

<https://courseoutline.auckland.ac.nz/dco/course/ECON/721/1213>



Business and Economics

ECON 721 : Econometrics 1 (15 POINTS)

2021 Semester One

Course Prescription

Core econometrics including theory and applications. The development of the classical linear regression model and extensions to the most general case. Applications to types of linear models involving cross-section and time-series data, and simultaneous equation models. The method of maximum likelihood, other extrema estimators and associated methods of testing.

Course Overview

Students taking this course should have a good background in econometrics and statistics to the advanced undergraduate level, and be comfortable with the related mathematics. Little prior knowledge of some topics is assumed, but the course moves quickly quite quickly through the more basic material. The course emphasizes the importance of a knowledge of theoretical underpinnings in understanding a variety of practical methods.

Course Requirements

No pre-requisites or restrictions

Capabilities Developed in this Course

Capability 1: Disciplinary Knowledge and Practice

Capability 2: Critical Thinking

Capability 3: Solution Seeking

Capability 4: Communication and Engagement

Capability 5: Independence and Integrity

Graduate Profile: [Bachelor of Commerce \(Honours\)](#)

Learning Outcomes

By the end of this course, students will be able to:

1. Understand the foundations of econometrics (Capability 1, 2 and 4.2)
2. Understand the foundations of linear econometric theory (Capability 1, 2 and 4.2)

3. Apply preliminary and post estimation statistical tests and diagnostics including some specification tests. (Capability 1, 4.2 and 5.1)
4. Analyse micro-economic data using linear models (Capability 2, 4.2 and 5.1)
5. Use econometric methods to analyse various data issues (Capability 3, 4.2 and 5.2)

Assessments

Assessment Type	Percentage	Classification
Assignments	30%	Individual Coursework
Final Exam	70%	Individual Examination
2 types	100%	

Assessment Type	Learning Outcome Addressed				
	1	2	3	4	5
Assignments	✓	✓	✓	✓	✓
Final Exam		✓	✓	✓	

Workload Expectations

This course is a standard 15 point course and students are expected to spend 10 hours per week involved in each 15 point course that they are enrolled in.

For this course, you can expect 3 hours of lectures, 3 hours of reading and thinking about the content and 4 hours of work on assignments and/or test preparation.

Delivery Mode

Campus Experience

Attendance is expected at scheduled activities including labs to complete components of the course.

Lectures will be not be available as recordings. Other learning activities including labs will not be available as recordings.

The course will not include live online events.

Attendance on campus is required for the test and exam.

The activities for the course are scheduled as a standard weekly timetable.

Learning Resources

1. Lecture Notes posted on CANVAS. These are quite comprehensive.

2. The following books also contain relevant material; the first of these is probably the most useful general reference.

W.H. Greene, *Econometric Analysis*, 8th edition, Prentice Hall, 2018. (Other editions are also suitable.)

J. Wooldridge, *Econometric Analysis of Cross Section and Panel Data*, 2nd edition, MIT Press 2010.

R. Davidson and J.G. MacKinnon, *Econometric Theory and Methods*, Oxford University Press, 2004.

J. Johnston and J. DiNardo, *Econometric Methods*, 4th edition, McGraw-Hill, 1997.

T. Amemiya, *Advanced Econometrics*, Blackwell, 1985.

F. Hayashi, *Econometrics*, Princeton University Press, 2000.

P.A. Ruud, *An Introduction to Classical Econometric Theory*, Oxford University Press, 2000.

J.S. Chipman, *Advanced Econometric Theory*, Routledge, 2011.

A. C. Cameron and P. K. Trivedi, *Microeconometrics, Methods and Applications*, 2005, Cambridge University Press.

Student Feedback

At the end of every semester students will be invited to give feedback on the course and teaching through a tool called SET or Qualtrics. The lecturers and course co-ordinators will consider all feedback and respond with summaries and actions.

Your feedback helps teachers to improve the course and its delivery for future students.

Class Representatives in each class can take feedback to the department and faculty staff-student consultative committees.

Digital Resources

Course materials are made available in a learning and collaboration tool called Canvas which also includes reading lists and lecture recordings (where available).

Please remember that the recording of any class on a personal device requires the permission of the instructor.

Academic Integrity

The University of Auckland will not tolerate cheating, or assisting others to cheat, and views cheating in coursework as a serious academic offence. The work that a student submits for grading must be the student's own work, reflecting their learning. Where work from other sources is used, it must be properly acknowledged and referenced. This requirement also applies to sources on the internet. A student's assessed work may be reviewed against online source material using computerised detection mechanisms.

Inclusive Learning

All students are asked to discuss any impairment related requirements privately, face to face and/or in written form with the course coordinator, lecturer or tutor.

Student Disability Services also provides support for students with a wide range of impairments, both visible and invisible, to succeed and excel at the University. For more information and contact details, please visit the [Student Disability Services' website](http://disability.auckland.ac.nz) <http://disability.auckland.ac.nz>

Special Circumstances

If your ability to complete assessed coursework is affected by illness or other personal circumstances outside of your control, contact a member of teaching staff as soon as possible before the assessment is due.

If your personal circumstances significantly affect your performance, or preparation, for an exam or eligible written test, refer to the University's [aegrotat or compassionate consideration page](https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html) <https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html>.

This should be done as soon as possible and no later than seven days after the affected test or exam date.

Learning Continuity

In the event of an unexpected disruption we undertake to maintain the continuity and standard of teaching and learning in all your courses throughout the year. If there are unexpected disruptions the University has contingency plans to ensure that access to your course continues and your assessment is fair, and not compromised. Some adjustments may need to be made in emergencies. You will be kept fully informed by your course co-ordinator, and if disruption occurs you should refer to the University Website for information about how to proceed.

Student Charter and Responsibilities

The Student Charter assumes and acknowledges that students are active participants in the learning process and that they have responsibilities to the institution and the international community of scholars. The University expects that students will act at all times in a way that demonstrates respect for the rights of other students and staff so that the learning environment is both safe and productive. For further information visit [Student Charter](https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/student-charter.html) <https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/student-charter.html>.

Disclaimer

Elements of this outline may be subject to change. The latest information about the course will be available for enrolled students in Canvas.

In this course you may be asked to submit your coursework assessments digitally. The University reserves the right to conduct scheduled tests and examinations for this course online or through the use of computers or other electronic devices. Where tests or examinations are conducted online remote invigilation arrangements

may be used. The final decision on the completion mode for a test or examination, and remote invigilation arrangements where applicable, will be advised to students at least 10 days prior to the scheduled date of the assessment, or in the case of an examination when the examination timetable is published.