

# 1. General Course Information

# 1.1 Course Details

Course Code:	1003PSY
Course Name:	Research Methods and Statistics in Psychology
Trimester:	Trimester 2, 2024
Program:	Diploma of Social and Psychological Science
Credit Points:	10
Course Coordinator:	Tony Hurd
Document modified:	29/05/2024

# **Course Description**

Research Methods and Statistics introduces students to the core concepts of statistical analysis. It is introductory in nature and provides materials across a broad range of statistical techniques and methods. The focus of this course is to provide students with the ability to recognise situations in which statistical analysis may be useful, and the relevant techniques and methods that apply in those situations.

# Assumed Knowledge

No pre- or co-requisite knowledge

# 1.2 Teaching Team

Your teacher/s can be contacted via email as below:

You will also find their email in the Teacher's tile on your Course Site.

Name	Email
Tony Hurd	tony.hurd@staff.griffithcollege.edu.au

# 1.3 Meet with your teacher

Your teacher is available each week to meet outside of normal class times. This is called consultation. Times that your teacher will be available for consultation will be found on the Teacher's tile on your Course Site.

# 1.4 Timetable

Your timetable is available on the Griffith College Digital Campus at My Apps, Timetable.

# 1.5 Technical Specifications

All students must have access to a computer or suitable mobile device such as laptop or tablet (mobile phones are not suitable). In addition, up-to-date browser access, a reliable high-speed internet connection with enough upload and download capacity, a webcam and headset including microphone are needed.

# 2. Aims, Outcomes & Generic Skills

## 2.1 Course Aims

This course is designed to provide students with the basic statistical techniques needed for the study of their discipline. It aims to provide recognition where statistical analysis may be of benefit and introduce the range of methods that may apply to a given situation using real world examples.



# 2.2 Learning Outcomes

After successfully completing this course you should be able to:

- 1. Identify experimental designs, variables and types of data, and recognise their application in beginning psychological research.
- 2. Summarise and evaluate descriptive statistical information graphically or numerically to support data interpretation and analysis using statistical software.
- 3. Explain how probability and sampling are used in psychology research as the basis of inferential statistics.
- 4. Analyse data and apply a range of inferential statistical research methods in order to communicate knowledge in psychology.



# 2.3 Graduate Capabilities and Employability Skills

For further details on the Graduate Capabilities and Employability Skills please refer to the <u>Graduate Generic Skills and</u> <u>Abilities Policy</u>

Griffith College is committed to producing graduates who are able to demonstrate progress toward the development of a number of generic skills/capabilities that will allow them to successfully continue their studies at the tertiary level. This set of skills includes employability related skills that will ensure graduates are capable in the workplace of the future. Studies in this course will give you opportunities to begin to develop the following skills:

G	Focus within this course		
with	Teamwork	© •	
Interacting with People	Communication	<b>F</b> iq	$\checkmark$
Inter	Respect for Culture and Diversity		
or the e	Problem Solving	ô	$\checkmark$
Readiness for the Workplace	Planning and Organisation		$\checkmark$
	Creativity and Future Thinking		



# 3. Learning Resources

# 3.1 Required Learning Resources

A non-programmable scientific calculator (preferred model: CASIO fx series)

# 3.2 Recommended Learning Resources

Witte, R. S., & Witte, J.S. (2017). Statistics (11th ed). Wiley

Available for free online through Griffith Library – (Requires student s number login): Statistics Online

Redbook: Writing for Psychology and the Behavioural Sciences

#### https://redbook.org.au

Relevant readings may also be placed in the 1003PSY My Study modules on the Griffith College Portal throughout the trimester. You are also encouraged to find and bring in for discussion, your own readings relevant to the learning content topics that interest you.

# 3.3 College Support Services and Learning Resources

Griffith College provides many facilities and support services to assist students in their studies. Links to information about support resources that are available to students are included below for easy reference.

- <u>Digital Library</u> Databases to which Griffith College students have access to through the Griffith Library Databases.
- <u>Study Toolbox</u> there is a dedicated website for this course on the Griffith College Digital Campus.
- <u>Academic Integrity</u> Griffith College is committed to ensuring academic integrity is understood and maintained by all staff and students. All students learn about academic integrity through engagement with Academic Integrity online modules within the Academic and Professional Studies course.
- <u>Services and Support</u> provides a range of services to support students throughout their studies including
  academic advice and assignment help from Student Learning Advisors, and personal and welfare support from
  Student Counsellors.
- <u>Jobs and Employment</u> in the Student Hub can assist students with career direction, resume and interview preparation, job search tips, and more.
- <u>IT Support</u> provides details of accessing support, information on s numbers and internet access and computer lab rules.

# 3.4 Other Information about your Learning

#### **Preparation and Participation in Learning**

You need to prepare before attending your scheduled Learning Experience (In Class). Work through the Learning Content (Before Class) prepared by your teacher which is found on the course site. Make sure you complete the Learning Activities (After Class) set each week. Active participation in your learning will enhance your success. Ask questions when something is unclear or when you want to bring some issue to your teacher's attention; respond to questions to test your knowledge and engage in discussion to help yourself and others learn.

#### Attendance

You are expected to actively engage in all learning experiences which underpin the learning content in this course. Attendance will be recorded by your teacher in each learning experience to ensure you are meeting the requirements of the program you are studying and/or your visa conditions. You are expected to engage with the learning content and learning activities outside of timetabled class times. You are expected to bring all necessary learning resources to class such as the required textbook and /or Workbook.

#### **Consultation Sessions**

Teachers offer extra time each week to assist students outside the classroom. This is known as 'consultation time.' You may seek assistance from your teacher on email or in person according to how the teacher has explained this to the class. Attendance during consultation time is optional but you are encouraged to use this extra help to improve your learning outcomes.

#### **Course Learning Materials**

Learning materials are made available to you in the course site. The learning materials are arranged in Modules. In each Module you will find Learning Content (Before Class), Learning Experiences (In Class) and Learning Activities (After Class). Learning Content (Before Class) will be engaged with prior to the scheduled Learning Experience (In Class). This will ensure you are prepared for the scheduled Learning Experience (In Class) by being aware of the content to be covered and therefore will be able to actively participate in the session. Learning Activities (After Class) are accessed after the scheduled session for purposes of review, consolidation of learning, and preparation for the Evidence of Learning Tasks (Assessments) in the course.

#### Self-Directed Learning

You will be expected to learn independently. This means you must organise and engage with the course Learning Content (Before Class) even when you are not specifically asked to do so by your teacher. The weekly guide (below) will be helpful to organise your learning. This involves revising the weekly Learning Content (Before Class) and completing the Learning Activities (After Class). It also means you will need to find additional information to evidence your learning beyond that given to you, and to construct your own response to a question or topic. All of this requires careful planning of your time. Expect to spend, on average, at least 10 hours per week including class time for each of your courses.

#### **Program Progression**

You are reminded that satisfactory Program Progression requires that attendance in classes is maintained at equal to or greater than 80%, students are engaged in their learning and that GPA is maintained at equal to or greater than 3.5 [please see Griffith College Policy Library - <u>Program Progression Policy</u> - for more information].

#### International students enrolled in Language Development Modules (LDM100 / LDM200)

Successful completion of LDM100 and LDM200 is **required** to graduate with your Diploma award and progress to your Bachelor. If you do not achieve non-graded passes for these language modules your progression to your Bachelor will be affected. Please attend all your classes and submit your assessment.

#### Teacher and Course Evaluation

Your feedback is respected and valued by your teachers. You are encouraged to provide your thoughts on the course and teaching, both positive and critical, directly to your teacher or by completing course and teacher evaluations via Griffith College's evaluation tool whenever these are available.

# 4. Weekly Guide: Learning Content, Learning Experiences and Learning Activities

The information below lays out how your learning will be organised throughout the trimester:

Week	Learning Content (Before Class)	Learning Experiences (In Class)	Learning Activities (In Class)	Evidence of Learning (Assessment)	Learning Outcome
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	Module 1: Beginning Psychological Research				
1	Introduction to Research Methods & Statistics – (Experimental designs & Type of data) Textbook readings & exercises (CH 1)	Watch overview of course (Workshops, practical program and evidence of learning tasks) SPSS bridging videos Watch mini- lectures (YouTube: 1.1 – 1.2 + additional optional)	Guided tour of portal site Interactive class experiences (Experimental designs and types of data) Overview of SPSS statistical software SPSS activities	Formative experiences Quiz <i>(Portal activity)</i>	1
	Module 2: Descr	iptive Statistics			
2	<u>Describing</u> <u>Behaviour</u> <u>using</u> <u>Numbers</u>	Watch Mini- Lectures (YouTube: 2.1 – 2.3 + additional optional) Do exercises	Kahoot Quiz (In class – based on mini-lectures) Interactive class experiences	Formative in- class Quiz (In- class Kahoot)	1, 2
	Textbook readings & exercises (CHs 3 & 4)	(Text/Portal) Complete revision Quiz (Portal)	(Numerical Descriptive Statistics)	Formative experiences Quiz (Portal activity)	
3	Describing Behaviour using Graphs Textbook readings & exercises (CH 2)	Watch mini-lecture (YouTube: 3.1) Do exercises (Text/Portal) Complete Revision Quiz (Portal)	Kahoot Quiz (In Class – based on mini-lectures) Interactive class experiences (Graphical descriptive statistics)	Formative in- class Quiz (In- class Kahoot) Formative experiences Quiz (Portal activity)	1, 2
4	Normal distributions and z-scores Textbook readings & exercises (CH 5)	Watch mini- lectures (YouTube: 4.1 – 4.3) Do exercises (Text/Portal) Complete revision quiz (Portal) Complete SPSS Quiz (5%)	Interactive class experiences (Normal distribution and z-scores)	SPSS Skills (10% SPSS Quiz in Week 4).	1, 2
5	Revision for Mid- Trimester Exam	Practice exam	Exam preparation questions and discussion	Mid Trimester Exam (25%) Multiple Choice and Short Essay Quiz on Weeks 1-4	1, 2

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6	Correlation Analysis Textbook readings & exercises (CH 6)	Watch mini- lectures (YouTube: 6.1-6.7) Do exercises (Text/Portal) Complete revision Quiz (Portal) Read lab report information on portal	Kahoot Quiz (In class – based on mini-lectures) Interactive class experiences (Correlation) Lab report introduction	Formative in- class Quiz (In- class Kahoot) Formative experiences Quiz (Portal activity)	2
	Module 3: Probability and Sampling				
7	Probabi lity and Samplin g Textbook readings & exercises (CHs 8 & 9)	Watch mini- lectures (YouTube: 7.1-7.4) Do exercises (Text/Portal) Complete revision Quiz (Portal)	Kahoot Quiz (In class – based on mini-lectures) Interactive class experiences (Probability & Sampling) Casino Night	Formative in- class Quiz (In- class Kahoot) Formative experiences Quiz (Portal activity)	3
8	Statistical Inference Using Confidence Intervals Textbook readings & exercises (CH 12)	Watch mini- lectures (YouTube: 8.1-8.2) Do exercises (Text/Portal) Complete revision Quiz (Portal)	Kahoot Quiz (In Class – based on mini-lectures) Interactive class experiences (Understanding how and why we use confidence intervals for decision making)	Formative in- class Quiz (In- class Kahoot) Formative experiences Quiz (Portal activity)	3
9	Statistical Inference using Hypothesis Testing Textbook readings & exercises (CHs 10 & 11)	Watch mini- lectures (YouTube: 9.1-9.4) Do exercises (Text/Portal) Complete revision Quiz (Portal)	Kahoot Quiz (In class – based on mini-lectures) Interactive class experiences (Understanding how sampling error influences decision making)	Formative in- class Quiz (In- class Kahoot) Formative experiences Quiz (Portal activity)	3
Module 4: Applied Inferential Statistics					
10	Inferential Statistics (Repeated Measures t- tests) Textbook readings & exercises (CH 15)	Watch mini- lectures (YouTube: 10.1-10.2) Do exercises (Text/Portal) Complete revision Quiz (Portal)	Kahoot Quiz (In class – based on mini-lectures) Interactive class experiences (Applying hypothesis testing for within-subjects designs)	Formative in- class Quiz ( <i>In- class Kahoot</i> ) Formative experiences Quiz ( <i>Portal</i> <i>activity</i> )	4
11	Inferential Statistics (Independent Groups t- tests) Textbook readings & exercises (CH 14)	Watch mini-lecture (YouTube: 11.1) Do exercises (Text/Portal) Complete revision Quiz (Portal) Submit lab report (30%)	Interactive class experiences (Applying hypothesis testing for between- subjects designs)	Formative experiences Quiz (Portal activity) Lab Report (25%) due	4
12	Revision for Final Exam	Practice Final Exam	Final exam preparation questions and discussion		2, 3, 4



# 5. Evidence of Learning (Assessment)

# 5.1 Evidence of Learning Summary

	Evidence of Learning (Assessment)	Weighting	Learning Outcome	Due Date
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1	SPSS Examination	10%	1, 2	Week 4
2	Mid-Trimester Examination	25%	1, 2	Week 5
3	Laboratory Report	25%	2, 3	Week 11
4	Final Examination	40%	2, 3, 4	Examination Period

# 5.2 Evidence of Learning Task Detail.

Please note that generative artificial intelligence (generative AI) applications such as ChatGPT, Google Translate, Grammarly and Youdao (or equivalent services) are not permitted for assessment creation, translation, or extensive language assistance purposes. Wikipedia, and Baidu, Weibo and WeTalk are not permitted to be used.

Students should follow all teacher directions about the appropriate use of generative AI tools in terms of formative assessment tasks, citing the use of generative AI applications in summative assessment tasks and any other course specific preferences.

It should be noted that Turnitin now provides teaching staff with a generative AI percentage indicator similar to plagiarism detection capabilities accessible to teachers.

#### 1. Evidence of Learning Task 1: SPSS Examination (10%)

Task Type: Online SPSS Examination

Due Date: Week 4 (See course website for specific due date)

Weight: 10%, Marked out of: 10.

#### Duration: (10 Short answer questions) (60 mins)

**Task Description:** SPSS Exam consists of short answer questions that are to be solved using a SPSS statistical software package. The exam is worth 10% of the evidence of learning task of the course and examines materials taught in week 1 to 3 inclusively.

**Criteria and Marking:** Students are assessed on the accuracy of answers in interpreting SPSS data. **Submission:** Online Moodle Quiz (Assessment / Evidence of Learning Tile)

#### 2. Evidence of Learning Task 2: Mid-Trimester Examination (25%)

Task Type: In Class Closed Book Examination

Due Date: Week 5 during scheduled class time

Weight: 25%, Marked out of: 50

Duration: (40 Multiple Choice Questions & 3 Short Essay questions) (1 hour 30 mins)

**Task Description: The** Mid-Trimester Examination consists of multiple-choice and short essay questions covering the materials taught in learning experiences from weeks 1 to 4 inclusively. The mid- trimester exam is worth 25% of the evidence of learning tasks of the subject. The exam involves both theoretical and calculation questions.

Criteria and Marking: Students are assessed on accuracy in answers based on their understanding of the key learning content areas.

Submission: In person closed book Moodle Quiz (Assessment / Evidence of Learning Tile) taken on own device (Laptop/ Tablet)

#### 3. Evidence of Learning Task 3: Laboratory Report (25%)

#### Task Type: Report Due Date: Week 11 (See course website for specific due date). Weight: 25%, Marked out of 100 Length: (1500 words)

**Task Description:** The research report consists of a 1500 word APA report involving calculation, interpretation, and reporting of descriptive and inferential statistics. Details will be on the MyStudy page for the course.

**Criteria and Marking:** Marks for the report will be awarded for evidence that you have mastered the requirements of psychology report writing, as specified in the Publication Manual of the American Psychological Association (7<sup>th</sup> edition) with each section being marked against established criteria which will be published on the 1003PSY course site. The marking grid will be given to students at the same time as the instructions.

Submission: Online Turnitin submission via the course site

#### 4. Evidence of Learning Task 4: Final Examination (40%)

Task Type: In Person Closed Book Examination

Due Date: Exam Week as per Academic Calendar. Timetable will be published by end of Week 10 (TBA). Weight: 40%, Marked out of: 80

#### Duration: (Multiple Choice and Short Essay Questions) (2 hours 30 mins)

**Task Description:** Consists of multiple-choice and short-essay questions. To be successful in this exam, you need to have a solid understanding of all topics covered in the course. The exam, however, will mainly examine lecture materials taught in weeks 6 to 11 inclusively. The final exam is worth 40% of the evidence of learning tasks of the course. The exam will involve theoretical, interpretation, and calculation questions. Tables and formula sheets will be provided.

**Criteria and Marking:** This exam will be marked following a strict marking guide and will undergo a full moderation process. Marks will be awarded for evidence that you have understood, and can apply and evaluate, the content presented in learning experiences, SPSS output, and the required readings.

**Submission:** In person closed book Moodle Quiz (Assessment / Evidence of Learning Tile) taken on own device (Laptop/ Tablet). Details will be placed on the evidence of learning tile closer to the examination period.

In order to pass this course, students must:

A. Achieve an overall mark of 50% on the summed total of all assessment items.

B. Demonstrate assurance of learning of all learning outcomes through graded Evidence of Learning Tasks.

## 5.3 Late Submission

An Evidence of Learning Task submitted after the due date, without an approved extension from the teacher, will be penalised. The standard penalty is the reduction of the mark allocated to the Evidence of Learning Task by 5% of the maximum mark applicable for the Evidence of Learning Task, for each calendar day that the task is late. Evidence of learning tasks submitted more than seven calendar days after the due date are awarded zero marks.

Please refer to the Griffith College website - Policy Library > <u>Assessment Policy</u> for guidelines and penalties for late submission.

## 5.4 Other Information about Evidence of Learning

#### **Retention of Originals**

You must be able to produce a copy of all work submitted if so requested. Copies should be retained until after the release of final results for the Course.

#### **Requests for extension**

To apply for an extension of time for an evidence of learning task, you must submit an <u>Application for Extension</u> of <u>Assignment</u> form to your teacher at least 24 hours before the date the assignment is due. Grounds for extensions are usually: serious illness, accident, disability, bereavement or other compassionate circumstances and must be able to be substantiated with relevant documentation [e.g. <u>Griffith College Student Medical</u> <u>Certificate</u>]. Please refer to the Griffith College website – <u>Policy Library</u> for guidelines regarding extensions and deferred Evidence of Learning Tasks.

#### **Return of Evidence of Learning Tasks**

- 1. Marks awarded for in-trimester evidence of learning tasks, except those being moderated externally with Griffith University, will be available on the course site within fourteen [14] days of the due date. This does not apply to the final evidence of learning task in this course (marks for this task will be provided with the final course result).
- 2. Students will be advised of their final grade through the Digital Campus. Students can review their final exam papers after student grades have been published. Review of final exam papers will not be permitted after the final date to enrol.
- 3. Marks for **all** evidence of learning tasks including the final exam (if applicable) will be recorded in the Course Site and made available to students through the Course Site.

The sum of your marks of evidence of learning tasks in this course does not necessarily imply your final grade for the course. Standard grade cut off scores can be varied for particular courses, so you need to wait for the official release of grades to be sure of your grade for this course.

#### 6. Policies & Guidelines

Griffith College Evidence of Learning Tasks-related policies can be found in the <u>Griffith College Policy Library</u> which include the following policies:

Assessment Policy, <u>Special Consideration</u>, <u>Deferred Assessment</u>, <u>Alternate Exam Sittings</u>, <u>Medical Certificates</u>, <u>Academic Integrity</u>, <u>Finalisation of Results</u>, <u>Review of Marks</u>, <u>Moderation of Assessment</u>, <u>Turn-it-in Software Use</u>. These policies can be accessed within the <u>Policy Library</u>

**Academic Integrity** Griffith College is committed to maintaining high academic standards to protect the value of its qualifications. Academic integrity means acting with the values of honesty, trust, fairness, respect and responsibility in learning, teaching and research. It is important for students, teachers, researchers and all staff to act in an honest way, be responsible for their actions, and show fairness in every part of their work. Academic integrity is important for an individual's and the College's reputation.

All staff and students of the College are responsible for academic integrity. As a student, you are expected to conduct your studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is considered a breach of academic integrity and is unacceptable.

Some students deliberately breach academic integrity standards with intent to deceive. This conscious, preform of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for College has zero tolerance and for which penalties, including exclusion from the College, will be applied.

However, Griffith College also recognises many students breach academic integrity standards without intent to deceive. In these cases, students may be required to undertake additional educational activities to remediate their behaviour and may also be provided appropriate advice by academic staff.

As you undertake your studies at Griffith College, your teachers and academic advisors will provide you with guidance to understand and maintain academic integrity; however, it is also your responsibility to seek out guidance if and when you are unsure about appropriate academic conduct.

In the case of an allegation of a breach of academic integrity being made against a student he or she may request the guidance and support of a Griffith College Student Learning Advisor or Student Counsellor.

Please ensure that you are familiar with the Griffith College Academic Integrity Policy; this policy provides an overview of some of the behaviours that are considered breaches of academic integrity, as well as the penalties and processes involved when a breach is identified.

For further information please refer to the Griffith College website - Policy Library > <u>Academic Integrity Policy</u>

#### Reasonable Adjustments for Evidence of Learning Tasks - The Disability Services policy

The <u>Disability Services policy</u> (accessed within the <u>Policy Library</u>) outlines the principles and processes that guide the College in making reasonable adjustments to Evidence of Learning Tasks for students with disabilities while maintaining academic robustness of its programs.

### Risk Assessment Statement

There are not out of the ordinary risks associated with this course.

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Note: Griffith College acknowledges content derived from Griffith University in Diploma level courses, as applicable.