

**Syllabus**  
**ECON 2311Q: Econometrics I**  
**Spring 2020**

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<b>Instructor:</b>	Zhenhao Gong ( <a href="mailto:zhenhao.gong@uconn.edu">zhenhao.gong@uconn.edu</a> )
<b>Office hours:</b>	MoWe 15:30 – 16:20 or by appointment, OAK 237
<b>Lectures:</b>	MoWe 16:40 - 17:55, MCHU 205

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**Course Description:**

ECON 2311Q is a semester long course in introductory econometrics. Econometrics is the art and science of the estimating and testing of economic models. The course will focus on multiple regression methods for analyzing data in economics and related disciplines. The objective of the course is for the student to learn how to conduct and how to critique empirical studies in economics and related fields. The mathematics of econometrics will not be a central focus.

**Prerequisites:** ECON 1200 or both ECON 1201 and 1202; MATH 1071Q or 1110Q or 1125Q or 1131Q or 1151Q or 2141Q; and STAT 1000Q or 1100Q.

**Main References:** There is no required textbook for this course, however, the following textbooks are recommended:

- Stock, J. and Watson, M., *Introduction to Econometrics*, 4<sup>th</sup> Edition, Pearson.
- Wooldridge, J., *Introductory Econometrics: A Modern Approach*, 7<sup>th</sup> Edition, Cengage.

In addition to the recommended textbooks, a series of lecture notes which follow the material presented in class will be posted on [HuskyCT](#). You should check this page regularly.

**Grading Policy:**

Participation (10%), Homework (30%), Midterm 1 (20%), Midterm 2 (20%), Final (20%).

**Class Requirements:**

- Participation: Regular attendance is essential and expected.
- Homework Assignments: There are six homework assignments in total including computer exercises. These assignments with lecture notes are key materials for reviewing the main contents of the lectures and preparing for the exams.
- Exams: Two midterm exams and one final exam. Dates are TBA. One page (double sided, 8.5 × 11 inches) of cheat sheet are allowed for each exam. It need to be handwritten.

**Makeup Exam Policy:** Only students with legitimate excuses will be allowed to make up missed exams. The date and time for student to take a makeup exam will be arranged on a case by case basis

**Statistical Software:**

The course will require use of Stata, one of the primary statistical packages used by economists. Stata is freely available to students at UConn through the computer labs or online with UConn AnyWare. Eligible students can also download Stata at <https://software.uconn.edu/software/stata/> . You are welcome to use other statistical software such as R, but I will only demonstrate how to use Stata in class.

**Academic Integrity:**

You are responsible for acting in accordance with the University of Connecticut's [Student Code](#). Review and become familiar with these expectations. In particular, make sure you have read the section that applies to you on [Academic Integrity](#). Cheating and plagiarism are taken very seriously at the University of Connecticut. As a student, it is your responsibility to avoid plagiarism

**Disabilities and Accommodations:**

In compliance with the University of Connecticut policy and equal access laws, I am available to discuss appropriate academic accommodations that may be required for students with disabilities. Students in need of accommodations should go to the [center for students with disabilities](#) to verify their eligibility for appropriate accommodations. If you are eligible for accommodations such as extra time during exams, please provide documentation and coordinate with me no later than a week prior to every exam.

**Tentative Course Outline:**

1. **Introduction** (Stock & Watson, Chapter 1)
2. **Review of Probability and Statistics** (Stock & Watson, Chapter 2 & 3)
  - (a) Random Variables and Probability Distribution Functions
  - (b) Estimators and Sampling Distributions
  - (c) Statistical Inference: Estimation and Hypothesis Testing
  - (d) Jointly Distributed Random Variables, Covariance and Correlation
3. **Simple Linear Regression** (Stock & Watson, Chapter 4 & 5)
  - (a) Simple Linear Regression Model
  - (b) Estimation and Interpretation
  - (c) Inference
4. **Multivariate Regression Analysis** (Stock & Watson, Chapter 6 & 7)
  - (a) The Multivariate Regression Model
  - (b) Estimation and Interpretation
  - (c) Inference
5. **Nonlinear Regression Functions** (Stock & Watson, Chapter 8)
  - (a) Functional Form
  - (b) Dummy Variables and Interaction Terms
6. **Joint Hypothesis Tests and Robust Inference** (Stock & Watson, Chapter 5 & 6 & 7)
  - (a) Joint Hypothesis Testing
  - (b) Robust Inference: Heteroscedasticity, Serial Correlation, Clustering