



# STAT8181

## Applied Statistics Project II

Session 1, In person-scheduled-weekday, North Ryde 2024

*School of Mathematical and Physical Sciences*

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#### Disclaimer

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## General Information

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Credit points

10

Prerequisites

STAT8180

Corequisites

Co-badged status

Unit description

Part two of a two part extended applied statistics project. The two unit sequence provides students with the opportunity to strengthen their exploratory data analysis, research methods and analytical skills by applying these to real-world data and context. Part two involves students using the data selected to answer the research questions posed in part one using appropriate statistical methods. A substantial report is produced incorporating the exploratory data analysis from part one.

## Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

## Learning Outcomes

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

**ULO1:** Apply appropriate statistical models/methods in planning and carrying out a significant statistical analysis project.

**ULO2:** Demonstrate an in-depth understanding of statistical theory and methods.

**ULO3:** Use modern statistical software packages in data analysis.

**ULO4:** Communicate methods used and results obtained in a clear and concise manner suitable for a non-statistical audience.

**ULO5:** Demonstrate the ability to undertake a statistics project independently.

## General Assessment Information

### Requirements to Pass this Unit

To pass this unit you must achieve a total mark equal to or greater than 50%

### Project Report Submission

The submission of the Project Report will be online via the appropriate assignment link on the iLearn page. A title page is required which includes your name and Student ID as well as your project title. Read the submission statement carefully before accepting it as there are substantial penalties for making a false declaration.

- Project Report submission is via iLearn.
- Please make sure that your Project Report is word processed.
- You should upload one single PDF file.
- Please note the quick guide on how to upload your assignments provided on the iLearn page.
- If there are technical obstructions to your submission online, please email us to let us know.

You may submit as often as required prior to the due date/time. Please note that each submission will completely replace any previous submissions. It is in your best interest to make frequent submissions of your partially completed work as insurance against technical or other problems near the submission deadline.

### Late Assessment Submission Penalty

Unless a Special Consideration request has been submitted and approved, a 5% penalty (of the total possible mark of the task) will be applied for each day a written report or presentation assessment is not submitted, up until the 7<sup>th</sup> day (including weekends). After the 7<sup>th</sup> day, a grade of '0' will be awarded even if the assessment is submitted. The submission time for all uploaded assessments is **11:55 pm**. A 1-hour grace period will be provided to students who experience a technical concern.

### Assessments where Late Submissions will be accepted

In this unit, late submissions will accepted as follows:

- Brief communication – YES, Standard Late Penalty applies
- Abstract – YES, Standard Late Penalty applies

- Log book – YES, Standard Late Penalty applies
- Second draft of project report – YES, Standard Late Penalty applies
- Formal presentation – NO, unless Special Consideration is granted
- Project Report – YES, Standard Late Penalty applies

### Special Consideration

The [Special Consideration Policy](#) aims to support students who have been impacted by short-term circumstances or events that are serious, unavoidable and significantly disruptive, and which may affect their performance in assessment. If you experience circumstances or events that affect your ability to complete the assessments in this unit on time, please inform the convenor and submit a Special Consideration request through [ask.mq.edu.au](mailto:ask.mq.edu.au).

## Assessment Tasks

Name	Weighting	Hurdle	Due
<a href="#">Abstract</a>	5%	No	TBA
<a href="#">Brief communication.</a>	10%	No	TBA
<a href="#">Weekly log book</a>	5%	No	TBA
<a href="#">Second draft of project report.</a>	15%	No	TBA
<a href="#">Formal presentation</a>	10%	No	TBA
<a href="#">Project report</a>	55%	No	TBA

### Abstract

Assessment Type <sup>1</sup>: Professional writing

Indicative Time on Task <sup>2</sup>: 5 hours

Due: **TBA**

Weighting: **5%**

Write an abstract. State what were the research questions, how were they investigated, what did you find out and what do your findings mean?

On successful completion you will be able to:

- Communicate methods used and results obtained in a clear and concise manner suitable for a non-statistical audience.

## Brief communication.

Assessment Type <sup>1</sup>: Professional writing

Indicative Time on Task <sup>2</sup>: 10 hours

Due: **TBA**

Weighting: **10%**

Brief communication. At most 1000 words written for a general audience.

On successful completion you will be able to:

- Communicate methods used and results obtained in a clear and concise manner suitable for a non-statistical audience.

## Weekly log book

Assessment Type <sup>1</sup>: Log book

Indicative Time on Task <sup>2</sup>: 13 hours

Due: **TBA**

Weighting: **5%**

Weekly log book.

On successful completion you will be able to:

- Apply appropriate statistical models/methods in planning and carrying out a significant statistical analysis project.
- Demonstrate an in-depth understanding of statistical theory and methods.
- Use modern statistical software packages in data analysis.
- Communicate methods used and results obtained in a clear and concise manner suitable for a non-statistical audience.
- Demonstrate the ability to undertake a statistics project independently.

## Second draft of project report.

Assessment Type <sup>1</sup>: Report

Indicative Time on Task <sup>2</sup>: 30 hours

Due: **TBA**

Weighting: **15%**

The second draft of the project report. The introduction and exploratory data analysis chapters from the First draft of project report submitted in STAT8180 should be included, these may be revised to address given feedback. The formal statistical analyses should be included in one or more chapters as well as a separate Discussion/Conclusion chapter.

On successful completion you will be able to:

- Apply appropriate statistical models/methods in planning and carrying out a significant statistical analysis project.
- Demonstrate an in-depth understanding of statistical theory and methods.
- Use modern statistical software packages in data analysis.
- Communicate methods used and results obtained in a clear and concise manner suitable for a non-statistical audience.
- Demonstrate the ability to undertake a statistics project independently.

## Formal presentation

Assessment Type <sup>1</sup>: Presentation

Indicative Time on Task <sup>2</sup>: 10 hours

Due: **TBA**

Weighting: **10%**

Project talk.

On successful completion you will be able to:

- Apply appropriate statistical models/methods in planning and carrying out a significant statistical analysis project.
- Demonstrate an in-depth understanding of statistical theory and methods.
- Use modern statistical software packages in data analysis.
- Communicate methods used and results obtained in a clear and concise manner suitable for a non-statistical audience.
- Demonstrate the ability to undertake a statistics project independently.

## Project report

Assessment Type <sup>1</sup>: Project

Indicative Time on Task <sup>2</sup>: 56 hours

Due: **TBA**

Weighting: **55%**

Final written project report.

On successful completion you will be able to:

- Apply appropriate statistical models/methods in planning and carrying out a significant statistical analysis project.
- Demonstrate an in-depth understanding of statistical theory and methods.
- Use modern statistical software packages in data analysis.
- Communicate methods used and results obtained in a clear and concise manner suitable for a non-statistical audience.
- Demonstrate the ability to undertake a statistics project independently.

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<sup>1</sup> If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the [Writing Centre](#) for academic skills support.

<sup>2</sup> Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

## Delivery and Resources

### Classes

Every student enrolled in this offering of the unit should attend two classes every week: a 1-hour seminar and a 1-hour SGTA. Both of these classes begin in Week 1. Please see iLearn for details.

### Communication

We will communicate with you via your university email or through announcements on iLearn. Queries to the convenor can be emailed to your lecturer from your university email address.

### COVID Information

For the latest information on the University's response to COVID-19, please refer to the Coronavirus infection page on the Macquarie website: <https://www.mq.edu.au/about/coronavirus-faqs>. Remember to check this page regularly in case the information and requirements change during semester. If there are any changes to this unit in relation to COVID, these will be communicated via iLearn.

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://policies.mq.edu.au\)](https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](#)
- [Academic Integrity Policy](#)
- [Academic Progression Policy](#)
- [Assessment Policy](#)
- [Fitness to Practice Procedure](#)
- [Assessment Procedure](#)
- [Complaints Resolution Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#)

Students seeking more policy resources can visit [Student Policies \(https://students.mq.edu.au/support/study/policies\)](https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit [Policy Central \(https://policies.mq.edu.au\)](https://policies.mq.edu.au) and use the [search tool](#).

## Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: <https://students.mq.edu.au/admin/other-resources/student-conduct>

## Results

Results published on platform other than [eStudent](#), (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit [ask.mq.edu.au](https://ask.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## Academic Integrity

At Macquarie, we believe [academic integrity](#) – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free [online writing and maths support](#), [academic skills development](#) and [wellbeing consultations](#).

## Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>



## The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- [Workshops](#)
- [Chat with a WriteWISE peer writing leader](#)
- [Access StudyWISE](#)
- [Upload an assignment to Studiosity](#)
- [Complete the Academic Integrity Module](#)

The Library provides online and face to face support to help you find and use relevant information resources.

- [Subject and Research Guides](#)
- [Ask a Librarian](#)

## Student Services and Support

Macquarie University offers a range of [Student Support Services](#) including:

- [IT Support](#)
- [Accessibility and disability support](#) with study
- Mental health [support](#)
- [Safety support](#) to respond to bullying, harassment, sexual harassment and sexual assault
- [Social support including information about finances, tenancy and legal issues](#)
- [Student Advocacy](#) provides independent advice on MQ policies, procedures, and processes

## Student Enquiries

Got a question? Ask us via [AskMQ](#), or contact [Service Connect](#).

## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/offices\\_and\\_units/information\\_technology/help/](http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/).

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.

## Changes from Previous Offering

This is the first offering of the unit.

We value student feedback to be able to continually improve the way we offer our units. As such

we encourage students to provide constructive feedback via student surveys, to the teaching staff directly, or via the FSE Student Experience & Feedback link in the iLearn page.

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Unit information based on version 2024.01 of the [Handbook](#)