[EMET4314]
[Fundamentals of Econometric Methods]

Mode of Delivery	On campus
Prerequisites	As listed in *Programs and Courses*
Incompatible Courses	As listed in *Programs and Courses*
Course Convener:	
Phone:	
Email:	tao.yang@anu.edu.au
Office hours for student consultation:	
Research Interests	
Relevant administrator if any (optional)	Nicole Millar
Phone:	026125 0384
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Lecturer(s)	Thomas Tao Yang
Phone(s):	
Email(s):	tao.yang@anu.edu.au
Office hours for student consultation:	Friday 16:00-17:00
Tutor(s) (optional)	

SEMESTER 1
2018

http://programsandcourses.anu.edu.au/course/EMET4314

COURSE OVERVIEW

The overall aim of this course is to provide students with an advanced understanding of the principles underlying estimation methods and hypothesis tests in econometrics. The course first covers basic probability theory and statistics, then moves to econometrics.

Learning Outcomes

On successful completion of this course, students will be able to

1. Calculate expected values and higher order moments for random variables.

2. Derive distributional properties of random variables and statistics from first principles using various mathematical techniques.

3. Use asymptotic theory to calculate approximate distributions for random variables and statistics.

4. Derive properties of estimators and compare their performance.

5. Derive properties of test statistics.

6. Appreciate the connections between the many different methods used in econometrics.

A side-objective of the course is for students to practice rigorous mathematical reasoning and to enhance their analytical skills.

Course format

Each week there will be one 2 hours lecture and 1 hour tutorial.
Lecture: Friday 14:00 – 16:00 SRES T
Tutorial (choose one only): Wednesday, 11:00 – 12:00 COP G021; Wednesday, 17:00 – 18:00 COP G021; Thursday, 9:00 - 10:00 COP G021
Office hours: Friday 16:00-17:00 Arndt Building Room 2089

Normally, there will be a problem set after each lecture. Problem solving is the most important aspect of this course. Each problem set is to be submitted in Turnitin. The deadline is 10:00 am the next Wednesday. **NO tutorials in the first week.**

Recommended (NOT required) Reading:

Introduction to Statistics and Econometrics, Takeshi Amemiya, 1st Ed, 1994 Harvard University Press.
Statistical Inference, George Casella and Roger L. Berger, 2nd Ed, 2001 Duxbury Press.
Econometric Analysis, William H. Greene, 7th Ed, 2011 Prentice Hall.

Assessment Summary

Assessment Task	Value	Due Date	Date for Return of Assessment	*Linked Learning Outcomes (optional)*
1. Problem sets	**10% of mark**	**Tutorial next week**	*In Turnitin*	
2. Mid term exam (Optional and/or Redeemable)	**40% of mark**			
3. Final exam	**50% of mark**			

You can miss up to 1 week' assignments to get the 10% of mark.
The mid-semester exam is <u>optional and/or redeemable</u>:
·   There will be no special examinations for the mid-semester exam. Instead the

weighting will be moved to the final exam.

Scaling

Your final mark for the course will be based on the **raw** marks allocated for each of your assessment items. However, your final mark may not be the same number as produced by that formula, as marks may be **scaled**. Any scaling applied will preserve the rank order of raw marks (i.e. if your raw mark exceeds that of another student, then your scaled mark will exceed the scaled mark of that student), and may be either up or down

Policies

ANU has educational policies, procedures and guidelines, which are designed to ensure that staff and students are aware of the University's academic standards, and implement them. You can find the University's education policies and an explanatory glossary at: http://policies.anu.edu.au/

Students are expected to have read the Student Academic Integrity Policy before the commencement of their course.

Other key policies include:
- Student Assessment (Coursework)
- Student Surveys and Evaluations

Extensions and penalties

Extensions and late submission of assessment pieces are covered by the Student Assessment (Coursework) Policy and Procedure.

The Course Convener may grant extensions for assessment pieces that are not examinations or take-home examinations. If you need an extension, you must request it in writing on or before the due date. If you have documented and appropriate medical evidence that demonstrates you were not able to request an extension on or before the due date, you may be able to request it after the due date.

No submission of assessment tasks without an extension after the due date will be permitted. If an assessment task is not submitted by the due date, a mark of 0 will be awarded.