STAT1250

Business Statistics

Session 2, Special circumstance 2020

Department of Mathematics and Statistics

Contents

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Notice

As part of Phase 3 of our return to campus plan, most units will now run tutorials, seminars and other small group learning activities on campus for the second half-year, while keeping an online version available for those students unable to return or those who choose to continue their studies online.

To check the availability of face-to-face and online activities for your unit, please go to timetable viewer. To check detailed information on unit assessments visit your unit's iLearn space or consult your unit convenor.

General Information

Unit convenor and teaching staff
Unit Convenor/Lecturer
Ayse Bilgin
ayse.bilgin@mq.edu.au
Contact via via email
12 WW 635
By appointment

Unit Convenor/Lecturer
Karol Binkowski
karol.binkowski@mq.edu.au
Contact via via email
12 WW 614
By appointment

Thomas Fung
thomas.fung@mq.edu.au

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

You need to have the latest version of Excel with Data Analysis for the assessment tasks (see iLearn for access to Excel from the university).

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: Without Excel with Data Analysis you will not be able to answer questions for these assessment tasks.

Assessment Tasks

Name	Weighting	Hurdle	Due
Final Exam (online)	50%	No	Exam Period
Class Test 1 (online)	15%	No	W7
Class Test 2 (online)	25%	No	W11
Hurdle Quizzes	10%	Yes	W3, W4, W6, W10, W12

Final Exam (online)

Assessment Type [1]: Examination
Indicative Time on Task [2]: 21 hours
Due: **Exam Period**
Weighting: **50%**

The Final Examination will be online with length of two hours (plus ten minutes reading time) and will be held during the examination period by using iLearn. The University Examination timetable

will be available before the commencement of the examinations. 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
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- draw conclusions from the results of data analysis
- apply statistical techniques to problems arising from diverse fields of research including examples on sustainability

Class Test 1 (online)

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 3 hours
Due: **W7**
Weighting: **15%**

Class Test 1 will be online and available on iLearn. A supplementary class test will be given for students with an approved Special Consideration application.

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 (online)

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 3 hours
Due: **W11**
Weighting: **25%**

Class Test 2 will be online and available on iLearn. A supplementary class test will be given for students with an approved Special Consideration application.

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

Hurdle Quizzes

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 10 hours
Due: **W3, W4, W6, W10, W12**
Weighting: **10%**
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 at least two weeks prior to the due dates. Students are allowed 10 or more attempts to pass each quiz until the deadline. The required pass mark is indicated on each quiz. Inability to pass a quiz without help indicates that students should visit the Numeracy Centre for help. The highest score obtained will count towards the final grade. Each quiz is worth 2%. Extensions will not be given without an approved Special Consideration application. Completion and passing of all Hurdle Quizzes is a hurdle requirement. **Students who fail to do so will fail the unit regardless of other assessment tasks marks.**

On successful completion you will be able to:
- use appropriate techniques to analyse data
- use Excel to manipulate and analyse data
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- demonstrate foundational learning skills including active engagement in your learning process

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[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
- the Writing Centre 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

Delivery and Resources

You are expected to complete your learning weekly by studying the Lecture slides (and watching Lecture videos), by solving the problems presented in SGTA materials (solutions are presented in SGTA videos) and by solving the problems presented in Practical materials (solutions are presented in Practical videos). To be able to learn and enjoy your learning of business statistics,

you need to plan 10 hours of study time each week.

Lecture notes, **SGTA** worksheets and **Practical** worksheets will be available to download within iLearn. Lecture, SGTA and Practical videos will provide answers to unsolved problems in the Lecture slides, SGTA and Practical worksheets.

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	Assessment Due
1	Introduction to statistics	
2	Summarising and displaying data	
3	Summarising and displaying data (continued)	Hurdle Quiz 1
4	Introduction to distributions: the normal distribution	Hurdle Quiz 2
5	Sampling distributions and confidence intervals for proportions	
6	Sampling distributions and confidence intervals for means	Hurdle Quiz 3
7	One sample hypothesis tests for a population mean	Class Test 1
	Semester Break (not holiday)	
8	Hypothesis tests for comparing population means	
9	Simple linear regression (Part 1)	
10	Simple linear regression (Part 2)	Hurdle Quiz 4
11	Hypothesis tests for population proportions: z-test of a proportion and chi-squared goodness-of fit test	Class Test 2
12	Chi-squared test of independence	Hurdle Quiz 5
13	Revision	

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). 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 *(**Note:** The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.)*

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

If you would like to see all the policies relevant to Learning and Teaching visit Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/study/getting-started/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.