

BUS515 Applied Quantitative Research Methods

School: School of Business and Creative Industries

2025 Semester 1

UniSC Sunshine 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 will introduce you to a range of quantitative research methods and their application to a variety of different research questions relevant to higher degrees by research. You will develop skills in analysing data, interpreting results and reporting those results.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – Interactive learning guides	1hr	Week 1	11 times
Tutorial/Workshop 1 – In-class workshop	2hrs	Week 1	10 times
ONLINE			
Learning materials – Interactive online learning activities.	1hr	Week 1	11 times
Tutorial/Workshop 1 – Scheduled online workshops (Recorded).	2hrs	Week 1	10 times

1.3. Course Topics

Introduction to quantitative research methods

Univariate hypothesis testing

Multivariate hypothesis testing

Non-parametric methods

Factor analysis

Dealing with outliers and data transformation

Simple correlation and regression

Multiple regression

Discriminant analysis and logistic regression

2. What level is this course?

500 Level (Advanced)

Engaging with new discipline knowledge and skills at an advanced level or deepening existing knowledge and skills within a discipline. Independent application of knowledge and skills in unfamiliar contexts.

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 MAPPING	PROFESSIONAL STANDARD MAPPING *
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...	Association to Advance Collegiate Schools of Business
1 Demonstrate an understanding of advanced quantitative research methodologies.	Knowledgeable Creative and critical thinker	PC1.1, PC3
2 Design and develop a research proposal using quantitative methods	Creative and critical thinker Engaged	PC1.1, PC3
3 Apply research skills and appropriate methodologies to investigate relevant issues.	Knowledgeable Empowered Engaged	PC1.1, PC3, PC6

* Competencies by Professional Body

CODE	COMPETENCY
ASSOCIATION TO ADVANCE COLLEGIATE SCHOOLS OF BUSINESS	
PC1.1	Written Communication
PC3	Creative and Critical Thinking
PC6	Career-adaptive

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

Enrolled in any honours program or postgraduate coursework program

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

MBA719 or EMB769

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

A draft copy of your Task 1 will be peer reviewed in week 3 during the class session.

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	Plan	Individual	10%	600 words	Week 5	Online Assignment Submission with plagiarism check
All	2	Written Piece	Individual	40%	120 minutes online	Week 10	Online Assignment Submission with plagiarism check
All	3	Report	Individual	50%	2,500 words	Week 13	Online Assignment Submission with plagiarism check

All - Assessment Task 1: Research Project - Design

GOAL:	Based on secondary data, you will design a modest quantitative research project. The project will involve hypothesis testing based on multiple regression.																
PRODUCT:	Plan																
FORMAT:	Research project plan. The project plan will comprise of a brief introduction to the project topic, a tentative method section and a list of appropriate references.																
CRITERIA:	<table border="1"> <thead> <tr> <th>No.</th> <th></th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Statement of the quantitative research question based on existing literature</td> <td>2</td> </tr> <tr> <td>2</td> <td>Identification and discussion of the appropriate secondary data and data sources</td> <td>2</td> </tr> <tr> <td>3</td> <td>Listing of appropriate hypotheses and justification of methodology</td> <td>1</td> </tr> <tr> <td>4</td> <td>Professional communication and referencing.</td> <td>2</td> </tr> </tbody> </table>	No.		Learning Outcome assessed	1	Statement of the quantitative research question based on existing literature	2	2	Identification and discussion of the appropriate secondary data and data sources	2	3	Listing of appropriate hypotheses and justification of methodology	1	4	Professional communication and referencing.	2	
No.		Learning Outcome assessed															
1	Statement of the quantitative research question based on existing literature	2															
2	Identification and discussion of the appropriate secondary data and data sources	2															
3	Listing of appropriate hypotheses and justification of methodology	1															
4	Professional communication and referencing.	2															
GENERIC SKILLS:	Problem solving, Applying technologies																

All - Assessment Task 2: Written Piece

GOAL:	You will demonstrate your advanced understanding of quantitative methods and analysis covered in this course.													
PRODUCT:	Written Piece													
FORMAT:	This is an open-book individual assessment based on topics 1 to 8. You will have 120 minutes to type your answers in a word file and upload for marking.													
CRITERIA:	<table border="1"> <thead> <tr> <th>No.</th> <th></th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Accurate calculations using relevant concepts and techniques</td> <td>1 3</td> </tr> <tr> <td>2</td> <td>Appropriate interpretation and discussion of the results</td> <td>1 3</td> </tr> <tr> <td>3</td> <td>Clarity of written communication</td> <td>3</td> </tr> </tbody> </table>	No.		Learning Outcome assessed	1	Accurate calculations using relevant concepts and techniques	1 3	2	Appropriate interpretation and discussion of the results	1 3	3	Clarity of written communication	3	
No.		Learning Outcome assessed												
1	Accurate calculations using relevant concepts and techniques	1 3												
2	Appropriate interpretation and discussion of the results	1 3												
3	Clarity of written communication	3												
GENERIC SKILLS:	Problem solving													

All - Assessment Task 3: Quantitative Research Project - Results and Analysis

GOAL:	This task builds from your project plan and develops your skills in analysis of quantitative research results.											
PRODUCT:	Report											
FORMAT:	Report will have the following sections: Title page, list of contents, introduction, methodology, analysis, conclusion and recommendations, references and an appendix. The introduction and methodology sections will be brief and the bulk of the report will focus on statistical results and their analysis.											
CRITERIA:	<table border="1"> <thead> <tr> <th>No.</th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1 Discussion of data and assumption testing</td> <td>1 2 3</td> </tr> <tr> <td>2 Hypotheses testing, robustness checks and appropriate interpretation</td> <td>1 3</td> </tr> <tr> <td>3 Reasoned conclusions, recommendations and discussion of limitations</td> <td>1 3</td> </tr> <tr> <td>4 Professional communication, presentation and referencing</td> <td>2 3</td> </tr> </tbody> </table>	No.	Learning Outcome assessed	1 Discussion of data and assumption testing	1 2 3	2 Hypotheses testing, robustness checks and appropriate interpretation	1 3	3 Reasoned conclusions, recommendations and discussion of limitations	1 3	4 Professional communication, presentation and referencing	2 3	
No.	Learning Outcome assessed											
1 Discussion of data and assumption testing	1 2 3											
2 Hypotheses testing, robustness checks and appropriate interpretation	1 3											
3 Reasoned conclusions, recommendations and discussion of limitations	1 3											
4 Professional communication, presentation and referencing	2 3											
GENERIC SKILLS:	Communication, Problem solving, Applying technologies											

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

Please note that you need to have regular access to the resource(s) listed below. Resources may be required or recommended.

REQUIRED?	AUTHOR	YEAR	TITLE	EDITION	PUBLISHER
Recommended	JOSEPH. HAIR	0	Multivariate Data Analysis	8th ed.	n/a
Recommended	Andy Field	2018	Discovering Statistics Using IBM SPSS Statistics	n/a	SAGE Publications Limited

8.2. Specific requirements

Not applicable

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