Economics 311 Fall 2016 Syllabus Noelwah R. Netusil Vollum 227, ext. 7306 e-mail: netusil@reed.edu

Survey of Econometric Methods

Course Content: This course will focus on the application of empirical methods in economics. During the semester we will study the basic concepts of data collection, data presentation, economic statistics, and econometrics. We will also read articles that use econometric techniques. This course is taught with the expectation that students have completed Economics 201.

Office Hours: Office hours will be held in Vollum 227 on Mondays and Wednesdays from 3:15-4:15 pm and on Thursdays from 4:00-5:00 pm. Students who are unable to come during these times are encouraged to make an appointment.

Text and Required Reading: The principal textbook for this course is *Using Econometrics: A Practical Guide* (7th edition) by A. H. Studenmund. This text is supplemented with empirical articles drawn from the economics literature.

Evaluation: Evaluation will be based on two midterm examinations, a final exam, homework assignments, and class participation. The midterms are on October 5th and November 16th. The Registrar's Office will announce the time and day for the final exam. A detailed list of assignments is on the Moodle site. All assignments are due in class. In fairness to other students, late assignments will be penalized 1 letter grade for each day or partial day past the due date. Assignments handed in more than 3 days after the due date will not be accepted.

Collaboration: All submitted work is expected to reflect your work on the assignment. You are encouraged to work with classmates, tutors, and the instructor on problem sets. However, when you write the assignment, it must be your work and should be written in words that reflect your understanding of the course material. The Honor Principle and the ethics of proper academic conduct must guide your conduct in this class in all respects. The following section from the Guidebook to Reed College summarizes my expectations:

Reed College is a community of scholars. The fundamental ethical principle governing scholarship is that one should never claim or represent as one's own work that which is not one's own. The principle of proper academic conduct requires that all work submitted for academic purposes--including, but not limited to examinations, laboratory reports, essays, term papers, homework exercises, translations, and creative work--be the work of the person who submits it, and that, in the case of work based upon experiment and observation, the experimental results and observations be reported faithfully. The principle thus requires that no one claim authorship to the work of another and that no one falsify or misrepresent empirical data. This principle should be clear to every

scholar, although determining its application in particular circumstances will require careful thought and guidance.¹

Citations: Citations must be used when appropriate and should reflect the guidelines in the Economic Department Citation Guide, which is available on the class Moodle site.

Tutor: Helena Pedrotti will be available on Thursdays from 7-9pm in the DoJo. Tutoring is also available through Reed's Academic Support Services.

Public Policy Workshop: The Public Policy Workshop (PPW), located in Eliot 110, has computers with Stata and other statistical programs. Access to the PPW can be obtained by filling out a PPW user agreement form (available outside Eliot 110A).

Materials on Reserve: The following texts are on reserve in the Reed Library.

Studenmund, A.H. 2017. *Using Econometrics: A Practical Guide* (7th edition) Pearson Addison Wesley: Boston, MA.

Tufte, Edward R. 1997. Visual Explanations Graphics Press: Cheshire, CT.

Urdan, Timothy C. 2010. Statistics in Plain English Routledge: New York, NY.

Outline and Reading List

I. Introduction and Overview of Regression Analysis (August 29 and 31)

Best, Joel. 2001. Telling the Truth about Damned Lies and Statistics. *The Chronicle of Higher Education* (May 4): B7-B9.

National Public Radio Special Series: Risk and Reason. 2014. An All Things Considered Series Exploring How Well We Understand and Act on Probabilities. *National Public Radio* (July 21-25).

Studenmund, Chapter 1.

II. Data Visualization (September 2)

Tufte, Edward. 1997. Visual Explanations. Chapter 2.

Schwabish, Jonathan A. 2014. An Economist's Guide to Visualizing Data. *Journal of Economic Perspectives* 28(1): 209-234.

* Yau, Nathan. 2013. *Data Points: Visualization That Means Something*. John Wiley & Sons, Inc.: Indianapolis, Indiana.

¹ For more information see: http://www.reed.edu/academic/gbook/comm_pol/acad_conduct.html

III. Ordinary Least Squares (September 7 and 9)

Studenmund, Chapter 2

IV. Running Regressions (September 12, 14 and 16)

Studenmund, Chapter 3

V. Classical Model (September 19 and 21)

Studenmund, Chapter 4

VI. Probability and Statistics (September 23 and 26)

Studenmund, Chapter 17

* Urdan, Timothy C. 2010. Statistics in Plain English Routledge: New York, NY.

VII. Hypothesis Testing (September 28, 30 and October 3)

Studenmund, Chapter

Gwartney, James and Charles Haworth. 1974. Employer Costs and Discrimination: The Case of Baseball. *Journal of Political Economy* 82(4): 873-882.

VIII. Model Specification (October 7, 10, 12 and 14)

Studenmund, Chapter 6 & Appendix

Studenmund, Chapter 7

IX. Multicollinearity (October 24 and 26)

Studenmund, Chapter 8 & Appendix

Deere, Donald, Kevin M. Murphy and Rinis Welch. 1995. Employment and the 1990-1991 Minimum-Wage Hike *The American Economic Review* 85(2): 232-237.

X. Serial Correlation (October 28 and 31)

Studenmund, Chapter 9

XI. Heteroskedasticity (November 2, 4 and 7)

Studenmund, Chapter 10

Levitt, Stephen D. 1998. Juvenile Crime and Punishment. *The Journal of Political Economy* 106 (6): 1156-1185.

XII. Regression User's Handbook (November 9)

Studenmund, Chapter 11 & Appendix

XIII. Time Series Models (November 11, 14 and 18)

Studenmund, Chapter 12

Feldstein, Martin. 1996. Social Security and Saving: New Time Series Evidence *National Tax Journal* 49(2): 151-164.

XIV. Dummy Dependent Variable Models (November 21 and 23)

Studemund, Chapter 13

Chaloupka, Frank J. and Henry Wechsler. 1996. Binge Drinking in College: The Impact of Price, Availability, and Alcohol Control Policies *Contemporary Economic Policy* 14(4): 112-123.

Leonhardt, David. 2005. To Reduce the Cost of Teenage Temptation, Why Not Just Raise the Price of Sin? *The New York Times* (July 25): C3.

XV. Simultaneous Equations (November 28 and 30)

Studenmund, Chapter 14 & Appendix

XVI. Forecasting (December 2 and 5)

Studenmund, Chapter 15

The Economist. 1992. America Extrapolated: Tomorrow Will Be Different (Dec 21-Jan 3): 25-27.

Fair, Ray C. 1996. Econometrics and Presidential Elections *Journal of Economic Perspectives* 10(3): 89-102.

XVII. Experimental and Panel Data (December 7)

Studenmund, Chapter 16

*Coutemanche, Charles. 2011. A Silver Lining? The Connection Between Gasoline Prices and Obesity. *Economic Inquiry* 49 (3) 935-957.