

**Economics 388, Introduction to Econometrics
Winter 2007**

Instructor: Eric R. Eide, 162 FOB, 422-4883, eide@byu.edu

Office Hours: 9:30am-10:30am TTh, or by appointment

Text: Jeffrey M. Wooldridge, Introductory Econometrics: A Modern Approach, 3rd Edition

Objective: This course provides the basic econometric methods and tools needed to test economic models. We will cover both the theoretical and empirical aspects of econometrics, focusing primarily on linear regression analysis. Practical application through problem sets and a research paper are essential components of this course.

Prerequisites: Econ 378; Econ 380.

Blackboard: Homework assignments, PowerPoint lecture slides, announcements, scores, and other documents will be posted on Blackboard, so check regularly. Additional resources are available on the Wooldridge website.

Software: We will use the statistical software STATA for homework assignments and the research paper. STATA will be available in the economics computer lab (130 FOB) as well as all computers in the computer lab in the basement of the SWKT, as well as most other public computers on campus.

Grading: Exams: There will be one midterm exam and a comprehensive final exam. The midterm and the final exams will both be given in class on the indicated dates.

Problem sets: Problem sets are due by 5pm in the TA's box in 130 FOB on the assigned date. You may work together, but each person must submit their own homework. Problem sets will consist of both theoretical problems and data analysis problems using STATA. Your TA will hold evening lab hours in the computer lab in the basement of the SWKT once a week. The time will be determined during the second week of class.

Paper: There will be a required project that will involve writing an original empirical research paper demonstrating the tools you learn in the course. The paper is typically around 10 pages in length (excluding tables and figures). Details will be discussed in class. Chapter 19 of the Wooldridge text contains an excellent overview for carrying out the project. There are also two examples of good undergraduate econometrics papers posted on Blackboard.

Quizzes: There will be 7 quizzes given in class. Each quiz is worth 5 points, and the lowest two quizzes will be dropped. I will announce in class when each quiz will be given.

<u>Scoring:</u>	Problem Sets	25 points
	Midterm	50 points
	Final	100 points
	Quizzes	25 points
	Paper	<u>50 points</u>
		250 points

Economics 388
Course Outline: Winter 2007

<u>Date</u>	<u>Topic</u>
1/9	Introduction, Ch. 1
1/11	Statistics/Matrix Algebra review
1/16	Simple Regression, Ch. 2
1/18	Simple Regression, Ch. 2
1/23	Multiple Regression: Estimation, Ch. 3
1/25	Multiple Regression: Estimation, Ch. 3
1/30	Multiple Regression: Dummy Vars, Ch. 7.1-7.4
2/1	Multiple Regression: Inference, Ch. 4
2/6	Multiple Regression: Inference, Ch. 4
2/8	Multiple Regression: Inference, Ch. 4
2/13	Specification Issues, Ch. 6
2/15	Specification Issues, Ch. 6
2/20	NO CLASS—MONDAY INSTRUCTION
2/22	Review
2/27*	MIDTERM EXAM IN CLASS
3/1	OLS Asymptotics, Ch. 5
3/6	Heteroskedasticity, Ch. 8
3/8	Heteroskedasticity, LPM, 7.5, 7.6
3/13	More Specification and Data Problems, Ch. 9
3/15	Basic Time Series Regression, Ch. 10
3/20	Further Issues with Time Series, Ch. 11
3/22	Serial Correlation and Heteroskedasticity, Ch. 12
3/27	Instrumental Variables, Ch. 15
3/29	Instrumental Variables, Ch. 15
4/3	Limited Dependent Variables, Ch. 17
4/5	Limited Dependent Variables, Ch. 17
4/10	Limited Dependent Variables, Ch. 17
4/12	Paper presentations
4/17	Paper presentations, PAPER DUE

Monday, April 23, 11:00am-2:00pm, Comprehensive Final Exam in Class

*Professor Arden Pope from the Department of Economics is this year's recipient of the Karl G. Maeser award. He will be giving the Maeser lecture in a university forum on **February 27th at 11:00 a.m. in the Marriott Center**. It will be entitled, "What are you breathing and should you inhale?" The address will focus on his research on air pollution and its impact on human health. All students are encouraged to attend.

Student Learning Outcomes

Each program at BYU has developed a set of expected student learning outcomes. These will help you understand the objectives of the curriculum in the program, including this class. To learn the expected student outcomes for the programs in this department and college go to <<http://learningoutcomes.byu.edu>> and click on the College of Family, Home and Social Sciences and then this department. We welcome feedback on the expected student learning outcomes. Any comments or suggestions you have can be sent to <FHSS@byu.edu>.

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Brigham Young University is committed to providing a working and learning atmosphere which reasonably accommodates qualified persons with disabilities. If you have any disability which may impair your ability to complete this course successfully, please contact the Services for Students with Disabilities Office (422-2767). Reasonable academic accommodations are reviewed for all students who have qualified documented disabilities. Services are coordinated with the student and instructor by the SSD office. If you need assistance or if you feel you have been unlawfully discriminated against on the basis of disability, you may seek resolution through established grievance policy and procedures. You should contact the Equal Employment Office at 422-5895, D-282 ASB.