FOBE730

Quantitative Research Approaches in Business and Economics 1

S2 Day 2014

Business and Economics Faculty level units

Contents

General Information

Unit convenor and teaching staff
Unit Convenor
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E4A 521
Friday: 2:00pm to 3:00pm Week 1-13 @ E4A 521 or by appointment

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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, 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 feedback will be provided to students. If the task is deemed unsatisfactory, you will be expected to revise and resubmit it for reassessment.

Assessed Coursework 1- Comments on methodology

Oral presentation (Individually, 10%): to be performed in Week 6's class

Written report (individually, 15%): A soft copy to be submitted to Turnitin dropbox in Week 6. No late submission is allowed unless there is an approved special consideration by the convenor.

Submission: This assignment is due in week 6 for the individual presentation and individual report. A soft copy of the written assignment needs to be submitted 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 assessment to the final exam.

Assessed Coursework 2- Comments on Statistical Analysis

Oral presentation (individually, 10%): to be performed in Week 10's class

Written report (individually, 15%): A soft copy to be submitted to Turnitin dropbox in Week 10. No late submission is allowed unless there is an approved special consideration by the convenor.

Submission: This assignment is due in week 10 for the individual presentation and the individual report. A soft copy of the written assignment needs to be submitted 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 assessment to the final exam.

Research Proposal

Submission method: A soft copy to Turnitin assignment dropbox in the iLearn (in Week 13). No late submission is allowed unless there is an approved special consideration by the convenor.

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 the final exam.

Class Participation and Discussion

Every enrolled student is required to attend the 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 assessment to the final exam.

Assessment Tasks

Name	Weighting	Due
Assessed Coursework 1	25%	Week 6 in tutorial
Assessed Coursework 2	25%	Week 10 in tutorial
Research Proposal	40%	Week 13

Name	Weighting	Due
Class Participation/Discussion	10%	Week 2, 4, 6, 8, 10

Assessed Coursework 1

Due: **Week 6 in tutorial**
Weighting: **25%**

In this assignment, students should write up a review on the quantitative method that has been applied in a discipline based journal paper. It has been designed to assist students' learning in relation to an experience in summarising and critically evaluating the quantitative method and data source applied in their fields; conveying information in an effective, proper and concise manner; and developing an academic referencing style. This assignment of this part is to be completed as an individual presentation in class and as an individual piece of work (for the report), with 10% and 15% unit marks worth respectively.

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, 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.

Assessed Coursework 2

Due: **Week 10 in tutorial**
Weighting: **25%**

In this assignment, students should write up an individual review on the statistical analysis that has been applied in a journal paper (i.e. discipline based). It has been designed to assist students' learning in relation to an experience in doing statistical analysis, summarising and critically evaluating the statistics method in their fields; conveying information in an effective, proper and concise manner; and developing an academic referencing style. The assignment of this part is to be completed as a presentation and as an individual piece of work (for the report), with presentation 10% and report 15% of unit marks respectively.

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, 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.

Research Proposal

Due: **Week 13**
Weighting: **40%**

In this assessment every student should 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). This assignment is to be uploaded to "Turn-it-in" (via iLearn) in week 13. The assignment is worth for 40% of the course grade. A more detailed project brief will be provided separately.

On successful completion you will be able to:
- 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.

Class Participation/Discussion

Due: **Week 2, 4, 6, 8, 10**
Weighting: **10%**

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

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, 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.

Delivery and Resources

CLASS SCHEDULE

- Classes for FOBE730 are held on a fortnightly base starting from Week 2, and through Week 4, 6, 8, 10, and Until Week 12.

- The class details will be posted in iLearn soon.
- In every class there will be one module of 5-6 hours in length, conveyed in a face-to-face manner per week in a classroom with computer setting. Each module is composed by 3 hour lecture/seminar plus one 2 hour tutorial of class activities aided by computer, discussions and so forth.
- 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 Agnieszka Baginska (Email: agni

eszka.baginska@mq.edu.au), who will enrol you. 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 dependent and critical thinking will be inherently needed.

CHANGES FROM PREVIOUS OFFERING OF THIS UNIT:

1) The learning outcomes are rephrased to focus on more measurable results of student learning.

2) The delivery pattern has been customised to the enrolled students' knowledge and preparation level. In particular, the classes conveyed in every two weeks have been redesigned into SIX MODULES with each one containing 2 or 3 interrelated blocks of methods and analytic techniques in combination of some tutorial activities to strengthen student's skills in the aspects.

3) The assessment components have been set as FOUR, with each one's percentage changed accordingly, e.g., report on methods (25%), report on statistical analysis (25%), research proposal (40%), and attendance (10%). And all the assignments are all individual assignments.

4) Feedback of assessment will be provided only to students generally unless there is a specific need to discuss with the student's academic supervisor.

5) There are no guest lectureships in this semester due to the change of delivery pattern.

6) One newly recommended textbook (Allen, Bennett and Heritage, 2014) is added to the book list.

7) Timetable of weekly teaching activities has been update with a reference to the university calendar.

Unit Schedule

Week	Start Date of the Week	Topic	Tutorial

2	11 Aug	**Module 1- Introduction to Quantitative Research Methods** **Part A: Quantitative Research** **Part B: Data Collection and Sampling**	**Class Discussion**
4	25 August	**Module 2- Validation** **Part A: Exploratory, Descriptive, and Causal Research (Experiment)** **Part B: Measurement, Reliability, and Validity**	**Class Discussion**
6	8 Sep	**Module 3 - Fundamental Inferential Statistics I (Variance & Covariance)** **Part A: t-Test** **Part B: ANOVA** **Part C: Correlation**	**Lab + Student Presentation**
8	7 Oct	**Module 4 - Fundamental Inferential Statistics II** **Part A: Multiple Regression** **Part B: Logistic Regression**	**Lab**
10	20 Oct	**Module 5 - Dimension Reduction Techniques** **Part A: Cluster Analysis (Groups of Cases)** **Part B: Factor Analysis (Groups of Variables)**	**Lab + Student Presentation**
12	3 Nov	**Module 6 - Introduction of Contemporary Techniques** **Part A: Structured Equation Models (SEM)** **Part B: Simulations and Agent-Based Models (ABM)**	**Lab + Student Reflection + Q&A**

Learning and Teaching Activities

Lectures or Seminars

Most of the above classes will be presented by Dr. Jie Meng. Week 11 & 12 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

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

Disruption to Studies Policy 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/

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 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](#)

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.

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*:

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

*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" webpage (www.businessandeconomics.mq.edu.au/research) from diversified research interests.