

Economics 103

Introduction to Econometrics

Office: 138 DMH

Phone: 924-5414(office) 924-5400(dept.)

Email: tom.means@sjsu.edu

Faculty Web

Page: www.sjsu.edu/people/tom.means/

Office

Hours: M-W 12:00 – 1:15 pm, and by appointment.

Text: *Essentials of Econometrics*, Damodar N. Gujarati and Dawn C. Porter,
McGraw-Hill/Irwin, 4th edition, 2010.

Primer on Bayesian Statistics, T. S. Means, 2011
(<http://www.sjsu.edu/people/tom.means/courses/econ3/>)

Course

Information: This is an introductory course in Econometrics. You must have a good working knowledge of basic statistics and probability theory. If you did not receive a B or better in Econ 3 (Basic Stats), you need to get approval from me to stay enrolled in the class. Attendance in class is highly recommended since lecture material will go into more depth than the text. Lecture material will also be emphasized on quizzes. If you are having problems with the course material, please see me early on in the course. I might be able to help you achieve better results if I know of your problem soon enough.

This is a four-unit course. There are three hours of lecture along with 2-3 hours of lab work each week. Unlike a 3-unit course, I will not do homework problems during lecture so that I will be able to cover more material than a 3-unit semester course. You will learn the computer software, work on computer projects, and go over homework problems during the lab period.

This syllabus has learning objectives, rigor, class meeting times, and

assignments commensurate with the expectation of 12 hours of work per week across 15 weeks in a semester. For reference, under a traditional three-unit course, you are expected to complete 9 hours of work per week inclusive.

Exams, Lab and Homework:

There will be **one final exam, several quizzes, and several computer projects** spaced throughout the course. You may write formulas on a piece of paper to use during the final exam. Incomplete grades will only be considered if you have a grade of C or better. Grading will be done on a curve.

| | |
|-------------------|------------|
| Quizzes | 40% |
| Projects | 30% |
| <u>Final Exam</u> | <u>30%</u> |
| | 100% |

Add/Drops:

You are responsible for all University and Department guidelines regarding the adding and dropping of a class. Please consult the SCHEDULE OF CLASSES.

Disability:

Any student with a disability requiring an accommodation should make this need known to the instructor during the first class period. Every effort will be made to accommodate your needs

Course Outline:

Quizzes are usually scheduled on Wednesday, but subject to change.

INTRODUCTION

01/27(M) Introduction, Chapter 1
Statistics Review – Appendixes A - D, Primer 1-3

THE LINEAR REGRESSION MODEL

02/03(M) Basic Regression: The 2-Variable Model – Chapter 2, 3

02/10(M) Basic Regression: The 2-Variable Model – Chapter 2, 3

02/17(M) Multiple Regression - Chapter 4

- 02/24(M) Multiple Regression – Chapter 4
- 03/02(M) Functional Form – Chapter 5
- 03/09(M) Dummy Variable Models – Chapter 6

VIOLATIONS OF THE LRM

- 03/16(M) Model Selection – Chapter 7
- 03/23(M) Multicollinearity - Chapter 8

03/31 – 04/03 SPRING BREAK – no classes

- 04/06(M) Heteroscedasticity - Chapter 9
- 04/13(R) Autocorrelation - Chapter 10

SELECTED TOPICS

- 04/20(M) Selected Topics – Logit/Probit – Chapter 12
- 04/27(M) Selected Topics – Panel Data, Handouts
- 05/04(M) Instrumental Variables/2SLS – Chapter 11
- 05/11(M) Selected Topics - Spatial Econometrics, Handouts
Review
- 05/15(F) Final Exam 9:45 am– 12:00 pm**