Subject Description Form

Subject Code	AMA481
Subject Title	Econometrics
Credit Value	3
Level	4
Pre-requisite/ Co-requisite/ Exclusion	Pre-requisite: Applied Statistical Methods (AMA263 or AMA2631)
Objectives	This subject is to apply the techniques of statistics, in particular that of regression methods, to formulate, estimate and analyze economic relationships.
Intended Learning Outcomes	Upon satisfactory completion of the subject, students should be able to: 1. recognize economic relations and econometric models; 2. formulate econometric models and identify the data relevant to the models; 3. use statistical packages to estimate econometric models; 4. apply econometric techniques in the estimation and analysis of econometric models and to evaluate the pros and cons of alternative models; 5. deal with nonstandard situations encountered in model analysis; 6. interpret analysis results and make recommendations with valid justifications for actions; 7. present analysis results of econometric models in a well-structured manner. 8. build up on team spirit, presentation and technical writing skills; 9. solve real-world problems using econometric techniques; 10. communicate effectively in a well-structured manner and build up an open-minded attitude.
Subject Synopsis/ Indicative Syllabus	*Review of single equation and multiple regressions (15 hours)* Economic relationships and econometric models, nature and quality of economic data, model specification, production, consumption, and investment functions, multiplier effects, dummy variables and seasonality. *Problems arising from use of least squares (9 hours)* Heteroscedasticity, serially correlated errors, weighted least squares, generalized least squares, multicollinearity. *Econometric Modelling (12 hours)* Instrumental variable estimation, errors in variables, dynamic and distributed lag models, simultaneous equations models. *Applications (6 hours)* Macroeconomic models, production function, supply and demand analysis, financial models.
Teaching/Learning Methodology	The subject will be delivered mainly through lectures and tutorials. The lectures will be conducted to introduce the econometrics concepts of the topics in the syllabus, which are then reinforced by learning activities involving demonstration, tutorial exercise and assignments.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)									
		1	2	3	4	5	6	7	8	9	10
a. Assignments	20%	✓	✓	✓				✓	✓		✓
b. Tests	20%		✓	✓	✓	✓					
c. Examination	60%			✓	✓	✓	✓			✓	
Total	100 %										

Continuous Assessment comprises of assignments and tests. A written examination is held at the end of the semester.

To pass this subject, students are required to obtain Grade D or above in **both** the Continuous Assessment and the Examination components in order to satisfy all the intended learning outcomes.

Student Study Effort Required

Class contact:	
▪ Lecture	28 Hrs.
▪ Tutorial	14 Hrs.
Other student study effort:	
▪ Assignment	40 Hrs.
▪ Self-study	26 Hrs.
Total student study effort	108 Hrs.

Reading List and References

Textbooks:

Gujarati, D.N.	Basic Econometrics, 5th edition	McGraw Hill, 2008
Maddala G.S.	Introduction to Econometrics 3rd edition	Wiley 2001

References:

Wooldridge, J.M.	Introductory Econometrics: A Modern Approach 4th edition	South-Western College Publication 2008
Studenmund, A.H.	Using Econometrics: A Practical Guide, International Edition 5th edition	Addison Wesley 2005
Pindyck, R.S. & Rubinfeld, D.L.	Econometric Models and Economic Forecasts, 4th edition	McGraw-Hill 1998
Stock, J.H. & Watson, M.W.	Introduction to Econometrics 2nd edition	Addison Wesley 2006