

Applied Macro and Financial Econometrics

This course will examine modern applied research on macroeconomic and financial issues. The main objective is to allow students to understand and critically appraise applied work on macroeconomic and financial topics.

Mode of Delivery	On campus		
Prerequisites	As listed in Programs and Courses		
Incompatible Courses	As listed in Programs and Courses		
Course Convener:	Sriram Shankar		
Phone:	6125 2310		
Email:	sriram.shankar@anu.edu.au		
Office hours for student	Please refer to Wattle for consultation time		
consultation:			
Research Interests	Risk and Uncertainty and Applied Econometrics		
Relevant administrator if	Nicole Millar		
any (optional)			
Phone:	6125 0384		
Email:	Enquiries.rse@anu.edu		
Office hours for student	TBA		
consultation:			
Tutor (optional)	-		

SEMESTER 2 2017

http://programsandcourses.anu.edu.au/course/EMET3008

COURSE OVERVIEW

Learning Outcomes

This course will expose the student to a range of macroeconomics and finance research techniques. Upon successful completion of the requirements for this course, students will be able to:

- Select a model and combine from a model space comprising univariate or multivariate;
- · Apply and explain the principles of parsimony and fit;
- Explain the methodology of dynamic time series modelling
- Critically evaluate the results derived from model estimation using econometric computer software:
- · Reconcile theory and evidence; and,
- Conduct hypothesis and diagnostic testing.

Assessment Summary

Assessment Task	Value	Start Date	Due Date
1. Assignment 1	15%	26/07/2017	25/08/2017
2. Assignment 2	15%	06/09/2017	20/10/2017
3. Mid-term exam	30%	-	18/09/2017
4. Final exam	40%	-	TBA

Feedback

Staff Feedback

Students will be given feedback in the following forms in this course: written comments, verbal comments, feedback to the whole class and to tutorial groups.

Student Feedback

ANU is committed to the demonstration of educational excellence and regularly seeks feedback from students. One of the key formal ways students have to provide feedback is through Student Experience of Learning Support (SELS) surveys. The feedback given in these surveys is anonymous and provides the Colleges, University Education Committee and Academic Board with opportunities to recognise excellent teaching, and opportunities for improvement.

For more information on student surveys at ANU and reports on the feedback provided on ANU courses, go to

http://unistats.anu.edu.au/surveys/selt/students/ and http://unistats.anu.edu.au/surveys/selt/results/learning/

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 <u>Academic Misconduct Rules 2014</u> before the commencement of their course.

Other key policies include:

- Student Assessment (Coursework)
- Student Surveys and Evaluations

Required Resources

Commonwealth supported students and domestic full-fee paying students generally must be able to complete the requirements of their program of study without the imposition of fees that are additional to the student contribution amount or tuition fees.

Provided that its payment is in accordance with the *Act*, a fee is of a kind that is into any one or more of the following categories:

- (a) It is a charge for a good or service that is not essential to the course of study.
- (b) It is a charge for an alternative form, or alternative forms, of access to a good or service that is an essential component of the course of study but is otherwise made readily available at no additional fee by the higher education provider.
- (c) It is a charge for an essential good or service that the student has the choice of acquiring from a supplier other than the higher education provider and is for:
- (i) equipment or items which become the physical property of the student and are not consumed during the course of study; or
- (ii) food, transport and accommodation costs associated with the provision of field trips that form part of the course of study.
- (d) It is a fine or a penalty provided it is imposed principally as a disincentive and not in order to raise revenue or cover administrative costs.

Additional course costs

EViews econometric software will be used in this course. A Student version of the software may be purchased separately.

Examination material or equipment

The relevant information will be posted on Wattle.

Recommended Resources

Essential Textbook: Enders, W. Applied Econometric Time Series, Wiley, 2014.

Other recommended texts (not compulsory):

- Brooks, C., Introductory Econometrics for Finance, Cambridge, 2004.
- Hamilton, J. D., Time Series Analysis, Princeton, 1994.
- Harris, R. and R. Sollis, Applied Time Series Modelling and Forecasting, Wiley, 2003.
- Hendry, D.F., Dynamic econometrics, Oxford University Press, 1995.
- Lütkepohl, H. and M. Krätzig, Applied Time Series Econometrics, Cambridge University Press, 2004.
- Mills, T.C., The Econometric Modelling of Financial Time Series, 2nd edition, Cambridge University Press, 2000.
- Patterson, K., An Introduction to Applied Econometrics: A Time Series Approach, MacMillan, 2000.
- Stock, J. & M. Watson, Introductory Econometrics, Addison-Wesley, 2003.
- Tsay, R.S., Analysis of Financial Time Series, Wiley, 2002.
- Verbeek, M., A Guide to Modern Econometrics, Wiley, 2008.
- Wooldridge, J., Introductory Econometrics: A Modern Approach, 2nd Ed. South-Western College Publishing, 2001

COURSE SCHEDULE

Week/ Session	Summary of Activities	
1	Univariate time series (Enders, chapter 1 and 2)	
2	Stationary ARMA models (Enders, chapter 2)	
3	Trend and difference stationary processes (Enders, chapter 4)	
4	Testing for unit roots – I (Enders, chapter 4)	
5	Testing for unit roots – II (Enders, chapter 4)	
6	Modelling volatility – I (Enders, chapter 3).	
7 (Monday)	Mid-semester exam	
7 (Tuesday)	Modelling volatility – II (Enders, chapter 3).	
8	VAR models - I (Enders, chapter 5)	
9	VAR models - I (Enders, chapter 5)	
10	VAR models - II (Enders, chapter 5)	
11	Conitegration, long-run equilibria, error correction models – I (Enders, chapter 6)	
12	Conitegration, long-run equilibria, error correction models – II (Enders, chapter 6)	
	Examination period	

ASSESSMENT REQUIREMENTS

The ANU is using Turnitin to enhance student citation and referencing techniques, and to assess assignment submissions as a component of the University's approach to managing Academic Integrity. For additional information regarding Turnitin please visit the <u>ANU</u> Online website.

Students may choose not to submit assessment items through Turnitin. In this instance you will be required to submit, alongside the assessment item itself, copies of all references included in the assessment item.

As a further academic integrity control, students may be selected for a 15 minute individual oral examination of their written assessment submissions.

Any student identified, either during the current semester or in retrospect, as having used ghost writing services will be investigated under the University's Academic Misconduct Rule.

Assessment Tasks

The assignments and exams for honours and graduate students will be longer and more challenging compared to undergraduate students.

Assignments

There will be two assignments in this course. The due dates for these assignments will be posted on Wattle.

Examination(s)

The mid-semester exam would contain short-answer/calculation type questions based on topics covered in the assignment and textbook. Students who miss the mid-semester exam for valid and documented medical reasons will have the value of the mid-semester exam added to the value of

the final examination. In other words, students who miss the mid-term exam for valid medical reasons will have 70% of the assessment based on the final examination.

Assignment submission

Online Submission: Assignments are submitted using Turnitin in the course Wattle site. You will be required to electronically sign a declaration as part of the submission of your assignment. Please keep a copy of the assignment for your records.

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 takehome 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.

Returning assignments

The dates for returning the assignments will be posted on Wattle.

Announcements

Students are expected to check the Wattle site for announcements about this course, e.g. changes to timetables or notifications of cancellations.

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.

Privacy Notice

The ANU has made a number of third party, online, databases available for students to use. Use of each online database is conditional on student end users first agreeing to the database licensor's terms of service and/or privacy policy. Students should read these carefully.

In some cases student end users will be required to register an account with the database licensor and submit personal information, including their: first name; last name; ANU email address; and other information.

In cases where student end users are asked to submit 'content' to a database, such as an assignment or short answers, the database licensor may only use the student's 'content' in accordance with the terms of service – including any (copyright) licence the student grants to the database licensor.

Any personal information or content a student submits may be stored by the licensor, potentially offshore, and will be used to process the database service in accordance with the licensors terms of service and/or privacy policy.

If any student chooses not to agree to the database licensor's terms of service or privacy policy, the student will not be able to access and use the database. In these

circumstances students should contact their lecturer to enquire about alternative arrangements that are available.

<u>Tutorial Seminar Registration</u>

Tutorial signup for this course will be done via the Wattle website. Detailed information about signup times will be provided on Wattle or during your first lecture. When tutorials are available for enrolment, follow these steps:

- 1. Log on to Wattle, and go to the course site
- 2. Click on the link "Tutorial enrolment"
- 3. On the right of the screen, click on the tab "Become Member of....." for the tutorial class you wish to enter
- 4. Confirm your choice

If you need to change your enrolment, you will be able to do so by clicking on the tab "Leave group...." and then re-enrol in another group. You will not be able to enrol in groups that have reached their maximum number. Please note that enrolment in ISIS must be finalised for you to have access to Wattle.

SUPPORT FOR STUDENTS

The University offers a number of support services for students. Information on these is available online from http://students.anu.edu.au/studentlife/