



# PSYC13015 *Advanced Methods in Psychology*

## Term 2 - 2021

Profile information current as at 06/05/2024 02:51 am

All details in this unit profile for PSYC13015 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 give you the analytic skills necessary to carry out advanced applied research. There is both theory and computer 'hands-on' experiential exercises. The primary aim of the unit is to introduce you to a variety of univariate and multivariate analytic techniques (e.g., t-test, ANOVA, ANCOVA, Regression, GLM) as well as developing skills in applying appropriate analyses relevant to a specific research design. It builds on earlier units by introducing more advanced statistical techniques and requires the use of industry standard software packages such as SPSS. Online tutorial sessions allow the chance to practice core SPSS skills.

#### Details

Career Level: *Undergraduate*

Unit Level: *Level 3*

Credit Points: 6

Student Contribution Band: 7

Fraction of Full-Time Student Load: 0.125

#### Pre-requisites or Co-requisites

PSYC12047 and PSYC12048.

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 - 2021

- Adelaide
- Bundaberg
- Cairns
- 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. **Written Assessment**

Weighting: 15%

#### 2. **Research Assignment**

Weighting: 40%

#### 3. **Report**

Weighting: 45%

### 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, email, self-reflection.

##### Feedback

There is a suitable number of assessment tasks to develop SPSS data analysis skills and writing results in APA style.

##### Recommendation

Maintain the number and type of assessment tasks in 2021.

#### Feedback from Moodle feedback, email, self-reflection.

##### Feedback

Providing too many video resources (e.g., SPSS video demonstrations) from previous years overwhelmed some students.

##### Recommendation

Only provide one year's worth of past material and signpost whether optional or essential.

#### Feedback from Moodle feedback, email, self-reflection.

##### Feedback

Lecturer was patient and wanted students to grasp difficult material.

##### Recommendation

Maintain commitment and student engagement in 2021.

## Unit Learning Outcomes

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

1. Prepare data sets suitable for analysis in SPSS
2. Utilise advanced working knowledge of appropriate statistical tests for analyses in SPSS
3. Write-up the results of advanced analyses in scientific APA style.

The external accrediting body is Australian Psychology Accreditation Council (APAC). The unit fulfills one of the key foundational competencies outlined in the accreditation document for students completing a 3 year psychology degree, i.e. *they will acquire a depth of understanding of underlying principles, theories and concepts in the discipline, using a scientific approach to research methods and statistics*. This is a compulsory (year 3) unit required to successfully complete the course.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes		
	1	2	3
1 - Research Assignment - 40%	•	•	
2 - Written Assessment - 15%	•		•

Assessment Tasks	Learning Outcomes		
	1	2	3
3 - Report - 45%		•	•

## 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 - Research Assignment - 40%	•	•	•			•				
2 - Written Assessment - 15%	•					•				
3 - Report - 45%	•	•	•	•		•				

## Textbooks and Resources

### Textbooks

PSYC13015

#### Prescribed

##### **Discovering Statistics using IBM SPSS Statistics**

5th Edition (2017)

Authors: Andy Field

Sage

London , UK

ISBN: 9781526419521

Binding: Paperback

PSYC13015

#### Supplementary

##### **Publication Manual of the American Psychological Association (APA)**

7th Edition (2019)

Authors: American Psychological Association

American Psychological Association

Washington , DC , USA

ISBN: 9781433832161

Binding: Paperback

PSYC13015

#### Supplementary

##### **SPSS Statistics: A Practical Guide**

4th Edition (2018)

Authors: Peter Allen, Kellie Bennett, Brody Heritage

CENGAGE

Australia

ISBN: 9780170421140

Binding: Paperback

#### Additional Textbook Information

Both paper and eBook versions can be purchased at the CQUni Bookshop here: <http://bookshop.cqu.edu.au> (search on 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)
- IBM SPSS Statistics GradPack. Ideally buy the latest version (v28) and either the Standard or Premium edition. This course requires the Standard feature set.

## Referencing Style

All submissions for this unit must use the referencing style: [American Psychological Association 7th Edition \(APA 7th edition\)](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Darren Walker** Unit Coordinator

[d.j.walker@cqu.edu.au](mailto:d.j.walker@cqu.edu.au)

## Schedule

### Week 1 - 12 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Statistics and SPSS	Field Ch 1-4 (skim expected, see Moodle)	

### Week 2 - 19 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Comparison of Means T tests	Field Ch 10 (full) and 7 (skim)	Minor Data Analysis assessment dataset available

### Week 3 - 26 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Comparison of Means One-Way ANOVA (between-subjects)	Field Ch 12 (full) and 7 (skim)	Major Data Analysis assessment dataset available

### Week 4 - 02 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Comparison of Means One-Way ANOVA (within-subjects)	Field Ch 15 (full) and 7 (skim)	<b>Minor Data Analysis</b> Due: Week 4 Monday (2 Aug 2021) 11:45 pm AEST

### Week 5 - 09 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Factorial ANOVA (Introduction)	Field Ch 14 and 15	

### Vacation Week - 16 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
	Catch up reading if needed	

### Week 6 - 23 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Further ANOVA (e.g. Mixed Designs)	Field Ch 16	

### Week 7 - 30 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Categorical data	Field Ch 19	Mini-Report assessment dataset available

### Week 8 - 06 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
ANCOVA	Field Ch 13	<b>Major Data Analysis</b> Due: Week 8 Monday (6 Sept 2021) 11:45 pm AEST

### Week 9 - 13 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Correlation and Regression	Field Ch 8 and 9	

### Week 10 - 20 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Bringing it all together	No set textbook chapter	

### Week 11 - 27 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Mini-report preparation (Discussion writing)	No set textbook chapter	

### Week 12 - 04 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic
Mini-report preparation (self study)	No set textbook chapter	<b>Mini-Report</b> Due: Week 12 Monday (4 Oct 2021) 11:45 pm AEST
<b>Review/Exam Week - 11 Oct 2021</b>		
Module/Topic	Chapter	Events and Submissions/Topic
		No Exam
<b>Exam Week - 18 Oct 2021</b>		
Module/Topic	Chapter	Events and Submissions/Topic
		No Exam

## Term Specific Information

Dr. Darren Walker (Cairns Campus) ; d.j.walker@cqu.edu.au ; 07-4037-5122

This is an advanced statistics course. Students are expected to have successfully completed PSYC12047. It is suggested students spend a few hours refreshing any lecture notes and/or textbook chapters from this unit prior to starting PSYC13015.

Students are expected to have purchased and loaded a recent (e.g., 26 onwards) version of IBM SPSS (Standard or Premium edition, not Base) onto their computer BEFORE week 1. Hearne software is a reputable supplier for students. There are no exams (invigilated or 'take home') for this unit, nor any minimum marks per assessment.

## Assessment Tasks

### 1 Minor Data Analysis

#### Assessment Type

Written Assessment

#### Task Description

You will be given a dataset that requires a one-way Analysis of Variance (ANOVA) covered in the unit. You will be required to enter the data into SPSS, analyse it and write up concisely using APA style.

#### Assessment Due Date

Week 4 Monday (2 Aug 2021) 11:45 pm AEST

#### Return Date to Students

Vacation Week Friday (20 Aug 2021)

Within 2 teaching weeks of submission (it could be returned in vacation week)

#### Weighting

15%

#### Assessment Criteria

The % of marks awarded will be split among the following criteria : appropriate analysis, assumption testing, correct interpretation of statistical output, statistics written concisely in APA format, additional statistics, e.g. effect size.

#### Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

#### Submission

Online

#### Submission Instructions

Word format preferred

#### Learning Outcomes Assessed

- Prepare data sets suitable for analysis in SPSS
- Write-up the results of advanced analyses in scientific APA style.

## Graduate Attributes

- Communication
- Information Technology Competence

## 2 Major Data Analysis

### Assessment Type

Research Assignment

### Task Description

The assessment will be provided in week 3. You will be asked to complete a series of short answer questions. You will need to enter data into SPSS, run statistical tests and interpret the output in order to find answers to these questions.

### Assessment Due Date

Week 8 Monday (6 Sept 2021) 11:45 pm AEST

### Return Date to Students

Week 11 Monday (27 Sept 2021)

Within 3 weeks of submission (detailed feedback provided)

### Weighting

40%

### Assessment Criteria

Each of the short answer questions will be worth a proportion of the total marks for assessment. The amount each question will be worth will be explicitly stated on the assessment. Marks will reflect the CQUniversity grades descriptor and range. For example, 4 marks out of 5 = 80%, which is a Distinction grade; whilst 3 marks out of 5 = 60% which is a Pass grade.

### Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

### Submission

Online

### Submission Instructions

Word format preferred

### Learning Outcomes Assessed

- Prepare data sets suitable for analysis in SPSS
- Utilise advanced working knowledge of appropriate statistical tests for analyses in SPSS

## Graduate Attributes

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

## 3 Mini-Report

### Assessment Type

Report

### Task Description

A synopsis of a research problem with accompanying data set (s) will be provided by week 7. You are to select the appropriate procedures from the material taught in the unit and analyse the data using SPSS. You will write up a report on the results (a skeleton outline will be given for guidance), using graphs and/or tables as required. You will also interpret and discuss the results in light of the research problem provided. The submission will thus be in the form of an abbreviated APA-style report, with a 'Results' and 'Discussion' section.

### Assessment Due Date

Week 12 Monday (4 Oct 2021) 11:45 pm AEST

### Return Date to Students

Exam Week Friday (22 Oct 2021)

Within 3 weeks of submission (detailed feedback provided)

### Weighting

45%



**Assessment Criteria**

1. Appropriate selection and application of the relevant statistical procedures and techniques, including any required screening and/or data pre-processing (15%)
2. Appropriate presentation and interpretation of the results, including the use of well-formatted graphs and/or tables as required (25%)
3. Appropriate critical discussion and explanation of the results in light of the research question (s), including an acknowledgement of any strengths and weaknesses of the analysis (50%)
4. Written expression and use of references (10%)

**Referencing Style**

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

**Submission**

Online

**Submission Instructions**

Word format preferred

**Learning Outcomes Assessed**

- Utilise advanced working knowledge of appropriate statistical tests for analyses in SPSS
- Write-up the results of advanced analyses in scientific APA style.

**Graduate Attributes**

- Communication
- Problem Solving
- 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