

**Course title: Advanced Econometrics**  
**Type of course: Core**

**Course No. IE 504**

**Semester: Winter Semester 2016**

**Course Instructor: Mandira Sarma**

**Course Outline:**

1. Review of simple and multiple linear regression methods, properties of OLS estimators and GLS/FGLS methods
2. Problem of endogenous regressors – Instrumental Variable method, 2 stage least square method, 3 stage least squares methods
3. Simultaneous Equations Model
4. Dummy Variable regression
5. Limited Dependent variable models
6. Regression with Panel data
7. Regression with time series data

**Suggested Readings:**

1. W.Greene, Econometric Analysis, 5th ed (2003) or 6th ed. (2008)
2. Stock and Watson, Introduction to Econometrics (3<sup>rd</sup> Edition, 2011)
3. J.M. Wooldridge: Econometric Analysis of Cross section and Panel Data, 2002, MIT publication

Additional Readings, depending on the topic of discussion, will be suggested in the class

Grades will be based on mid sem exam, End sem exam and assignments/home works.