

University of Colorado - Department of Economics
ECON 4858 Financial Econometrics
Professor Carlos Brunet Martins-Filho
Fall 2021

Office. Economics Building 105.

Meetings. Tuesdays and Thursdays 12:45 PM - 2:00 PM at Econ 117.

Office hours. Office hours will be held remotely, via Zoom, Tuesdays and Thursdays from 4:00 PM - 5:00 PM. You will receive an email with a Zoom meeting invitation to join me for office hours. If you need an appointment outside these hours send an email to carlos.martins@colorado.edu and I will try to accommodate your request.

Prerequisites. Successful completion of ECON 3818 or equivalent is a required prerequisite. Completion of ECON 4818 is desirable, but not necessary.

Objectives. Introduce statistical models, estimation and testing procedures used in analyzing financial data.

Class URL. <http://spot.colorado.edu/~martinsc/4858.html>.

Grades. Grades (A-F) will be based on the following:

There will be four sets of homework questions that will be graded. Each set is worth 10 percent of your course grade. Homework sets will be available on the class web site with their respective due dates.

There will be one midterm examination. It is worth 25 percent of your course grade.

There will be a final examination. It is worth 35 percent of your course grade.

Dates for the examinations:

| Examination | Date and Time |
|-------------------|--------------------------------|
| Midterm 1 | October 14 |
| Final Examination | December 12, 4:30 PM - 7:00 PM |

Textbook.

1. Ruppert, D., 2004, *Statistics and Finance: An Introduction*. Springer, New York.

Additional.

1. Bernstein, P., 2005, *Capital Ideas: The Improbable Origins of Modern Wall Street*. John Wiley and Sons, New York.

This book gives an informal and historical account of the development of many of the models we treat in class. Great reading for all students in this course.

2. Lai, T. L., and Peng, H., 2008, *Statistical Models and Methods for Financial Markets*. Springer, New York.

3. Ruppert, D., 2011, *Statistics and Data Analysis for Financial Engineering*. Springer, New York.

This book contains much of the material in our textbook. In many instances, however, the treatment is more advanced.

4. Hanselman, D. and Littlefield, B., 2005, Mastering MATLAB 7. Pearson, Upper Saddle River, New Jersey.

This is one of many step-by-step manuals/guide to MATLAB that are commercially available. It is very easy to read and provides speedy access to the many resources this software offers.

5. Frain, J. C., 2014, MATLAB for Economics and Econometrics: A Beginners Guide. Trinity College Economics Papers - Working Paper 0414.

This is another step-by-step introduction to MATLAB with a focus on the Econometrics Toolbox.

Topics.

All topics covered depend on some fundamental statistical concepts and results from Chapter 2 of your

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