B9323
Introduction to Econometrics and Statistical Inference
Fall 2018

Tuesday 9am - 12:15pm
Uris 142 (A term) and GDH 363 (B term - tentative)

Instructor: Abhinav Sinha
Email: as5561@columbia.edu
Office: TBD
Office Hours: By appointment

TA: Vrinda Mittal
Email: VMittal22@gsb.columbia.edu

Course description: This course serves as an introduction to econometrics and statistical inference at the graduate level. Topics will include mathematical statistics, estimation methods for linear and non-linear models, and statistical methods for making inference, particularly in the form of confidence intervals. The intent is to develop rigorous understanding of basic econometric models necessary for empirical research.

Grading: Grades will be based on problem sets (45%), a short project (15%), and a final exam (40%).

Recommended Texts:

Session topics:
1. Limit theorems and asymptotic inference
2. Linear predictor and least squares estimator
3. Inference for least squares estimator
4. Maximum likelihood
5. Duration models
6. Discrete choice models
7. Basic Bayesian inference
8. Generalized method of moments
9. Optimal weight matrix
10. Nonparametric density estimation
11. Introduction to causal inference