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| AGE-864 | Econometrics for Agri-Business | 3(3-0) |
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Course Objectives: *The course focuses on the estimation, inference and identification of linear model, issues and challenges of linear regression models, how to interpret the results of these models, and apply econometric to study real-world problems. STATA, a standard software for econometric and statistical analysis, will be used throughout the course.*

Course Contents:

The nature of regression analysis; classical linear regression model; multiple regression analysis; Violation of basic assumptions; Single equation regression models and their applications in economics; Problems of estimation and hypotheses testing; Multicollinearity, Heteroscedasticity, Autocorrelation and model specification problems; Causality and its detection; Distributed and autoregressive lag models; VAR models; finite and infinite distribution lags, etc; Adaptive expectations, partial adjustment and rational expectations models; Simultaneous equation models; Identification problems; Indirect least squares, 2SLS, 3SLS and seemingly unrelated regression models; Qualitative response models; Estimation of multiple linear regression and hypothesis testing; Regression of dummy variables; Estimation of logit and probit models; Estimation of VAR models using softwares like MINITAB, STATA and E-VIEWS.

Suggested Readings

1. Green, W.H. 2007. *Econometric Analysis*.6th Ed. Prentice Hall Publishers. Singapore.
2. Jinbergen, J. 2012. *Econometrics*. Routledge, Taylor and Francis group, Madison Ave, New York, USA.
3. Gujrati. D. N. 2009. *Basic Econometrics* 5th Ed. McGraw Hill Book Company, New York, USA.
4. Maddala, G.S. and Lahirir, K. 2009. *Introduction to Econometrics*. 4th Ed. John Wiley and Sons, Ltd, New York. USA.
5. Pindyek, R.S. and D.L. Rubinfeld. 1997. *Econometrics Models and Economic Forecasts*. McGraw-Hill, New York, USA.
6. Baltagi, B. H. 2011. *Econometrics*. 5th Ed. Springer Heidelberg Dordrecht, London,

UK.

7. Studenmund, A. H. 2005. Using Econometrics: A practical guide. 5th Ed. Addison Wesley, Boston, USA.