

INTRODUCTION TO ECONOMETRICS
ECON 4475
Spring 2015
Dr. Adrian Austin and Dr. William (Joey) Smith

The course emphasis is on applications of econometrics and techniques in business analytics. Topics include methods of presenting data, numerical measures and correlation, estimation, linear/non-linear regression, limited dependent variables, simultaneous equations/instrumental variables, models of duration, and the use of these models in decision making processes. SAS business analytics software will be used in this course.

The Course is split into two sections: Applied (Tuesdays) and Theory (Thursdays)

INTRO TO APPLIED ECONOMETRICS
SPRING 2015 (Tuesdays)
Dr. Joey Smith

Dr. Joey Smith
1307 Business Building
Phone: (678) 839-4771
E-mail: Use the Desire2Learn mail utility found on the course toolbar for all course related questions. All email will be answered within 1 business day.
E-mail (Emergency Only): wjsmith@westga.edu

Office Hours:

Monday	8:00 – 12:00
Tuesday	3:30 – 5:30
Wednesday	8:00 – 12:00

This is the practical section of the class where you will use econometric techniques to analyze data and then present the results.

Applied Class Assignments (25 points):

There will be about 10 assignments (in class exercises and homework) given throughout the semester. All assignments are equally weighted and I will drop the lowest two when calculating your grade.

Paper and Presentation (25 points):

You will write a research paper and present it at the College of Business' Annual SAS Day.

INTRO TO ECONOMETRIC THEORY
SPRING 2015 (Thursdays)
Dr. Adrian Austin

Dr. Adrian Austin

1315 Business Building

Phone: (678) 839-4773

E-mail: Use the Desire2Learn mail utility found on the course toolbar for all course related questions. All email will be answered within 1 business day.

E-mail (Emergency Only): aaustin@westga.edu

Office Hours:

Tuesday 9:00 – 11:30 & 3:30 – 5:00

Thursday 10:00 – 11:30 & 3:30 – 5:00

Topic List

1. Review of Probability and Statistics

Properties of the parameter estimates

Properties of the residuals

Hypothesis testing and CI

2. Bivariate OLS regression

Properties of the parameter estimates

Properties of the residuals

Hypothesis testing and CI

Goodness of Fit

Standard Output

3. MultiVariate OLS Regression

Properties of the parameter estimates

Properties of the residuals

Hypothesis testing and CI

Testing Multiple Restrictions

Goodness of Fit

Standard Output

4. OLS and Method of Moment Estimation

5. Gauss-Markov Theorem

6. Other properties of OLS regression

7. Functional Form, Specification and Identification

Over/Under Specification
Heteroskedasticity
Linear Non-Linear Equations
Binary Dependent Variables
Multicollinearity
Instrumental Variable Regression
Serial Correlation

8. Other Topics as time permits

This schedule may change as the class progresses. Any changes will be announced in class and on the class website.

Theory Exams (35 points):

There will be a theory midterm (15 points) and a theory final exam (20 points). The final exam is cumulative.

Theory Assignments (15 points):

There will be about 10 assignments (homework and quizzes) given throughout the semester. All assignments are equally weighted and I will drop the lowest two when calculating your grade.