

## Economics 420 Econometrics

Fall 2012

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**Instructor:** Marshall Gramm  
**Prerequisites:** Calculus (Math 115 or Math 121), Statistics (Econ 290)  
**Classroom:** 033 Barret Library  
**Classes:** TuTh 11:00-12:15 (CRN 13250)  
**Office:** 322 Buckman Hall  
**Phone:** 843-3122  
**e-mail:** [gramm@rhodes.edu](mailto:gramm@rhodes.edu)  
**Office Hours:** Monday 9:30-11:00, Wednesday 8:30-10:00 or by appointment  
Feel free to call or email anytime (except an hour before assignments are due)

**Course Objective:** Economics is the study of relationships among variables. Econometrics is the study of estimating these relationships, testing economic theories, and evaluating and implementing government and business policy. Students are expected to (1) develop an understanding of the single and multivariate linear regression method of estimation--applied to both cross-sectional and time-series data, (2) make inferences and test economic theories based on real-world data and (3) learn and implement the methods for addressing heteroskedasticity, autocorrelation, multicollinearity. I expect that at the end of this course you will be able to read and interpret scholarly Economics journals. Furthermore, you will have the tools to design and complete a research project for your senior seminar.

**Text:** Wooldridge, Jeffrey M., *Introductory Econometrics: A Modern Approach*, South-Western College Publishing

**Exams:**

Exam #1	Tuesday, October 2 <sup>nd</sup>	(30%)
Exam #2	Thursday, November 15 <sup>th</sup>	(30%)
Final	due Monday, December 10 <sup>th</sup> at 8am	(40%)

**Quizzes:** There may be random quizzes throughout the semester.

**Homework:** Problem Sets will be given and while they will not be collected, it is recommended that you work through them.

**Attendance Policy:** While I do not require attendance, I do expect you to come to class on time and forbid you from leaving early without notifying me in advance.

**Course Outline:**

Weeks 1-3	Probability and Statistics (Appendix)
Weeks 4-5	Simple Regression Model (Ch 2)
Week 6-7	Multiple Regression Model (Ch 3)
Week 8-9	Statistical Inference (Ch 4)
Week 10-11	Model Specification (Ch 6, 7, 9)
Week 12	Heteroskedasticity (Ch 8)
Week 13	Binary Dependent Variables (Ch 17)
Week 14	Time Series (Ch 10, 11)

**Stata:**

Stata 12 is available in all the labs, but if you would like a personal copy you can order it directly from Stata Corp:

<http://www.stata.com/coursegp.html>

You can choose from a number of options:

Small Stata 12	32.00/six months
Small Stata 12	49.00/annual
Stata/IC 12	65.00/six months
Stata/IC 12	98.00/annual
Stata/IC 12	179.00/perpetual
Stata/SE 12	395.00/perpetual
Stata/SE 12	235.00/annual

I would recommend Intercooled Stata. Small Stata has too many limitations and Stata/SE is overkill. If you plan to go to graduate school, you may want to consider the perpetual license (Stata normally costs over \$600). Once again, Stata is available in the labs, so you do not have to buy the software if you don't want.

Enter **MG420** when prompted for Course ID