

**San Jose State University/Department of  
Economics  
ECON 138, Business and Economic  
Forecasting, Sec 1, Spring, and 2020**

**Contact Information**

Instructor: Rui Liu

Office Location:

interested in the quantitative aspects of business decisions will benefit greatly from this material

# **Course Goals and Learning Objectives**

CLOs



## Prerequisite

This course requires understanding of the basic concepts of probability and statistics. Students are therefore expected to have taken Elementary Statistics (ECON3). Introduction to Econometrics (ECON103) is not a prerequisite for this course, but strongly preferred. Prior knowledge of R is not necessary, as it will be taught in the lectures. Time series analysis in economics rests on the mathematical and statistical models. Students should be comfortable with simple algebra and equations.

## Course Requirements and Assignments

The course grade will be based on seven quizzes, weekly problem sets, and a final project. The scores are averaged with the following weight:

Assignment	Weight
Problem Sets (2 lowest dropped)	25%
Online Discussion	10%
Quizzes (2 lowest dropped)	50%
Final Project	15%

### Quizzes

All quizzes will consist of true/false and multiple-choice questions on...

- x concepts
- x definitions
- x formulas
- x data analysis

Students are requested to download the **Canvas Lock Down Browser** on a wireless network

that you just need clarification on. You will also be asked to respond to at least 2 other students' posts.

## Grading Policy

Final grades will be determined as follows:

Assignment	Weight	Dates
Problem Sets (2 lowest dropped)	25%	Weekly
Online Discussion	10%	Weekly
Quizzes (two lowest dropped)	50%	2/6, 2/20, 3/5, 3/19, 4/9, 4/23, 5/7
Final Project	15%	Final exam week

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		

## Late Work Policy

Due dates for every assignment are provided on the course syllabus and course schedule (and posted in Canvas). Unless otherwise stated, assignments are due on those days. **An assignment submitted 24 hours of the due date will only be eligible for 70% of the maximum number of point allotted. Assignments submitted more than 24 hours after the due date will not be accepted.** If you experience extenuating circumstances (e.g., you are hospitalized) that prohibit







## ECON 138 / Business and Economic Forecasting, Spring 2020, Course Schedule

### Course Schedule

Week	Date	Topics
1	1/23	Syllabus, introduction, time series data
2	1/28	Introduction to R, statistics basics and review, time series graphs (chp 2)
	1/30	
3	2/4	Simple forecasting methods, data transformation (chp 3)
	2/6	
4	2/11	Linear regression models (chp 5)
	2/13	
	2/18	
5	2/20	Linear regression models (chp 5)
	2/25	
6	2/27	Time series decomposition (chp 6)
	3/3	
7	3/5	Time series decomposition (chp 6)
	3/10	
8	3/12	Exponential Smoothing (chp 7)
	3/17	
9	3/17	AR models (chp 8)
	3/19	
10	3/19	Quiz 4

Week Date