

DEPAUL UNIVERSITY
DEPARTMENT OF ECONOMICS
ECO 507 – RESEARCH METHODS FOR POLICY ANALYSIS 1

Professor: Avraham Stoler

Class Meetings: 5:45-9:00

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Office Hours: By appointment.

Text s

Main: using Econometrics – (7th edition) by A.H. Studenmund (Pearson / Addison Wesley).

Not covered in class, but highly useful help for Stata programming: “An Introduction to Modern Econometrics Using Stata” by Christopher F. Baum

Course Goals and Description

The objectives of this course are to:

1. Acquaint the student with the tools and techniques used to statistically analyze economic data. We will focus on both theoretical understanding (why do we use such tools and how do they work) and applied understanding (the ability to carry on a research project using these tools).
2. Teach the student statistical programming with Stata, which is the most widely used statistical analysis programming language in Economics.
3. Teach the student the practical skills of how to choose the right tools for the analysis, how to prepare and inspect the data, and how to run an analysis that is robust, can be replicated, and can be understood and used by others – all extremely valuable qualities in real life work.

Grading

The overall grade will be based on two projects and four problem sets. The projects will be assigned and in it you will need to use Stata to inspect and analyze a dataset I will provide and answer some questions, simulating a real-life research project from start to finish.

Mid-term project (30%)

Final project (40%)

Problem sets (30%)

Grade penalties will be assessed for academic integrity violations and/or submitting course work after the deadline.

Policies

1. **Collaboration:** some collaboration is allowed and encouraged, as long as your work remains your own. It is acceptable to ask a class-mate what command in STATA performs a certain task, for example.
2. **Attendance:** Attendance in this class is very important. There is a strong dependency between the material discussed in almost every class and the material discussed in the earlier classes, so if you miss a class please make sure you read and understand all of the material discussed in it before the next class. Attendance will be recorded.

COURSE COVERAGE

Studenmund will be the main text and the chapters below are from it. Stata programming commands will be taught in class, with Baum or the Stata help files being a useful reference to reinforce your learning.

Week 1: An overview of regression analysis (chapter 1)

Week 2: Ordinary least squares estimation (chapters 2)

Week 3: Applied Ordinary least squares and properties of OLS estimators (chapters 3-4)

Week 4: Hypothesis testing (chapter 5)

Week 5: Specification issues: omitted variables, irrelevant variables (chapter 6)

Week 6: Specification issues: functional form, working with dummy variables (chapter 7)

Week 7: Multicollinearity (chapter 8)

Week 8: Serial correlation (chapter 9)

Week 9: Heteroskedasticity (chapter 10)

Week 10: A regression's user's handbook (chapter 11)