



# FOBE730

## Quantitative Research Approaches in Business and Economics 1

S1 Day 2015

*Business and Economics Faculty level units*

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## General Information

Unit convenor and teaching staff

Lecturer, unit convenor

Jie Meng

[jie.meng@mq.edu.au](mailto:jie.meng@mq.edu.au)

Contact via email: [jie.meng@mq.edu.au](mailto:jie.meng@mq.edu.au)

E4A521

4:00-5:00 PM Friday, Week 2-6, 8-13

Lorne Cummings

[lorne.cummings@mq.edu.au](mailto:lorne.cummings@mq.edu.au)

Lorne Cummings

[lorne.cummings@mq.edu.au](mailto:lorne.cummings@mq.edu.au)

Credit points

4

Prerequisites

Admission to MRes

Corequisites

Co-badged status

Unit description

This unit provides students with an introduction to 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:

Understand the basic rationale and application of relevant quantitative approaches in relating disciplinary contexts of business, economics, finance, management, and marketing.

Be familiar with components of a few relevant quantitative methods in the field of interest and own the capability of application of them to the research project.

Own the capacity of Identifying, reasoning (or questioning), and applying a particular type of data and data collection procedure in terms of its appropriateness to be used, and furthermore evaluating risks of doing so.

Demonstrated capability of arguing for or against adopting appropriate quantitative skills to solve problems in scholarly research and putting them in a sound communication manner.

## General Assessment Information

Details of these assessment tasks will be given in the lecturers, and will be posted on the iLearn.

For each of the assessment tasks, individualised written feedback will be provided to students. If the task is deemed unsatisfactory, you will be expected to revise and resubmit it for reassessment.

## Assessment Tasks

Name	Weighting	Due
<u>Comment on Methodology</u>	25%	Week 5, 6
<u>Comment on Data Analysis</u>	25%	Week 9, 10
<u>Research Proposal</u>	40%	Week 13
<u>Class Discussion</u>	10%	Week 2-6, 8-13

### Comment on Methodology

Due: **Week 5, 6**

Weighting: **25%**

In this assignment, students should write up a review on the quantitative method (1,300-1,500 words) that has been applied in a discipline based journal paper. The assignment of this part is worth for 25% of the course grade, with report 15% and presentation 10% of unit marks respectively.

**Submission:** This assignment is due **in Week 5** for the individual report and **Week 6** for the group presentation. A hard copy of the assignment needs to be submitted to the lecturer **AND** a copy uploaded to “Turn-it-in” (via iLearn).

**Extension:** No extensions will be granted generally unless there is a special consideration approved by the convenor before it occurs.

**Penalties:** Students who are absent or do not participate in the group presentation will get a “0”

mark automatically. Students who have not submitted the written task prior to the deadline will get a “0” mark unless there is a compelling reason to make an exception (for exception, please refer to the "extension" above).

**Note:** No transfer of marks from this to other assessments.

On successful completion you will be able to:

- Understand the basic rationale and application of relevant quantitative approaches in relating disciplinary contexts of business, economics, finance, management, and marketing.
- Be familiar with components of a few relevant quantitative methods in the field of interest and own the capability of application of them to the research project.
- Demonstrated capability of arguing for or against adopting appropriate quantitative skills to solve problems in scholarly research and putting them in a sound communication manner.

## Comment on Data Analysis

Due: **Week 9, 10**

Weighting: **25%**

In this assignment, students should write up a review (1,300-1,500 words) on the statistical analysis that has been applied in a journal paper (i.e. discipline based). The assignment of this part (25%) is to be completed as a group (for presentation) and as an individual piece of work (for the report), with report 15% and presentation 10% of unit marks respectively.

**Submission:** This assignment is due in **Week 9** for the individual report, and in **Week 10** for the group presentation. A hard copy of the assignment needs to be submitted to the lecturer **AND** a copy uploaded to “Turn-it-in” (via iLearn).

**Extension:** No extensions will be granted generally unless there is a special consideration approved by the convenor before it occurs.

**Penalties:** Students who are absent or do not participate in the group presentation will get a “0” mark automatically. Students who have not submitted the written task prior to the deadline will get a “0” mark unless there is a compelling reason to make an exception (for exception, please refer to the "extension" above).

**Note:** No transfer of marks from this to other assessments.

On successful completion you will be able to:

- Understand the basic rationale and application of relevant quantitative approaches in relating disciplinary contexts of business, economics, finance, management, and

marketing.

- Own the capacity of Identifying, reasoning (or questioning), and applying a particular type of data and data collection procedure in terms of its appropriateness to be used, and furthermore evaluating risks of doing so.
- Demonstrated capability of arguing for or against adopting appropriate quantitative skills to solve problems in scholarly research and putting them in a sound communication manner.

## Research Proposal

Due: **Week 13**

Weighting: **40%**

In this assessment every student will write a research proposal. This is to be completed as an individual piece of work. The report should range from 3500-4000 words in length (including tables, figures, and reference while excluding abstract and appendix is applicable).

**Submission:** This major assignment is due in **Week 13** for the individual report. A soft copy needs to be uploaded to “Turn-it-in” (via iLearn).

**Extension:** No extensions will be granted generally unless there is a special consideration approved by the convenor before it occurs.

**Penalties:** Late submissions will be accepted up to 48 hours after the submission deadline. There will be a deduction of 10% of the total quality-based marks for EACH 24 HOURS period or part thereof that the submission is late (for example, being 25 hours late in submission will occur 20% mark penalty). This penalty does not apply for the cases in which an application for special consideration has been made and applied.

**Note:** No transfer of marks from this assessment to other assessments.

On successful completion you will be able to:

- Understand the basic rationale and application of relevant quantitative approaches in relating disciplinary contexts of business, economics, finance, management, and marketing.
- Be familiar with components of a few relevant quantitative methods in the field of interest and own the capability of application of them to the research project.
- Own the capacity of Identifying, reasoning (or questioning), and applying a particular type of data and data collection procedure in terms of its appropriateness to be used, and furthermore evaluating risks of doing so.

## Class Discussion

Due: **Week 2-6, 8-13**

Weighting: **10%**

Every enrolled student is required to attend the weekly lectures and tutorials punctually and actively participate in class discussions in a contributory manner.

**Submission:** Weekly attendance is recorded in every class. A full attendance record will not necessarily give students a full mark (10%) of this assessment, rather, a full attendance together with a well-demonstrated effort of class participation will do.

**Extension:** N.A.

**Penalties:** Missing every single class without any compelling reason will incur one mark's reduction directly from this session.

**Note:** No transfer of marks from this to other assessments.

On successful completion you will be able to:

- Understand the basic rationale and application of relevant quantitative approaches in relating disciplinary contexts of business, economics, finance, management, and marketing.
- Be familiar with components of a few relevant quantitative methods in the field of interest and own the capability of application of them to the research project.
- Own the capacity of Identifying, reasoning (or questioning), and applying a particular type of data and data collection procedure in terms of its appropriateness to be used, and furthermore evaluating risks of doing so.
- Demonstrated capability of arguing for or against adopting appropriate quantitative skills to solve problems in scholarly research and putting them in a sound communication manner.

## Delivery and Resources

### CLASS SCHEDULE

- Classes for FOBE730 are held on Monday at 11:00am-2:00pm at E3A244 or E4B208/206.
- For each student there will be 3 hours face-to-face teaching per week consisting of one 1.5-2 hour lecture/seminar plus one 1-1.5 hour tutorial of class activities aided by computer, discussions and so forth. Please bring a calculator and lecture notes to all classes.
- For latest information about timetables for classes, please refer to the University web site at: <http://www.timetables.mq.edu.au/>

### TEXTBOOKS AND READINGS

While there is no set textbook for FOBE730, the following books are **recommended**:

- Glyn Burton, George Carroll and Stuart Wall (2001) *Quantitative Methods for Business and Economics* (2nd Edition), Financial Times/Prentice Hall. ISBN: 0273655701

Or

- Frank Dewhurst (2006) *Quantitative Methods for Business and Management* (2nd Edition), McGraw-Hill Higher Education. ISBN-10: 0077109023

#### **Other Useful Books:**

- Sanjiv Jaggia and Alison Kelly (2013) *Business Statistics: Communicating with Numbers*. McGraw-Hill Higher Education. ISBN13: 9780073373669
- Robert B Burns and Richard A Burns (2008) *Business Research Methods and Statistics Using SPSS*, SAGE Publications, Inc. ISBN-10: 1412945305
- Peter Allen, Kellie Bennett, and Brody Heritage (2014) *SPSS Statistics Version 22: A Practical Guide* (3rd Edition), Cengage. ISBN-10: 0170348970, ISBN-13: 9780170348973

#### **TECHNOLOGY USED AND REQUIRED**

**Software and technology required:** (1) A personal computer with word processing software and Microsoft PowerPoint; (2) Access to iLearn for course materials; (3) Access to the SPSS software for data analysis.

As an FBE HDR candidate, you will be enrolled in the “FBE-HDR Transition to Research” online unit (iLearn). Login at <http://ilearn.mq.edu.au/>

If you cannot view this unit in your Online Units, please contact Unit Convenor (Email: [jie.meng@mq.edu.au](mailto:jie.meng@mq.edu.au)) for the instance. The site will be used to post lecture slides, handouts, and assignment instructions *after* each class, for those who miss their distribution in class.

The lecture notes will be posted on iLearn at <https://ilearn.mq.edu.au> on a weekly base. The Echo360 recording (video or audio) of lectures/seminars is NOT applied to this unit.

#### **WHAT IS REQUIRED TO COMPLETE THE UNIT SATISFACTORILY:**

This unit is delivered in the seminar pattern. Students are expected to be active and engaged individual learners as well as cooperative team players to complete all tasks as instructed, inclusive of before-class reading, after-class review, desktop work, presentation, and to

participate actively in class discussion. To get these above tasks accomplished, a certain level of independent and critical thinking will be inherently needed.

## Unit Schedule

### WEEKLY SUMMARY OF COURSE: SEMESTER 1 – 2015

<b>Week</b>	<b>Date</b>	<b>Topic</b>	<b>Tutorial</b>
2	2 Mar	Introduction to Quantitative Research Methods	Class Discussion
3	9 Mar	Data collection Methods and Sampling	Class Discussion
4	16 Mar	Descriptive Analysis	Lab
5	23 Mar	Correlation Analysis	Lab Assignment 1 due online this week
6	30 Mar	T-test and ANOVA	Lab Student Presentation I: Data & Method
	From 3 Apr to 17 Apr	Mid semester break	
8	27 Apr	Regression Methods	Lab Class Discussion: Feedback of Assignment 1
9	4 May	Reliability and Validity, Factor Analysis	Lab Assignment 2 due online this week
10	11 May	Introduction to Structural Equation Modelling (SEM)	Lab Student Presentation II: Statistical Analysis
11	18 May	Cross-discipline Showcase: Contemporary research methods in Finance and Economics	Class Discussion Feedback of Assignment 2
12	25 May	Guest Lecture: Clustering Methods and Segmentation	Class Discussion

13	1 Jun	<b>Cross-discipline Showcase:</b> Contemporary research methods in Economics and Marketing/Management  <b>Conclusion</b>	<b>Class Discussion</b>  <b>Group Report due online this week</b>
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## Learning and Teaching Activities

### Lectures and Seminars

Most of the above classes will be presented by Dr. Jie Meng. Week 11 - 13 seminars will be presented by guest lecturers.

### Guest Lecture/Showcase

Guest presenters from disciplines of Accounting, Finance, Management, and Marketing will present examples of their research, highlighting scholarly problems, quantitative solutions, problems encountered and results.

### Class Discussion

In-class discussion highlights abstract concepts and helps to apply different techniques and enriches class learning experience.

### Before-class Preview & Post-class Review

Students are expected to complete all pre-class preparation in advance of that particular class and all the post-class review tasks following class activities. Material that does not come from online unit will be provided by the lecturer/unit coordinator. It is advisable that students make notes summarising the pre-class readings. These notes do not need to be submitted for assessment; however they will allow discussion of the questions and material in class. It is expected that students will attend and participate in all classes. If attendance is below 80%, the student will be given an unsatisfactory result.

## Policies and Procedures

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

Academic Honesty Policy [http://mq.edu.au/policy/docs/academic\\_honesty/policy.html](http://mq.edu.au/policy/docs/academic_honesty/policy.html)

Assessment Policy <http://mq.edu.au/policy/docs/assessment/policy.html>

Grading Policy <http://mq.edu.au/policy/docs/grading/policy.html>

Grade Appeal Policy <http://mq.edu.au/policy/docs/gradeappeal/policy.html>

Grievance Management Policy [http://mq.edu.au/policy/docs/grievance\\_management/policy.html](http://mq.edu.au/policy/docs/grievance_management/policy.html)

Disruption to Studies Policy [http://www.mq.edu.au/policy/docs/disruption\\_studies/policy.html](http://www.mq.edu.au/policy/docs/disruption_studies/policy.html) *The*

*Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.*

In addition, a number of other policies can be found in the [Learning and Teaching Category](#) of 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/support/student\\_conduct/](https://students.mq.edu.au/support/student_conduct/)

## Results

Results shown in *iLearn*, 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](http://ask.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](http://mq.edu.au/learningskills)) provides academic writing resources and study strategies to improve your marks and take control of your study.

- [Workshops](#)
- [StudyWise](#)
- [Academic Integrity Module for Students](#)
- [Ask a Learning Adviser](#)

## 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](http://ask.mq.edu.au)

## IT Help

For help with University computer systems and technology, visit <http://informatics.mq.edu.au/help/>.

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

## Graduate Capabilities

### PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

#### Learning outcomes

- Own the capacity of Identifying, reasoning (or questioning), and applying a particular type of data and data collection procedure in terms of its appropriateness to be used, and furthermore evaluating risks of doing so.
- Demonstrated capability of arguing for or against adopting appropriate quantitative skills to solve problems in scholarly research and putting them in a sound communication manner.

#### Assessment task

- Class Discussion

### PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

#### Learning outcome

- Understand the basic rationale and application of relevant quantitative approaches in relating disciplinary contexts of business, economics, finance, management, and marketing.

#### Assessment tasks

- Comment on Methodology
- Comment on Data Analysis
- Research Proposal

### PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is

the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

### **Learning outcomes**

- Understand the basic rationale and application of relevant quantitative approaches in relating disciplinary contexts of business, economics, finance, management, and marketing.
- Be familiar with components of a few relevant quantitative methods in the field of interest and own the capability of application of them to the research project.
- Own the capacity of Identifying, reasoning (or questioning), and applying a particular type of data and data collection procedure in terms of its appropriateness to be used, and furthermore evaluating risks of doing so.

### **Assessment tasks**

- Comment on Methodology
- Comment on Data Analysis
- Research Proposal
- Class Discussion

## **PG - Research and Problem Solving Capability**

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

### **Learning outcomes**

- Be familiar with components of a few relevant quantitative methods in the field of interest and own the capability of application of them to the research project.
- Own the capacity of Identifying, reasoning (or questioning), and applying a particular type of data and data collection procedure in terms of its appropriateness to be used, and furthermore evaluating risks of doing so.

### **Assessment task**

- Research Proposal

## **PG - Effective Communication**

Our postgraduates will be able to communicate effectively and convey their views to different

social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

## **Learning outcome**

- Demonstrated capability of arguing for or against adopting appropriate quantitative skills to solve problems in scholarly research and putting them in a sound communication manner.

## **Assessment tasks**

- Comment on Methodology
- Comment on Data Analysis
- Research Proposal
- Class Discussion

## **Changes from Previous Offering**

- Feedback of assessment will be provided only to students generally unless there is a specific need to discuss with the student's academic supervisor.
- One newly recommended textbook (Allen, Bennett and Heritage, 2014) is added to the book list.
- Timetable of weekly teaching activities has been update with a reference to the university calendar.

## **Research and Practice**

- The unit is designed to equip students to embark on their individual higher degree research projects.
- Because the unit focuses on developing students' academic literacy skills, a number of reading, writing and analytical tasks are set. Responses to some of these tasks are discussed in class, whereas others will be submitted for assessment. The tasks will contribute directly to the Research Protocol submission and/or PhD thesis.
- The unit is delivered in accordance with current academic teaching and learning pedagogies.

As a guidance to direct students' future research outcomes, the following academic journals with high academic credit will assist students to link what is learned from this unit with a specific

disciplinary background that fits one's research interest.

Examples of discipline-based journals\*:

<p><b>Accounting and Corporate Governance</b></p> <p>Journal of Accounting Research</p> <p>Contemporary Accounting Research</p> <p>Accounting Research Journal</p> <p>Accounting and Finance</p> <p>Managerial Accounting Journal</p> <p>Journal of Accounting and Economics</p>	<p><b>Applied Finance and Actuarial Study</b></p> <p>Journal of Finance</p> <p>Journal of Financial and Quantitative Analysis</p> <p>Journal of Empirical Finance</p> <p>Annals of Actuarial Science</p> <p>Australian Actuarial Journal</p> <p>Asia-Pacific Journal of Risk and Insurance</p>
<p><b>Economics</b></p> <p>Econometrica</p> <p>American Economic Review</p> <p>Journal of Economic Theory</p> <p>Journal of International Economics</p> <p>The Journal of Industrial Economics</p> <p>Journal of Public Economics</p>	<p><b>Marketing and Management</b></p> <p>Journal of Marketing Research</p> <p>Journal of the Academy of Marketing Science</p> <p>Asia Pacific Journal of Marketing and Logistics</p> <p>Academy of Management Journal</p> <p>Organisation studies</p> <p>Journal of International Business Studies</p>

\*The selected journal lists are provided to assist students searching for discipline-based quantitative research. More comprehensive journals lists are available on the course website.

In addition, a list of other useful references may be available from the [Research at Faculty of Business and Economics](http://www.businessand economics.mq.edu.au/research) webpage (www.businessand economics.mq.edu.au/research) from diversified research interests.