



MQBS7030

Quantitative Research Approaches in Business and Economics

Session 1, Weekday attendance, North Ryde 2020

Macquarie Business School Faculty level units

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General Information

Unit convenor and teaching staff

Unit Convenor

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Credit points

10

Prerequisites

Admission to MRes

Corequisites

Co-badged status

Unit description

This unit provides students with an introduction to fundamental elements of research design and quantitative research approaches within the business and economics. It seeks to develop students' understanding of the contexts in which quantitative research can be undertaken and the ability to analyse, conduct, and evaluate quantitative forms of research.

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: Review and interpret the basic rationale and application of relevant quantitative

approaches and analyses in disciplinary contexts of management, accounting and marketing research.

ULO2: Formulate appropriate hypotheses and propose the most appropriate research design for a research project

ULO3: Use specific statistical techniques to analyse data and explain present results

Assessment Tasks

Coronavirus (COVID-19) Update

Assessment details are no longer provided here as a result of changes due to the Coronavirus (COVID-19) pandemic.

Students should consult [iLearn](#) for revised unit information.

[Find out more about the Coronavirus \(COVID-19\) and potential impacts on staff and students](#)

General Assessment Information

Research paper critique

Due: 30 March 2020

Weighting: 15%

This assignment requires students to provide a critical review of a research paper and draw an appropriate conclusion from their critical analysis. More information will be provided on iLearn in due course.

Extension: No extension will be granted, except in circumstances where an application for special consideration is made and approved.

Research proposal

Due: 11 May 2020

Weighting: 30%

This assignment requires students to develop a research project on a topic of their own choice using the survey method. More information will be provided on iLearn in due course.

Extension: No extension will be granted, except in circumstances where an application for special consideration is made and approved.

Data analysis and reporting

Due: 9 June 2020

Weighting: 55%

This assessment will provide students with raw data in a general business discipline to analyse and to write an analytical report in response to the given research questions. More information

will be provided on iLearn in due course.

Extension: No extension will be granted, except in circumstances where an application for special consideration is made and approved.

Delivery and Resources

Coronavirus (COVID-19) Update

Any references to on-campus delivery below may no longer be relevant due to COVID-19.

Please check here for updated delivery information: https://ask.mq.edu.au/account/pub/display/unit_status

This unit is structured around attendance at one 3 hour seminar per week. The class timetable can be found on the university web site <https://timetables.mq.edu.au/>. All important information including weekly seminar lectures, assessment details, important announcements and staff contact details can be found at the unit iLearn website. The following are recommended books related to the unit. They are available in the library.

- Singleton, JR., R. A. and Straits, B. C. (2017) Approaches to Social Research, 6th edition, Oxford University Press.
- Hayes, A. F. (2017). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford Publications.
- Wooldridge, J. M. (2020) Introductory Econometrics A Modern Approach, 7th edition, Cengage Learning.

Unit Schedule

Coronavirus (COVID-19) Update

The unit schedule/topics and any references to on-campus delivery below may no longer be relevant due to COVID-19. Please consult [iLearn](#) for latest details, and check here for updated delivery information: https://ask.mq.edu.au/account/pub/display/unit_status

| Class week | Date | Topics | Content |
|------------|------|--------|---------|
| | | | |

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|----------|-------------|--|---|
| 1 SSu | 25 Feb | Introduction to research | <p>Research flow:</p> <ol style="list-style-type: none"> 1. Defining the problem 2. Developing a research approach 3. Formulating a research design 4. Collecting data 5. Preparing and analysing data 6. Preparing and presenting the report results & findings |
| 2 SSu | 3 March | Elements of Research Design | <p>Origins of research topics;</p> <p>Units of analysis;</p> <p>Types of variables;</p> <p>Relationships;</p> <p>Stating problems and hypotheses (include explanations of different types of hypotheses).;</p> <p>Research purposes and research design (leading to the next week topic)</p> |
| 3 SSu | 10 March | Formulating a research design I | <p>Measurement conceptualisation</p> <p>Measurement operationalisation</p> <p>Levels of measurement</p> <p>Validity and Reliability</p> |
| 4 SSu | 17 March | Formulating a research design II | <p>Why Sampling</p> <p>Population definition</p> <p>Sampling designs including probability sampling (i.e. Simple random sampling vs systematic sampling vs stratified sampling vs cluster sampling) and Nonprobability sampling (convenience sampling, purposive sampling, quota sampling).</p> <p>Factors affecting choice of sampling testing</p> |
| 5 SSu | 24 March | Data collection using survey | <p>Survey design and administration</p> <p>Introduction to Qualtrics</p> |
| 6 SSu | 31 March | Introduction to SPSS | <p>Enter survey data in SPSS</p> <p>Demonstrate key tabs in SPSS</p> <p>Descriptive statistics</p> |

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|---|---------------|-----------------------------------|---|
| 7 PP | 7 April | Analysing and reporting I | Data preparation Testing for normality and distributional assumptions Exploratory factor analysis Reliability and validity testing |
| Mid session break 13 April to 26 April | | | |
| 8 pp | 28 April | Analysing and reporting IV | Hypotheses testing Types of tests: One-sample t-test Independent-samples t-test Paired-samples t-test |
| 9 NL | 5 May | Analysing and reporting II | ANOVA Cross-tabulation Correlation Regression |
| 10 NL | 12 May | Analysing and reporting III | Multiple regression analysis |
| 11 SS | 19 May | Analysing and reporting V | Multiple moderated and mediated regression analysis Part 1 |
| 12 SS | 26 May | Analysing and reporting VI | Multiple moderated and mediated analysis Part 2 |
| 13 NL/ SS | 1 – 5 June | Consultation -Data Analysis | By appointment |
| <p>Note:</p> <p>SSu: Sophia Su</p> <p>PP: Peter Petocz</p> <p>SS: Shahin Sharifi</p> <p>NL: Nidhida Lin</p> | | | |

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) (<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) (<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) (<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.