



1. General Course Information

1.1 Course Details

| | |
|----------------------------|---|
| Course Code: | 1003PSY |
| Course Name: | Research Methods and Statistics in Psychology |
| Trimester: | Trimester 3, 2020 |
| Program: | Diploma of Social and Psychological Science |
| Credit Points: | 10 |
| Course Coordinator: | Tony Hurd |
| Document modified: | 22 September 2020 |

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 lecturer/tutor can be contacted via the email system on the portal.

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

1.3 Staff Consultation

Your lecturer/tutor is available each week for consultation outside of normal class times. Times that your lecturer/tutor will be available for consultation will be given in the first week of lectures. A list of times will be published on the Griffith College Portal on the course site.

1.4 Timetable

Your timetable is available on the Griffith College Portal at Class Timetable in Student and Services.

1.5 Technical Specifications

All students must have access to a computer or suitable mobile device.

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 Generic Skills and Capabilities






For further details on the Generic Skills please refer to the Graduate Generic Skills and Capabilities policy.



Griffith College aims to develop graduates who have an open and critical approach to learning and a capacity for lifelong learning. Through engagement in their studies, students are provided with opportunities to begin the development of these and other generic skills.

Studies in this course will give you opportunities to begin to develop the following skills:

| Generic Skills and Capabilities | | Taught | Practised | Assessed |
|--|--|---------------|------------------|-----------------|
| Acquisition of discipline knowledge and skills with critical judgement | | ✓ | ✓ | ✓ |

| | | | | |
|---|---|---|---|---|
| Communication and collaboration |  | ✓ | ✓ | ✓ |
| Self-directed and active learning |  | ✓ | ✓ | ✓ |
| Creative and future thinking |  | ✓ | ✓ | ✓ |
| Social responsibility and ethical awareness |  | ✓ | ✓ | |
| Cultural competence and awareness in a culturally diverse environment |  | ✓ | ✓ | |



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 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

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

[Digital Library](#) – Databases to which Griffith College students have access to through the Griffith Library Databases.

MyStudy – there is a dedicated website for this course via MyStudy on the Griffith College Portal.

[Academic Integrity Tutorial](#) - this tutorial helps students to understand what academic integrity is and why it matters. You will be able to identify types of breaches of academic integrity, understand what skills you will need in order to maintain academic integrity, and learn about the processes of referencing styles.

Services and Support 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.

Jobs and Employment in the [Student Hub](#) can assist students with career direction, resume and interview preparation, job search tips, and more.

[IT Support](#) provides details of accessing support, information on s numbers and internet access and computer lab rules.

3.4 Other Information about your Learning

Attendance

You are expected to actively engage in all learning experiences and learning activities which underpin the learning content in this course. You are expected to engage with the learning content and learning activities outside of timetabled class times. This requires you to be an active agent of your learning. You are expected to bring all necessary learning resources to class such as the required textbook and /or Workbook. In addition, you are encouraged to BYOD (bring your own device) to class such as a laptop or tablet. This is not a requirement as computer lab facilities are available on campus, however, the use of such devices in the classroom is encouraged with appropriate and considerate use principles being a priority.

Preparation and Participation in Learning

In order to enhance your learning, you need to prepare before participating in the learning experiences. Absorb the learning content and complete the learning activities that are provided online before you attend the scheduled learning experiences. Make sure you complete the learning activities set each week, they are designed to support your learning. 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 lecturer or tutor's attention; respond to questions to test your knowledge and engage in discussion to help yourself and others learn.

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 MyStudy on the Griffith College Portal. The learning materials are arranged in Modules. In each Module you will find the learning content, learning activities and learning experiences. Actively working your way through these course learning materials together with your lecturer or tutor will prepare you to succeed when completing the evidence of learning (assessment).

Self-Directed Learning

You will be expected to learn independently. This means you must organise and engage with the course learning content even when you are not specifically asked to do so by your lecturer or tutor. The weekly guide will be helpful to organise your learning. This involves revising the weekly course learning material and completing the learning activities. It also means you will need to find additional information to evidence your learning (assessment) 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%, and that GPA is maintained at equal to or greater than 3.5 [please see Griffith College Policy Library - [Program Progression Policy](#) - for more information].






Teacher and Course Evaluation

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



4. Learning Content, Learning Activities and Learning Experiences

4.1 Modules for Learning and Weekly Learning Content, Learning Activities and Learning Experience

| | Learning Content  | Learning activities  | Learning experiences  | Evidence of learning  | Learning outcome  |
|---|---|--|--|---|---|
| Module 1: Beginning Psychological Research | | | | | |
| 1 | <u>Introduction to Research Methods & Statistics –</u> (Experimental designs & Type of data) Textbook readings & exercises (CH 1) | Watch overview of course (Workshops, practical program and assessment) 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: Descriptive Statistics | | | | | |
| 2 | <u>Describing Behaviour using Numbers</u> Textbook readings & exercises (CHs 3 & 4) | Watch Mini-Lectures (YouTube: 2.1 – 2.3 + additional optional) Do exercises (Text/Portal) Complete revision Quiz (Portal) | Kahoot Quiz (In class – based on mini-lectures) Interactive class experiences (Numerical Descriptive Statistics) | Formative in-class Quiz (<i>In-class Kahoot</i>) Formative experiences Quiz (<i>Portal activity</i>) | 1, 2 |
| 3 | <u>Describing Behaviour using Graphs</u> 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 (<i>In-class Kahoot</i>) Formative experiences Quiz (<i>Portal activity</i>) | 1, 2 |
| 4 | <u>Normal distributions and z-scores</u> 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 (5% SPSS Quiz in Week 4). | 1, 2 |




| | | | | | |
|---|---|---|--|--|------|
| 5 | Revision for Mid- Trimester Exam | Practice exam | Exam preparation questions and discussion | Mid Trimester Exam (20%) Multiple Choice Quiz on Describing Data | 1, 2 |
| 6 | <u>Correlation Analysis</u> 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 <i>mini-lectures</i>) Interactive class experiences (Correlation) Lab report introduction | Formative in- class Quiz (<i>In- class Kahoot</i>) Formative experiences Quiz (<i>Portal activity</i>) | 2 |
| Module 3: Probability and Sampling | | | | | |
| 7 | <u>Probability and Sampling</u> 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 <i>mini-lectures</i>) Interactive class experiences (Probability & Sampling) Casino Night | Formative in- class Quiz (<i>In- class Kahoot</i>) Formative experiences Quiz (<i>Portal activity</i>) | 3 |
| 8 | <u>Statistical Inference using Confidence Intervals</u> 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 <i>mini-lectures</i>) Interactive class experiences (Understanding how and why we use confidence intervals for decision making) | Formative in- class Quiz (<i>In- class Kahoot</i>) Formative experiences Quiz (<i>Portal activity</i>) | 3 |
| 9 | <u>Statistical Inference using Hypothesis Testing</u> 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 <i>mini-lectures</i>) Interactive class experiences (Understanding how sampling error influences decision making) | Formative in- class Quiz (<i>In- class Kahoot</i>) Formative experiences Quiz (<i>Portal activity</i>) | 3 |
| Module 4: Applied Inferential Statistics | | | | | |
| 10 | <u>Inferential Statistics (Repeated Measures t- tests)</u> 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 <i>mini-lectures</i>) Interactive class experiences (Applying hypothesis testing for within-subjects designs) | Formative in- class Quiz (<i>In- class Kahoot</i>) Formative experiences Quiz (<i>Portal activity</i>) | 4 |
| 11 | <u>Inferential Statistics (Independent Groups t- tests)</u> | Watch mini-lecture (YouTube: 11.1) | Interactive class experiences | Formative experiences Quiz (<i>Portal activity</i>) | 4 |

| | | | | | |
|----|---------------------------------------|--|--|----------------------|---------|
| | Textbook readings & exercises (CH 14) | Do exercises (Text/Portal) Complete revision Quiz (Portal) Submit lab report (30%) | (Applying hypothesis testing for between-subjects designs) | Lab Report (30%) due | 2, 3 |
| 12 | Revision for Final Exam | Practice Final Exam | Final exam preparation questions and discussion | | 2, 3, 4 |



5. Evidence of Learning (Assessment Plan)

5.1 Evidence of Learning Summary

| |  Evidence of learning |  Weighting |  Learning outcome |  Due Date |
|---|---|--|--|---|
| 1 | SPSS Examination | 5% | 1, 2 | Week 4 |
| 2 | Mid-Trimester Examination | 20% | 1, 2 | Week 5 |
| 3 | Laboratory Report | 30% | 2, 3 | Week 11 |
| 4 | Final Examination | 45% | 2, 3, 4 | Examination Period |

5.2 Evidence of Learning Task Detail

1. **SPSS Examination:** Will be held in week 4. SPSS Exam consists of multiple-choice questions that are to be solved using a SPSS statistical software package. The exam is worth 5% of the assessment of the course and examines materials taught in week 1 to 3 inclusively.

2. **Mid-Trimester Examination:** Will be held in week 5. It consists of multiple-choice questions covering the materials taught in lectures from weeks 1 to 4 inclusively. The mid- trimester exam is worth 20% of the assessment of the subject. The exam involves both theoretical and calculation questions.

3. **Laboratory Report:** Is due in week 11. It 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. The lab report is worth 30% of the assessment of the course.

4. **Final Examination:** Consists of multiple-choice and short-answer 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 45% of the assessment of the course. The exam will involve theoretical, interpretation and calculation questions. Tables and formula sheets will be provided.

5.3 Late Submission

An evidence of learning (assessment) item submitted after the due date, without an approved extension from the Course Coordinator, will be penalised. The standard penalty is the reduction of the mark allocated to the assessment item by 5% of the maximum mark applicable for the assessment item, for each working day or part working day that the item is late. Evidence of learning items submitted more than five working days after the due date are awarded zero marks.

Please refer to the Griffith College website - Policy Library > Assessment Policy 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 item, you must submit an [Application for Extension of Assignment](#) 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. [Griffith College Student Medical Certificate](#)]. Please refer to the Griffith College website - [Policy Library](#) - for guidelines regarding extensions and deferred assessment.

Return of Evidence of Learning Items

1. Marks awarded for in-trimester evidence of learning items, except those being moderated externally with Griffith University, will be available on the Student Portal within fourteen [14] days of the due date. This does not apply to the final evidence of learning item in this course (marks for this item will be provided with the final course result).
2. Students will be advised of their final grade through the Student Portal. 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 items including the final exam (if applicable) will be recorded in the Moodle Course Site and made available to students through the Moodle Course Site.

The sum of your marks of evidence of learning items 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 assessment-related policies can be found in the [Griffith College Policy Library](#) which include the following policies:

[Assessment Policy](#), [Special Consideration](#), [Deferred Assessment](#), [Alternate Exam Sittings](#), [Medical Certificates](#), [Academic Integrity](#), [Finalisation of Results](#), [Review of Marks](#), [Moderation of Assessment](#), [Turn-it-in Software Use](#). These policies can be accessed within the [Policy Library](#)

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, pre-meditated form of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for which the 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 lecturers, tutors 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 > [Academic Integrity Policy](#)

Reasonable Adjustments for Assessment – The Disability Services policy

The [Disability Services policy](#) (accessed within the [Policy Library](#)) outlines the principles and processes that guide the College in making reasonable adjustments to assessment for students with disabilities while maintaining academic robustness of its programs.

Risk Assessment Statement

There are no out of the ordinary risks associated with this course.

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