

# ECO 374 H1S: Forecasting and Time Series Econometrics

Winter 2019, L0201

Department of Economics, University of Toronto

**Lectures:** Monday 1:00 pm – 3:00 pm, MS4171  
**Tutorials:** Friday 10:00 – 11:00 am, MS4171  
**Instructor:** Prof. Martin Burda  
**Contact:** 416-978-4479, martin.burda@utoronto.ca  
**Office hours:** Friday 11:00 am – 1:00 pm in GE234  
**TA:** Hu, Yu Fan  
**Contact:** yufan.hu@mail.utoronto.ca  
**Office hours:** Tuesday 10:00 am – 12:00 pm, GE213

## Course Description

The primary objective of the course is to provide students with a solid theoretical and practical foundation for forecasting and time series analysis. The course is built around the statistical foundations and economic application of modeling stochastic processes. Key examples will be drawn from business and financial economics. Students will gain practical experience working with economic and financial data, making use of statistical software.

## Previous Training

*Prerequisites:* ECO200Y1/ ECO204Y1/ ECO206Y1, ECO220Y1(70%)/ ECO227Y1/( STA237H1(70%), STA238H1(70%))/( STA257H1, STA261H1)

*Recommended:* MAT221H1/ MAT223H1/ MAT240H1

The prerequisites are checked by the administration of the Department of Economics and students will be removed from the course list if the prerequisites are not met.

## Textbook

"Forecasting for Economics and Business" by González-Rivera, 2013, Pearson (Addison-Wesley, Routledge). ISBN-13: 978-0-13-147493-2, ISBN-10: 0-13-147493-6. The book will be available at the University of Toronto Bookstore, or can be purchased from various online bookstores. Data and other resources are available at the book's [companion website](#).

## Software

We will make regular use of statistical functions in R, which can be freely downloaded from <https://www.r-project.org/>.

## Evaluation

The final grade is based on the following:

Task	Weight	Due date
Midterm	30 %	February 15, 2019
Short Written Assignment	10 %	April 5, 2019
Final Exam	60 %	Final Exam Period

The **midterm** will be held during the Friday tutorial.

- The midterm will have duration of 50 minutes and will be composed of short-answer questions.
- A grade of zero will be given to students who do not write the test, unless an appropriate and convincing note is received within one week of the missed test explaining why the test was missed. The note must be provided using the University of Toronto medical certificate. The note must clearly state that on the date of the test, the student was too sick to write the test. All students who miss a test for medical reasons must complete the Absence Declaration on Acorn. It is an academic offence to feign illness to avoid a test.
- If a student has been excused from a test on medical grounds, he or she will be permitted to write a make-up test worth the value of the midterm. Consistent with university policy, there is no “make-up” test for the make-up test. No medical excuses will be accepted, and grade of zero will be applied if the make-up test is requested but missed.
- If students wish to appeal a grade, they must provide a written explanation of why they believe their grade is mistaken and submit it to the instructor within one week of the midterm being returned to the class.

**Problem Sets** will be distributed throughout the semester and form the basis of the tutorials. They will consist of both theoretical and computer- (data-) based problems. The problems sets will not be graded but serve to prepare students for the graded components of the course (midterm and final exam).

The **Short Written Assignment** (SWA) will have a similar format as the problem sets, but will give students the opportunity to work on a graded computer-based set of exercises. The SWA will be handed out approximately two weeks prior to the completion deadline. There is a 5% late penalty of the SWA’s worth for each day overdue.

## Accessibility Needs

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: [disability.services@utoronto.ca](mailto:disability.services@utoronto.ca) or <http://studentlife.utoronto.ca/accessibility>.