

Introduction to Econometrics
ECON103-Section 01
San Jose State University

Course and Contact Information

Instructor:	Dr. Marjan Orang
Office Location:	DMH 214
Email:	marjan.orang@sjsu.edu
Office Hours:	Wed 6pm-7pm and by appointment
Class Days/Time:	Tue/Wed 4:30pm-5:45pm
Classroom:	Clark Building 303

Course Description

In this course, you will learn about topics including econometric methods in analyzing economic data, simple and multiple regression, problems of autocorrelation, multicollinearity and heteroskedasticity, probability, random variables, sampling, point estimation, hypothesis testing, and regression analysis. There will be an emphasis on economic applications. My goals for you this semester are:

1. To understand the conceptual foundations of econometrics and data analysis;
2. To recognize and understand the use of econometric techniques and be able to implement them to your subject of interest.

SJSU classes are designed such that in order to be successful, it is expected that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including weekly assignments, in-class simulations, and three exams. Careful time management will help you keep up with readings and assignments and enable you to succeed in this class. More details about student workload can be found in University Policy S12-3 at <http://www.sjsu.edu/senate/docs/S12-3.pdf>.

Class Participation

You are expected to attend and participate in every class. Your class participation grade will be measured by the quantity and quality of your contribution to the class. When estimating what participation grade you will receive, you should ask yourself in what way did your participation in class benefit other students and the class discussion.

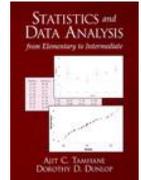
Optional Text Books

Primary Book:

Statistics and Data Analysis: From Elementary to Intermediate.

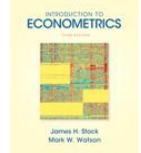
Tamhane, Ajit C., and Dorothy D. Dunlop. Prentice Hall, 2000. ISBN: 0137444265.

<http://cwx.prenhall.com/bookbind/pubbooks/tamhane/chapter0/deluxe.html>

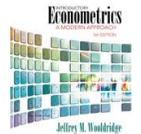


MIT offers nice supplements for the book, which you can find at

<http://ocw.mit.edu/courses/sloan-school-of-management/15-075j-statistical-thinking-and-data-analysis-fall-2011/index.htm>



- Introduction to Econometrics, James Stock and Mark Watson, 3rd Edition, 2007, ISBN: 9780138009007.
- Introductory Econometrics: A Modern Approach, 5th Edition. Jeffrey M. Wooldridge 2013



Announcements

Announcements will be posted in Canvas on a regular basis. They will appear on your Canvas dashboard when you log in and/or will be sent to you directly through your preferred method of notification from Canvas. Please make certain to check them regularly, as they will contain any important information about upcoming assignments or class concerns.

Final grades will be determined as follows:

<u>Assignment</u>	<u>Points</u>	<u>Dates</u>
Midterm I	20 points	Tuesday, March 5th
Midterm II	20 points	Tuesday, April 9th
Individual Project	20 points	Tuesday, May 7th
Final	20 points	Monday, May 20th
Homework	15 points	Weekly
Attendance	5 points	Weekly

Grading Policy

Your grade is determined at the end of the semester based on your performance on homework assignments (15%), three exams (60%), final project (20%), and attendance (5%). Letter grades will be determined as follows:

A+ = 100-97%	A = 96-93%	A- = 92-90%
B+ = 89-87%	B = 86-83%	B- = 82-80%
C+ = 79-77%	C = 76-73%	C- = 72-70%
D+ = 69-67%	D = 66-63%	D- = 62-60%
F = 59-0% Unsatisfactory		

The above plus/minus grading scale will be used. A curve may be used to rescale the grades of a difficult exam. Often, no curve will be used and a curve will never be used to reduce your grade.

Exams

We will have two exams and one cumulative final exam. Each will be open note but closed book. During exams, you are allowed to use only your own notes, written in your own handwriting. No photocopies are allowed. No typed notes are allowed. You are not allowed to bring the PowerPoint slides into the exams. Anything not handwritten by you is not permitted in the exams. You are encouraged to use a calculator during the exams but you are bound by the Code of Student Conduct to use only the basic four functions (+ - * /) as well as the square root and square functions.

All three exams are required. Make-up exams are allowed only for university-approved excuses. If you miss an exam(s) for any reason (including university-sanctioned activities, illness, or family emergency), you must notify me at the first possible moment; notification after the missed exam will only be permissible in the case of a severe illness/emergency that is fully documented. A university-approved excuse must be provided for any missed exam.

Individual Project

Each student will individually complete an original research project on a data set collected by the student. The project is a large component of your final grade, reflecting the importance of implementing the techniques learned in class using data to address real-world problems. I encourage you to devote time to thinking of a topic that is both interesting to you and can be addressed using available data. All students must have had their topics approved by me prior to 12:00PM (noon) Friday, March 15th.

Failure to do so will reduce your Project Assignment #1 grade by 20%. You may email me your topic but I strongly encourage you to meet with me to discuss your topic because otherwise I will not be able to provide you with detailed comments

Prerequisite

ECON 3

To emphasize the importance of having taken the prerequisite, I copy a comment from a previous evaluation of the course: "It should be absolutely mandatory that one has taken a statistics course before taking this class. I believe many students thought that they could handle it but really struggled since it is difficult material."

Tentative Schedule of Topics and Readings and Exams

Week(s)	Chapter	Topic
1		Economic Questions and Data
2	2	Review of Probability
3	3	Collecting Data
4	4	Summarizing and Exploring Data
5		Lab1
6		Exam1
7	5	Sampling Distributions in Statistics
8	6	Basic Concepts of Inference
9	7	Inferences for Single Samples
10		
11		Lab2
12	9	Exam 2
13	10	Inferences for Proportions and Count Data
14	11	Similar Linear Regression and Correlation
15		Multiple Linear Regression
16		Lab3
		Final Exam

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>"