

# **ECON2041**

# **Introductory Econometrics**

Session 1, Weekday attendance, North Ryde 2020

Department of Economics

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#### Disclaimer

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### **General Information**

Unit convenor and teaching staff

**Unit Convenor** 

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06EaR-453

TBA on iLearn

Credit points

10

#### Prerequisites

50cp at 1000 level or above including (STAT150 or STAT1250 or STAT170 or STAT1170 or STAT1371) and (ECON110 or ECON111 or ECON1020)

Corequisites

Co-badged status

#### Unit description

This unit introduces some basic econometric techniques employed by economists in the analysis of economic relationships. These techniques are also used extensively in marketing and finance. Topics covered will usually include: estimation and hypothesis testing; simple and multiple regression; prediction; the interpretation and evaluation of regression models, including an elementary discussion of nonlinear modelling, heteroscedasticity, autocorrelation, multicollinearity and specification error; and the use of categorical or qualitative data in regression models.

## 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:** Analyse and apply key statistical concepts, including probability distributions, parameters and estimators, the sampling distribution of an estimator, point and interval estimation, and hypothesis testing.

**ULO2:** Specify, estimate and interpret a regression model.

**ULO3:** Summarise and interpret the estimation results, and draw valid inferences utilising hypothesis tests.

**ULO4:** Critically evaluate the assumptions of a classical (or standard) regression model and the consequences of violation of the assumptions.

**ULO5:** Employ an econometric software program to solve an econometric problem.

### **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

# **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: <a href="https://ask.mq.edu.au/account/pub/display/unit\_status">https://ask.mq.edu.au/account/pub/display/unit\_status</a>

#### Classes

- There is a lecture each week of semester. Barring technical issues (which often occur), screen recordings of all lectures will be made available on Echo. Lecture slides and the data sets used for examples in the lectures will be made available on iLearn. The lectures cover all the material necessary to pass the unit, including some material that is not available in other formats. Consequently, students are expected to attend all lectures and/or study the lectures online closely.
- There is a tutorial class held in each week except Week 1. Students must register in a tutorial class and generally will **not** be permitted to attend a tutorial class other than the one in which they are registered. Changes to tutorial enrolments may only be made using the online system subject to available capacity. The Unit Convenor cannot make enrolment changes on behalf of students. Changes to tutorial enrolments generally take up to 24 hours to be reflected on iLearn.
- In tutorial classes, students will attempt exercises that count towards their final grade.

  Except in special circumstances (e.g. technical problems that prevent a particular tutorial

- class from being run), these exercises may only be attempted by students who physically attend the class in which they are enrolled.
- The timetable for classes can be found on the University website: http://www.timetables.mq.edu.au/
- Students are expected to attend all lectures (live and/or online) and tutorials (live only), read the text, attempt the set exercises, and regularly seek help from their tutor for any problems that, having made a reasonable effort, they have not been able to resolve. Following the last tutorial class each week, marks and solutions for the tutorial exercises will be made available. Students should study the solutions carefully, attempt to resolve any issues they had with the work, and seek help from their tutor with any unresolved issues the following week. In general, it is difficult for staff to provide meaningful help to students who do not do this work each week.
- It is expected that students will spend an average of approximately 10 hours per week working on ECON241 (including class time).

#### Required and Recommended texts and/or materials

Wooldridge, J. M., Wadud, M. and Lye, J. (2017) Introductory Econometrics (1st Asia-Pacific ed.) Cengage.

#### Additional useful textbooks and resources.

- Hill, C. H., Griffiths, W. E. and Lim, G. C. (2018) Principles of Econometrics (5th ed.)
   Wiley.
- Gujarati, D.N., and Porter, D.C. (2010) Essentials of Econometrics (4th ed.) McGraw-Hill.
- Stock, J.H., and Watson, M.W. (2007) Introduction to Econometrics (2nd ed.) Addition-Wesley
- A list of prescribed reading will be developed on the website as the unit progresses.
- The data sets used in the textbook and in lectures will be provided on the website.

#### **Technology Used and Required**

• The main software package used in ECON241 is Gretl (http://gretl.sourceforge.net/). This software is available for use in the 06EaR computer labs and may be freely downloaded for use elsewhere. The Microsoft Windows version is available at http://gretl.sourceforge.net/win32/. A Mac version is available at http://gretl.sourceforge.net/osx.html. Linux users should check their repositories or download the rpm or source from http://gretl.sourceforge.net/.

- The use of a spreadsheet will often be helpful for tasks in this unit. Microsoft Excel will be used during tutorials and is available for students to use off-campus at https://wiki.mq.edu.au/display/microsoftstu/
  About;jsessionid=E26834FF0E276C3384E93466EE687514. For students who don't wish to use Microsoft Excel, free alternatives include
  OpenOffice (http://www.openoffice.org), LlbreOffice (https://www.libreoffice.org/) and Gnumeric (http://www.gnumeric.org/, https://portableapps.com/apps/office/gnumeric\_portable).
- Formatting of equations using LaTeX will be required in the assignments. Guidance will be given on iLearn and in lectures.
- Course material is available on the learning management system (iLearn).
- Announcements will be made regularly on iLearn. Students should ensure that these
  announcements are forwarded to their email account, which they should check regularly.
  Staff may also occasionally directly email students.
- Students are strongly advised to check the unit web page regularly for new material and announcements.

### **Policies and Procedures**

Macquarie University policies and procedures are accessible from Policy Central (https://staff.m q.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 <u>Student Policy Gateway</u> (https://students.m <u>q.edu.au/support/study/student-policy-gateway</u>). 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 (http

s://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 <u>eStudent</u>, (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 <u>eStudent</u>. For more information visit <u>ask.mq.edu.au</u> 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 <a href="http://students.mq.edu.au/support/">http://students.mq.edu.au/support/</a>

### **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 <u>Disability Service</u> 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 <a href="http://www.mq.edu.au/about\_us/">http://www.mq.edu.au/about\_us/</a> 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.