



# **Econometrics Economics 7590**

**Spring 2023**

## **Course Information**

**Course Name:** Econometrics

**Course Days/Time/Location:** Tuesday and Thursday, 10:45am – 12:05pm, via Zoom

**Course Credits:** 3 Credit Hours

## **Instructor Information**

**Instructor:** Eunice S. Han

**Email:** eunice.han@economics.utah.edu

**Phone Number:** (801) 587-1398

**Office Hours:** By appointment

**Office Location:** GC 4033

## **Course Introduction**

### **Course Description and Objectives**

The purpose of this course is to provide a graduate-level introduction to econometrics. In particular, this course will focus on applications of statistical methods to cross-sectional and panel data in order to conduct empirical and quantitative analysis of various topics.

### **Suggested Textbooks**

George Casella and Roger Berger. Statistical Inference. 2nd Edition.  
ISBN-13: 978-0534243128

Jeffrey M. Wooldridge. Econometric Analysis of Cross Section and Panel Data. 2nd Edition.  
ISBN-13: 978-0262232586

### **Teaching and Learning Methods**

We will use software called Stata for the applied exercises in this course. I will introduce you to the software and also provide you with a brief reference guide on the most common commands. You will have access to Stata through the university computers or Virtual Labs. Instructions for how to access the CSBS Virtual Labs can be found at:

<https://support.csbs.utah.edu/get-help/self-support/virtual-lab.php>

Alternatively, you can purchase a student version of the software here:

<https://www.stata.com/order/new/edu/gradplans/student-pricing/>

## Course Policies

### Attendance & Participation

Because we will conduct data analysis in class, attendance is strongly encouraged. I will check attendance 12 times this semester on a random basis, and two absences will be excused.

### Class Etiquette

Be mindful of others and respect one another. Please be on time. If you have to leave early, sit near the door. If you must bring food to class, please make sure that you don't disturb others.

### Canvas

Canvas is where the syllabus, course content, grades, and communication will reside for this course.

- Canvas login: [instructure.com](https://instructure.com)
- Problems with Canvas? Please contact the [Uonline Help Desk](#) at [classhelp@utah.edu](mailto:classhelp@utah.edu) or call 801-581-6112 and press 2 (M-F, 8:00am-5:00pm).

### Communication

If you have any questions or concerns regarding the class material or other related issues, please email me. I usually respond to email inquiries within 24 hours, but this is not guaranteed, especially on weekends, so plan accordingly if you have time-sensitive questions.

### Copyrighted Materials

Throughout the course you will receive copyrighted materials, such as test questions and sample answers. These materials are provided to you as a student of Econ 7590, for use in this course only. Please remember that you may not copy or share these materials with others (including posting any of these materials online) without permission. Not only can such copying raise questions regarding academic integrity, but, in many cases, it is a violation of copyright law. If you have any questions about whether you can share course materials or work with students from other sections of Econ 7590, please contact me.

### Tentative Topics

- Review of Probability Theory and Statistical Inference (Week 1)
- Univariate Linear Regression (Week 2)
- Univariate Hypothesis Test (Week 3)
- Omitted Variable Bias and Multiple Regression (Week 4)
- Joint Hypothesis Test (Week 5)
- Nonlinearity (Weeks 6 & 7)

- Panel Data (Weeks 8 & 9)
- Binary Dependent Variable (Week 10)
- Instrumental Variables Estimation (Week 11)
- Experiment and Quasi-experiment (Weeks 12 & 13)

## Course Assignments

### 1. Problem Sets

There will be eight problem sets. Late problem sets will not be accepted under any circumstances, but you are allowed to drop one problem set. You are encouraged to work in groups (up to three students).

### 2. Midterm Exam

The midterm exam will be on Thursday, February 23, 2023, at 10:45am – 12:05pm. The exam will be administered through Canvas, and it must be taken at this scheduled time. The exam will cover material from lectures and problem sets. You are responsible only for the material that is covered during lectures and in the problem sets. The format of the exam will be similar to your problem set questions. The midterm is an open-book exam. No make-up exam will be given unless you provide legitimate documentation, such as a doctor's note.

### 3. Final Exam

The final exam will be on Tuesday, May 2, 2023 at 10:30am-12:30pm. The exam will be administered through Canvas, and it must be taken at this scheduled time. The final exam will be cumulative – covering the entire semester's material from lectures and problem sets. However, it will have a greater emphasis on the later material, after the midterm exam. The format of the exam will be similar to the midterm exam. The final is an open-book exam. No make-up exam will be given unless you provide legitimate documentation, such as a doctor's note.

## Grading Policy

Basic semester grades are determined by the final exam (30%), midterm exam (30%), and problem sets (40%). The tentative letter grade scales are below:

- A range letter grades (A, A-) if  $\geq 90\%$ ;
- B range letter grades (B+, B, B-) if  $\geq 80\%$ ;
- C range letter grades (C+, C, C-) if  $\geq 70\%$ ;
- D range letter grades (D+, D, D-) if  $\geq 50\%$ ;
- E if  $< 50\%$

The exact breakdown of each letter grade range depends on the shape of the distribution, and the final letter grade is subject to curve. Incompletion is not generally given for non-medical reasons. If you have any questions regarding your grade on your assignment or on

your exam, you must inquire within one week from the day the grades are posted on Canvas. No exception to this rule will be given.

## **University Policies & Procedures**

### **Wellness Statement**

Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness – [www.wellness.utah.edu](http://www.wellness.utah.edu); 801-581-7776.

### **Addressing Sexual Misconduct.**

Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

### **Code of Student Rights and Responsibilities (“Student Code”)**

All students are expected to abide by the academic code of conduct as laid out by the university: <https://regulations.utah.edu/academics/6-400.php>

### **The Americans with Disabilities Act**

The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, (801) 581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.

### **Student Names & Personal Pronouns**

Class rosters are provided to the instructor with the student's legal name as well as 'Preferred first name' (if previously entered by you in the student profile section of your CIS account). While CIS refers to this as merely a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class, on papers, exams, group projects, etc. Please advise me of any name or pronoun changes (and update CIS) so I can help create a learning environment in which you, your name, and your pronoun will be respected.

**Veterans Center**

If you are a student veteran, the U of Utah has a Veterans Support Center located in Room 161 in the Olpin Union Building. Hours: M-F 8-5pm. Please visit their website for more information about what support they offer, a list of ongoing events and links to outside resources: <http://veteranscenter.utah.edu/>. Please also let me know if you need any additional support in this class for any reason.

**Safety on Campus**

The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit [safeu.utah.edu](http://safeu.utah.edu)

*Note: This syllabus is meant to serve as an outline and guide for our course. Please note that I may modify it with reasonable notice to you. I may also modify the Course Schedule to accommodate the needs of our class. Any changes will be announced in class and posted on Canvas under Announcements.*