This course will cover nonlinear statistical models for the analysis of cross-sectional and panel
data, with applications in microeconomics. It is intended both for students specializing in
econometric theory and for students interested in applying statistical methods to economic data.
Economics 240A-B (or equivalent) is prerequisite. The grade for the second half of the semester
will be based upon problem sets and an in-class midterm (on May 10).

**COURSE OUTLINE FOR SECOND HALF OF SEMESTER**

1. **Conditional moment restrictions**

   **References:**

eds., *Handbook of Econometrics, Vol. 4* (North Holland), Sec. 2.1.

   597-626.

   62: 1349-1382.

2. **Nonparametric density and regression estimation**

   **References:**

   chapters 1-3


3. **Quantile regression**

**References:**


Powell, “Estimation of Semiparametric Models,” Sec. 2.2.


4. **Semiparametric binary response models**

**References:**

Pagan and Ullah, *Nonparametric Econometrics*, Sec. 7.1-7.3, Sec. 7.5.1-7.5.4.

Powell, “Estimation of Semiparametric Models,” Sec. 3.1.


5. Single index regression models

References:

Pagan and Ullah, *Nonparametric Econometrics*, Sec. 7.4, 7.5.6.

Powell, “Estimation of Semiparametric Models,” Sec. 3.2.


6. Semiparametric censored and truncated regression models

References:

Pagan and Ullah, *Nonparametric Econometrics*, Sec. 9.5-9.7.

Powell, “Estimation of Semiparametric Models,” Sec. 3.3.

Amemiya, *Advanced Econometrics*, chapter 10..


7. **Semilinear regression and semiparametric selection models**

**References:**

Pagan and Ullah, *Nonparametric Econometrics*, Sec. 5.1-5.2, 8.1-8.3.

Powell, “Estimation of Semiparametric Models,” Sec. 3.4.


8. **Semiparametric panel data models**

**References:**

Powell, “Estimation of Semiparametric Models,” Sec. 3.5.


9. Nonparametric and semiparametric models with endogeneity

References:

Pagan and Ullah, *Nonparametric Econometrics*, Sec. 6.5.


