## **Boston College Department of Economics**

Econ 2228.06 – Econometric Methods Professor Geoff Sanzenbacher Day/Time: MW 4:30PM O'Neill 257

Phone: 410-259-9437 Email: sanzenba@bc.edu

Office Hours: Maloney 391A, Monday and Wednesday, 12pm – 2pm and by appointment.

Required Text: Wooldridge, Jeffrey M., Introductory Econometrics: A Modern Approach (Any addition, although reading suggestions come from 7<sup>th</sup>

<u>Topic</u>

September 16 Scaling and logarithms

**Key OLS Assumptions and Implications** 

Variance of the estimate

September 18 Finishing up simple regression and review

September 23 Midterm 1

Multiple Regression and Inference

September 25 Multiple independent variables

Characteristics of Multiple Regression

September 30 Characteristics of Multiple Regression (cont.)

Omitted variables and bias

October 2 Inference

October 7 Inference continued

**Linear Combinations** 

October 9 Finishing up inference: The F-test

October 14 No Class – Fall Break

October 16 Functional form

October 21 Goodness of Fit

Picking a model

Qualitative Variables

October 23 What is qualitative data?

Interpreting a single indicator

Regressions with multiple indicators

October 28 Midterm 2

October 30 Continue discussion of indicators

Binary dependent variables

<u>Date</u>	<b>Topic</b>
Failure of Assumptions	
November 4	Heteroskedasticity and robust standard errors
November 6	Functional form misspecification Omitted variables and proxies
November 11	Measurement error Outliers, missing variables, and nonrandom samples
Advanced Topics	
November 13	Working with real data for your paper
November 18	Difference-in-differences
November 20	Regression Discontinuity
November 25	Introduction to Instrumental Variables
November 27	No Class – Thanksgiving
December 2	Continuing Instrumental Variables
December 4	Introduction to time series analysis
December 16	Final Exam

**Please Note:** This schedule is an outline for the course and is subject to change as I feel necessary or because of inclement weather. Any changes will be noted by me during class.