Solving
- Information Technology Competence

3 Computer Task

Assessment Type
Written Assessment

Task Description
You will be required to choose and run an appropriate statistical analysis using computer-based software, as well as interpret and report these results in American Psychological Association (APA) format.

Assessment Due Date
Week 12 Wednesday (9 Oct 2019) 9:00 am AEST

Return Date to Students
Exam Week Wednesday (23 Oct 2019)

Assessments with feedback will be returned approximately two weeks from the due date.

Weighting
10%

Assessment Criteria
This assessment will be graded out of 10. Marks will be allocated, according to the following criteria:

1. Selection of an appropriate statistical analysis for the given data (2 marks)

2. Justification for the choice of statistical test (2 marks)

3. Results reported and interpreted correctly (4 marks)

4. Results written according to American Psychological Association (APA) standards (2 marks)

Referencing Style

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

Submission
Online

Submission Instructions
Students will upload a Word document with their submission to the Moodle site.

assessmentOutcome

- Explain and evaluate different statistical methods and procedures
- Apply statistical procedures, methods and calculations
- Translate statistical output into a summary, formatted in APA style.

assessmentGradAttribute

- Communication
- Critical Thinking
- Information Literacy
- Information Technology Competence

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