

TPP105 Statistics

School: School of Education and Tertiary Access

2024 | Semester 1

UniSC Sunshine Coast
UniSC Moreton Bay
UniSC Fraser Coast

**BLENDED
LEARNING**

Most of your course is on campus but you may be able to do some components of this course online.

Online

ONLINE

You can do this course without coming onto campus.

Please go to usc.edu.au for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1. Description

This course is designed to introduce basic statistical skills for entry to academic programs at university. By undertaking this course, you will gain an understanding of the research process and the critical thinking skills required in research and its reporting. The ability to apply statistical concepts is an essential skill for all undergraduates. This course consists of weekly learning materials where you will be presented with theoretical knowledge, and followed by a tutorial, where the theoretical concepts are illustrated, reaffirmed and complemented with practical exercises.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – A range of weekly materials delivered through Canvas including course recordings, reading materials and activities	1hr	Week 1	12 times
Tutorial/Workshop 1 – On campus engagement and application of learning materials	2hrs	Week 1	13 times
ONLINE			
Learning materials – A range of weekly materials delivered through Canvas including course recordings, reading materials and activities	1hr	Week 1	12 times
Tutorial/Workshop 1 – synchronous online engagement and application of learning materials	2hrs	Week 1	13 times

1.3. Course Topics

- Descriptive statistics
- Research design
- Calculator skills
- Basic statistical packages (SPSS)
- Appropriate data presentation
- Inferential statistics
- Applying inferential tests
- Hypotheses and how to test them
- Z tests
- t-tests
- Confidence intervals

2. What level is this course?

100 Level (Introductory)

Engaging with discipline knowledge and skills at foundational level, broad application of knowledge and skills in familiar contexts and with support. Limited or no prerequisites. Normally, associated with the first full-time study year of an undergraduate program.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES		GRADUATE QUALITIES
On successful completion of this course, you should be able to...		Completing these tasks successfully will contribute to you becoming...
1	Demonstrate basic knowledge and skills of the field of statistics as developed with support and practice in this course.	Empowered
2	Use technologies including scientific calculators and statistical software to interpret and present data sets in valid tabular and graphical forms, and identify measures of central tendency and variability	Knowledgeable
3	Select and apply appropriate inferential analyses to research scenarios to test hypotheses, analyse data and draw appropriate conclusions	Knowledgeable
4	Communicate effectively using statistical terms, conventions and symbols to demonstrate knowledge and understanding	Creative and critical thinker

5. Am I eligible to enrol in this course?

Refer to the [UniSC Glossary of terms](#) for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1. Pre-requisites

Must be enrolled in Program TP000

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

5.4. Specific assumed prior knowledge and skills (where applicable)

Not applicable

6. How am I going to be assessed?

6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

6.2. Details of early feedback on progress

Tutorial activities allow students to access formative feedback on progress. Drafts may be discussed with tutors if time permits in tutorials, or during consultation times. Time is allocated in tutorials for visits to computer labs in Week 3 and 4 (online equivalent for online students) for students to gain experience in statistical packages required for questions within this assessment item.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Written Piece	Individual	30%	approximately 500 words	Week 5	Online Assignment Submission with plagiarism check
All	2	Examination - not Centrally Scheduled	Individual	30%	1.5 hours	Week 7	Online Test (Quiz)
All	3	Examination - not Centrally Scheduled	Individual	40%	2 hours	Week 13	Online Test (Quiz)

All - Assessment Task 1: Statistics assignment

GOAL:	To assess knowledge gained in the first 5 weeks of the course: the language of statistics, basic research design, sampling strategies and the presentation of descriptive statistics.						
PRODUCT:	Written Piece						
FORMAT:	Online submission						
CRITERIA:	No.						Learning Outcome assessed
	1	Demonstrates understanding of basic statistics terminology and statistical research approaches.					1
	2	Uses scientific calculator appropriately to discern measures of centre and variability, and SPSS to present appropriate tables and graphs					2
	3	Demonstrates ability to communicate using statistical language, including use of statistical symbols and formulas					4

All - Assessment Task 2: Mid semester exam

GOAL:	To assess knowledge gained in the first 6 weeks of the course: the language of statistics, basic research design, sampling strategies, measures of central tendency and variability, analysing data and using a scientific calculator and the presentation of descriptive statistics						
PRODUCT:	Examination - not Centrally Scheduled						
FORMAT:	Online examination						

CRITERIA:	No.	Learning Outcome assessed
	1	Demonstrates understanding of statistical research design, data collection, collation and appropriate display of data sets
	2	Uses calculator appropriately to identify measures of central tendency and variability, correct interpretation of data outputs from statistical software
	3	Demonstrates ability to communicate with, and understand, statistical language, conventions and symbols.

All - Assessment Task 3: Final exam

GOAL:	To assess knowledge gained during the 12 weeks of the course; the language of statistics, basic research design, sampling strategies, measures of central tendency and variability, analysing data and using a scientific calculator, the presentation of descriptive statistics, data distributions, z scores, and hypothesis testing, specifically using t tests.	
PRODUCT:	Examination - not Centrally Scheduled	
FORMAT:	Online examination	
CRITERIA:	No.	Learning Outcome assessed
	1	Demonstrates understanding of the overarching statistical concepts of the course
	2	Uses calculator appropriately to interpret data sets and test research hypotheses
	3	Demonstrates ability to correctly select and apply inferential analyses (Z distribution or t tests) to test research hypotheses and solve problems
	4	Communicates knowledge and understanding through correct use of statistical terms, conventions and symbols

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site— Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

There are no required/recommended resources for this course.

8.2. Specific requirements

A scientific calculator is required for this course.

A graphics or programmable calculator is not required but you may use one if you already own one.

Course readings and tutorial materials are in TPP105 Course Reader available on Canvas.

This will be used in open book examinations.

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the [online induction training for students](#), and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

10.2. Assessment: Additional Requirements

Eligibility for Supplementary Assessment

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

The final mark is in the percentage range 47% to 49.4%

The course is graded using the Standard Grading scale

You have not failed an assessment task in the course due to academic misconduct

10.3. Assessment: Submission penalties

Late submission of assessment tasks may be penalised at the following maximum rate:

- 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task.

- 10% (of the assessment task's identified value) for the third day - 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task.

- A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task. Weekdays and weekends are included in the calculation of days late. To request an extension you must contact your course coordinator to negotiate an outcome.

10.4. SafeUniSC

UniSC is committed to a culture of respect and providing a safe and supportive environment for all members of our community. For immediate assistance on campus contact SafeUniSC by phone: [07 5430 1168](tel:0754301168) or using the [SafeZone](#) app. For general enquires contact the SafeUniSC team by phone [07 5456 3864](tel:0754563864) or email safe@usc.edu.au.

The SafeUniSC Specialist Service is a Student Wellbeing service that provides free and confidential support to students who may have experienced or observed behaviour that could cause fear, offence or trauma. To contact the service call [07 5430 1226](tel:0754301226) or email studentwellbeing@usc.edu.au.

10.5. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the [Learning Advisers](#) web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au.

10.6. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to [Student Hub](#), email studentwellbeing@usc.edu.au or call 07 5430 1226.

10.7. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, [AccessAbility Services](#) can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to [Student Hub](#), email AccessAbility@usc.edu.au or call 07 5430 2890.

10.8. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit <https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.9. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The [Student Charter](#) sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

10.10. General Enquiries

In person:

- **UniSC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **UniSC Moreton Bay** - Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **UniSC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **UniSC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **UniSC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **UniSC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au