



STAT1250

Business Statistics

Session 2, Special circumstances 2021

Archive (Pre-2022) - Department of Mathematics and Statistics

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Session 2 Learning and Teaching Update

The decision has been made to conduct study online for the remainder of Session 2 for all units WITHOUT mandatory on-campus learning activities. Exams for Session 2 will also be online where possible to do so.

This is due to the extension of the lockdown orders and to provide certainty around arrangements for the remainder of Session 2. We hope to return to campus beyond Session 2 as soon as it is safe and appropriate to do so.

Some classes/teaching activities cannot be moved online and must be taught on campus. You should already know if you are in one of these classes/teaching activities and your unit convenor will provide you with more information via iLearn. If you want to confirm, see the list of [units with mandatory on-campus classes/teaching activities](#).

Visit the [MQ COVID-19 information page](#) for more detail.

General Information

Unit convenor and teaching staff

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Credit points

10

Prerequisites

Corequisites

Co-badged status

Unit description

Data is the foundation of sound business decisions. In this unit you will learn the fundamentals of analysing, solving and communicating business problems using quantitative information.

The unit will cover the statistical concepts that provide a foundation for the study of and professional practice in business and economics. The focus will be on tools and approaches that are used every day in business. Problems and examples will be drawn from current real-world experience.

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: organise and summarise data graphically and numerically

ULO2: use appropriate techniques to analyse data

ULO3: use Excel to manipulate and analyse data

ULO4: draw conclusions from the results of data analysis

ULO5: apply statistical techniques to problems arising from diverse fields of research including examples on sustainability

ULO6: demonstrate foundational learning skills including active engagement in your learning process

General Assessment Information

General Assessment Information

You need to have the latest version of **Excel with the Data Analysis add-on enabled** for the assessment tasks (see iLearn for information on how to access Excel for free from the university).

Participation Hurdle: You need to pass participation hurdle (see SGTA and Practicals) to be able to pass this unit.

Hurdle Quizzes: There are 5 (five) Hurdle Quizzes. If you fail any of the Hurdle Quizzes your highest possible mark for this unit will be 49 with a grade of Fail Hurdle (FH). **You need to pass all five Hurdle Quizzes to be able to pass this unit.**

Class Tests and Final Exam: You require Excel with the Data Analysis add-on to enable completion of these assessments. You will not be able to answer questions for these assessment tasks without it.

See the schedule in iLearn for detailed of assessment dates and additional information.

LATE SUBMISSION OF WORK: All assessment tasks must be submitted by the official due date and time. In the case of a late submission for a non-timed assessment (e.g. an assignment), if special consideration has NOT been granted, 20% of the earned mark will be deducted for each 24-hour period (or part thereof) that the submission is late for the first 2 days (including weekends and/or public holidays). For example, if an assignment is submitted 25 hours late, its mark will attract a penalty equal to 40% of the earned mark. After 2 days (including weekends and public holidays) a mark of 0% will be awarded. Timed assessment tasks (e.g. tests, examinations) do not fall under these rules.

Assessment Tasks

Name	Weighting	Hurdle	Due	Groupwork/Individual	Short Extension	AI Approach
<u>Practical Participation</u>	0%	Yes	Weekly - from 2 to 13		No	
<u>SGTA Participation</u>	0%	Yes	Weekly - from 2 to 13		No	
<u>Hurdle Quizzes</u>	10%	Yes	5 of them - see iLearn		No	
<u>Class Test 1</u>	15%	No	See iLearn		No	
<u>Class Test 2</u>	25%	No	See iLearn		No	
<u>Final Exam</u>	50%	No	During exam period		No	

Practical Participation

Assessment Type ¹: Participatory task

Indicative Time on Task ²: 0 hours

Due: **Weekly - from 2 to 13**

Weighting: **0%**

Groupwork/Individual:

Short extension ³: No

AI Approach:

This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)

Students must attend and participate in at least 10 of the weekly practical classes to pass this unit. This is a hurdle requirement. They must attend the class that they are registered into.

On successful completion you will be able to:

- organise and summarise data graphically and numerically
- use appropriate techniques to analyse data
- use Excel to manipulate and analyse data
- apply statistical techniques to problems arising from diverse fields of research including examples on sustainability

SGTA Participation

Assessment Type ¹: Participatory task

Indicative Time on Task ²: 0 hours

Due: **Weekly - from 2 to 13**

Weighting: **0%**

Groupwork/Individual:

Short extension ³: No

AI Approach:

This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)

Students must attend and participate in at least 10 of the weekly SGTA classes to pass this unit. This is a hurdle requirement. They must attend the class that they are registered into.

On successful completion you will be able to:

- organise and summarise data graphically and numerically
- use appropriate techniques to analyse data
- draw conclusions from the results of data analysis
- apply statistical techniques to problems arising from diverse fields of research including examples on sustainability

Hurdle Quizzes

Assessment Type ¹: Quiz/Test

Indicative Time on Task ²: 10 hours

Due: **5 of them - see iLearn**

Weighting: **10%**

Groupwork/Individual:

Short extension ³: No

AI Approach:

This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)

The Hurdle Quizzes are online quizzes that will be made available on iLearn.

On successful completion you will be able to:

- use appropriate techniques to analyse data
- use Excel to manipulate and analyse data
- draw conclusions from the results of data analysis
- apply statistical techniques to problems arising from diverse fields of research including examples on sustainability
- demonstrate foundational learning skills including active engagement in your learning process

Class Test 1

Assessment Type ¹: Quiz/Test

Indicative Time on Task ²: 3 hours

Due: **See iLearn**

Weighting: **15%**

Groupwork/Individual:

Short extension ³: No

AI Approach:

Class Test 1 will be held in the first half of the session.

On successful completion you will be able to:

- organise and summarise data graphically and numerically
- use appropriate techniques to analyse data
- use Excel to manipulate and analyse data
- draw conclusions from the results of data analysis

Class Test 2

Assessment Type ¹: Quiz/Test

Indicative Time on Task ²: 3 hours

Due: **See iLearn**

Weighting: **25%**

Groupwork/Individual:

Short extension ³: No

AI Approach:

Class Test 2 will be held in the second half of the session.

On successful completion you will be able to:

- organise and summarise data graphically and numerically
- use appropriate techniques to analyse data
- use Excel to manipulate and analyse data
- draw conclusions from the results of data analysis

Final Exam

Assessment Type ¹: Examination

Indicative Time on Task ²: 21 hours

Due: **During exam period**

Weighting: **50%**

Groupwork/Individual:

Short extension ³: No

AI Approach:

Formal invigilated examination testing the learning outcomes of the unit. Students are advised that it is Macquarie University policy not to set early examinations for individuals or groups of

students. All students are expected to ensure that they are available until the end of the teaching semester, i.e. the final day of the official examination period.

On successful completion you will be able to:

- organise and summarise data graphically and numerically
- use appropriate techniques to analyse data
- use Excel to manipulate and analyse data
- draw conclusions from the results of data analysis
- apply statistical techniques to problems arising from diverse fields of research including examples on sustainability

¹ 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
- [Academic Success](#) for academic skills support.

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

³ An automatic short extension is available for some assessments. Apply through the [Service Connect Portal](#).

Delivery and Resources

You are expected to study **each week at least 10 hours** to achieve best learning outcomes.

Lecture notes, **SGTA** worksheets and **Practical** worksheets will be available to download within iLearn. Recommended text books will be listed in iLearn, you only need one of the recommended text books.

Technology Used and Required: All course material is delivered through iLearn (which is a version of Moodle). The link may be found at <http://ilearn.mq.edu.au>

Unit Schedule

Week	Lecture Topic
1	Introduction to statistics
2	Summarising and displaying data
3	Summarising and displaying data (continued)
4	Introduction to distributions: the normal distribution

Week	Lecture Topic
5	Sampling distributions and confidence intervals for proportions
6	Sampling distributions and confidence intervals for means
Semester Break (not holiday)	
7	One sample hypothesis tests for a population mean
8	Hypothesis tests for comparing population means
9	Simple linear regression (Part 1)
10	Simple linear regression (Part 2)
11	Hypothesis tests for population proportions: z-test of a proportion and chi-squared goodness-of fit test
12	Chi-squared test of independence
13	Revision

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](#)
- [Grade Appeal Policy](#)
- [Complaint Management 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 or if you are a Global MBA student contact globalmba.support@mq.edu.au

Student Support

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

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- [Getting help with your assignment](#)
- [Workshops](#)
- [StudyWise](#)
- [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

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

IT Help

For help with University computer systems and technology, visit 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.