

**Syllabus for AGE 650**  
**Application of Quantitative Analysis: Econometrics I, Spring 2008**

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**Class Schedule:** MWF 11:30am -12:20pm Jan 8 - Apr 29, 2008 [RAWL 1071](#) Krannert Lab 2

**Class Website:** <http://www.agecon.purdue.edu/academic/syllabi/grad/650.pdf>

**Discussion Group:** <http://www.agecon.purdue.edu/>(to be explored with computer support)

**Course Description:**

We will introduce linear regression techniques and applications with statistical inference to economic problems using non-experimental data. Specifically, this course will cover topics of single equation models, principles of estimation, hypothesis testing, multicollinearity, dummy variables, heteroscedasticity, autocorrelation, general linear models, and discrete dependent variables.

**Delivery Methods:**

Classroom lectures, computer lab sessions, and student presentations  
Additional help sessions may be scheduled based on the need for optional participation

**Learning Objectives:**

This course should prepare students to use relevant quantitative tools for problems they will face in subsequent employment, and equip them with adequate background for higher academic degrees in economics and related fields. Students successfully completing this course with a grade of B or better shall have the skills of

- (1) understanding and interpreting economic and business data with statistical methods;
- (2) competently applying statistical regression analysis to real world economic data and interpret the results;
- (3) using appropriate software package; and
- (4) communicating in technical report writing and oral presentation.

**Prerequisites:**

STAT 301, ECON 511, MA223 or higher level courses for the same subject. Authorized equivalent courses or consent of instructor may be used in satisfying prerequisites.

**Text:**

Wooldridge, Jeffrey M. *Introductory Econometrics: A Modern Approach*. 3<sup>rd</sup> edition. Thomson South-Western, New York, 2006.

