

San José State University  
College of Social Sciences Department of Economics  
ECON 203B, Seminar in Econometric Methods, 01, Spring, 2022

Course and Contact Information

Instructor	Rui Liu, PhD
Office Location	DMH 143
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Email:	Rui.Liu@sjsu.edu
Office Hours	Wednesday 12PM-1PM or by appointment
Class Days/Time	Wednesday 6:00PM - 8:45PM
Classroom	<a href="#">Zoom Link for Lecture and Office Hours</a> Password: 203
Prerequisites	ECON 203A or Instructor Consent

Course Description

This course will extend your knowledge of econometrics beyond the linear models you used in ECON 203A. Econometrics is a tool which allows one to use data and statistical techniques to answer questions and test predictions of economic theory. This course is the second in a two-course sequence on basic applied econometrics. It focuses on applications and interpreting the findings of econometric studies.

The goal of this class is for you to be able to interpret the results of the linear regression model you learned about in ECON 203A as well as to learn additional topics such as use of panel data, nonlinear regression functions, limited dependent variable models, instrumental variables models, and introductory time series. You should also be able to use these various models to analyze data, and critically assess studies using these models. An important part of the class will be use of R, a free software environment for statistical computing and graphics to analyze data. Econometrics is used in business, government, and academia for purposes such as studying the effects of government policies, using historical data to forecast future values of variables such as the stock market, analyzing markets, and testing the predictions of economic theory. Knowledge of econometrics is valuable for many types of jobs. Knowing a programming language such as R is also valuable.



## Required Texts/Readings

### Textbook

Bailey, M.W. 2016. *Real Econometrics: The Right Tools to Answer Important Questions*. Oxford University Press; 2nd edition. ISBN: 9780190857462.

We will cover the material in Chapters 8–13 of Bailey (and 14 if time permits). There is a website with companion material to the text under “Student Resources” at [http://learninglink.oup.com/accessible-by-real-econometrics2/studentresources#all\\_resources](http://learninglink.oup.com/accessible-by-real-econometrics2/studentresources#all_resources). You need to have access to this book to work on the problem sets and prepare for the exams.

If you need a refresher on statistical concepts, the following book is a good resource: *Introductory Statistics with Randomization and Simulation* by Diez, Barr, and Çetin-Ryandel. Available free of charge at: <https://www.openintro.org/book/isrs/>.

### Other Readings

- 1.) Angrist, J. D. and Pischke, J. K. 2009. *Mostly Harmless Econometrics: An Empiricist's Guide to Modern Economic Data Analysis*. Princeton University Press.



There will be no rescheduling of any exams. If you are unable to attend class, miss midterms or final exam, you must provide a legitimate excuse, such as a note from your doctor. Any doctor's note or other legitimate excuse must include a privacy waiver from allowing the Department of Economics to call the doctor's office to verify the authenticity of the note. There will be no makeup exams. If you have a valid excuse for missing the midterms, all of the exam part of your grade will be determined by the final exam and other midterm.

### Term Paper

The purpose of this project is to provide an opportunity to formulate an economic model, estimate the model with appropriate data, and interpret the results. This experience will help you understand how econometric relates to other economics courses which focus on theoretical models for how the world operates. Econometric

## Academic Honesty

All students should be familiar with the University's policy on academic honesty, <https://www.sjsu.edu/studentconduct/docs/SJSU-AcademicIntegrity-Policy-F15-7.pdf>.

Intentional plagiarism is academic dishonesty. Plagiarism occurs when you ~~submit~~ purposefully do any of the following in an assignment:

- Use someone else's words either verbatim or almost verbatim without attribution,
- Use someone else's evidence, line of thinking, idea, without attribution,
- Turn in some else's work as your ~~own~~ as in copying a peer's paper or purchasing a readymade paper,
- Turn in previously submitted work as new work without instructor approval.

If I discover any evidence of cheating, dishonest conduct, plagiarizing, or inappropriate collusion on exams homework, or term paper, the students will be given ~~For~~ the work in question, will also make him/her liable for referral to Student Conduct and Ethical Development ~~for~~ further disciplinary action. These terms are explicitly defined at the URL above

## Final Examination or Evaluation

The course will conclude on May 24, 2021 with a cumulative final exam. The exam will include both multiple choice and short answer questions. The questions will be based on material from throughout Econ 203 A and ~~the~~ The final exam questions can be broken down into three parts: ~~about one~~ of the questions will be based on *readings*, another third of the exam questions will be multiple choice questions based on the *quizzes and problem sets*, and the final third will be based on topics discussed in *lectures* and on which you should have taken notes. There are no bathroom breaks during exams so please plan accordingly.

## Grading Information

Below is a list of the percentage weight assigned to various class assignments.

### *Assignment*

*Grades are determined as follows:*

<i>Grade</i>	<i>Percentage</i>
<i>A plus</i>	<i>96 to 100%</i>
<i>A</i>	<i>93 to 95%</i>
<i>A minus</i>	<i>90 to 92%</i>

<i>Grade</i>	<i>Percentage</i>
<i>B plus</i>	<i>86 to 89 %</i>
<i>B</i>	<i>83 to 85%</i>
<i>B minus</i>	<i>80 to 82%</i>
<i>C plus</i>	<i>76 to 79%</i>
<i>C</i>	<i>73 to 75%</i>
<i>C minus</i>	<i>70 to 72%</i>
<i>D plus</i>	<i>66 to 69%</i>
<i>D</i>	<i>63 to 65%</i>
<i>D minus</i>	<i>60 to 62%</i>
<i>F</i>	<i>59% or below</i>

# ECON 203B/ Seminar in Econometric Methods Spring 2022, Course Schedule

## Course Schedule

Lesson	Date	Topics, Readings	Assignments, Deadlines
1	2/1	Review of linear model Regression with a binary dependent variable (Chapter 12)	
2	2/8	Regression with a binary dependent variable (Chapter 12)	
3	2/15	Regression with panel data (Chapter 8)	HW 1 due
4	2/22	Regression with panel data (Chapter 8)	
5	3/1	Regression with panel data (Chapter 8)	
6	3/8	IV regression (Chapter 9)	HW 2 due
7	3/15	IV regression (Chapter 9)	
8	3/22	Experiments (Chapter 10)	Midterm HW 3 due
9	4/5	Experiments (Chapter 10)	