

CAS EC 204 B1: Empirical Economics 2

Summer 2, 2025

Instructor: Seungyoo Shin

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Class Hours: M, Tu, W 10:00am – 12:30pm [MCS B29]

Office Hours: W 2:30 – 4:30pm [SSW B30C]

Teaching Fellow: Nadia Fitriani

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Discussion: M 9:00 – 9:55am [MCS B29]

Office Hours: M 2:00 – 3:00pm [SSW B17]

Course Description

Do more years of schooling lead to better labor market outcomes after graduation? Is there a gender gap in wages? Does a smaller class size improve student performance? This course will introduce you to econometric tools that can be applied to analyze data and provide answers to these questions. The main goal is to estimate causal relationships.

This is the second course in the empirical economics sequence, building on EC203. In this course, you will learn how to pose a research question, develop a hypothesis, and test the hypothesis using econometric tools with available data. More detailed topics can be found in the tentative course schedule section. Stata will be used for data analysis in assignments and the final project.

Prerequisites

EC 101 Introductory Microeconomic Analysis, EC 102 Introductory Macroeconomic Analysis, and EC 203 Empirical Economics 1 or EC 303 Econ Analysis 1 or the equivalent.

Course Materials

1. Software

The statistical software Stata is **REQUIRED** for this course. We will begin using Stata right away, so it is important that you obtain a copy of Stata before the first discussion session. In the first class, I will explain several options for using Stata. You can purchase a copy of Stata at: <https://www.stata.com/order/new/edu/gradplans/student-pricing/>. Stata BE is sufficient for the scope of this course. It is strongly recommended to watch the Stata tutorial videos during the first week of the class, as needed. You can find the tutorial videos at: <https://www.bu.edu/econ/students/stata-resources/>.

2. Recommended Textbook

- Jeffrey M. Wooldridge, *Introductory Econometrics: A Modern Approach*. Cengage Learning, 7th Edition. Students can rent or get an e-Textbook or a printed book from the Cengage website: <https://www.cengage.com/c/introductory-econometrics-a-modern-approach-7e-wooldridge/9781337558860PF/> OR get a copy from Amazon or other bookstores: <https://www.amazon.com/Introductory-Econometrics-Modern-Approach-MindTap/dp/1337558869>
- Stock, James and Mark Watson, *Introduction to Econometrics*. Pearson

Grading

The course grade is determined by the following components:

Midterm	20%
Final	30%
Research Project	30%
2 Problem Sets	15%
Class Participation	5%

I reserve the right to curve the overall grades at the end of the course. **Please note that under no circumstances will “extra credit” work be given.**

1. Exam

The midterm will tentatively cover the materials from Chapters 1 to 4. The final exam will be cumulative. Both exams will be closed-book exams. All exams will aim to test your understanding of the learned concepts. Any changes to an announced exam date or time will be announced in class and posted on Blackboard. It is your responsibility to be aware of these changes.

Acceptable Calculators for Exams: In the exam, students are allowed to use calculators which display screen may be no more than the two lines.

2. Makeup Exams

There will be no makeup exams. You are expected to take all exams when scheduled. Excused absences will be granted in case of illness or family emergency. If you miss one exam due to a documented medical emergency on or before the exam, a signed note from a doctor, on their letterhead, indicating that you were seen on the day of the exam will be required. For family emergencies, you should contact me prior to the exam. With approval, the weight carried by the missed midterm will be added to the final exam; the weight carried by the missed final will be added to the midterm but with a penalty.

3. (Group) Research Project

Students are required to complete a group research project. Each group should have a maximum of 3 students. The project will require students to pose a novel research question, develop an econometric model and a hypothesis, perform their own regression analysis, and document your findings. Detailed instructions for the research project are posted on Blackboard.

4. Problem Sets

There will be two assignments throughout the course. The problem sets will consist of both a theoretical and an empirical (computational) part. You may work on them individually or in groups, but each student must submit their own individual work. There are no extensions or make-up problem sets. No late homework submissions are allowed. Solutions will be posted on the Blackboard after the due dates.

5. Class Participation

Class participation is important to facilitate your understanding of the course materials. Also, questions and comments can enhance other students' understanding – namely, positive externality! I strongly encourage you to ask questions or share comments. I will also check attendance randomly once a week. I reserve the right to adjust the letter grades of the border cases depending on student participation.

Class Schedule

The following is a *tentative* schedule for the course. **All the due dates are by 11:59 pm EST.**

Week	Dates	Topics	Discussion
1	6/30 – 7/2	Syllabus, Chapter 1 & 2, Stata Introduction	Stata practice session 1
2	7/7 – 9	Chapter 3 & 4 7/11: PS1 Due	Stata practice session 2
3	7/14 – 16	Research project, Chapter 6, Midterm preview 7/16: Midterm 7/18: Submit group and research topic	PS1 review
4	7/21 – 23	Chapter 7 & 8	Stata practice session 3
5	7/28 – 30	Chapter 13 & 15, Research project 8/1: PS 2 Due	Research project
6	8/4 – 6	Research project, Review for Final 8/6: Final exam 8/8: Research project Due	PS2 review

1. Administrative Dates

- Class begins: Monday, June 30
- Last day to register/add/audit classes: Monday, July 7
- Last day to drop or withdraw with a ‘W’ grade: Thursday, July 24

2. Important Course Dates

- PS1 due: Friday, July 11
- Midterm: Wednesday, July 16
- Submit group members and topic for research project: Friday, July 18
- PS2 due: Friday, August 1
- Final exam: Wednesday, August 6
- Research project due: Friday, August 8

Course Policies and Other Information

1. Attendance

Students are expected to attend every lecture and discussion session. I will check attendance randomly once a week. Attendance may be considered when assigning letter grades to borderline cases.

2. Class Structure

Each lecture runs from 10:00 am to 12:30 pm with a 15-minute break in between.

3. Discussion Sessions

In the discussion sessions, our TF (Teaching Fellow) will help you solve problem sets, provide Stata tutorials, and answer questions about writing research papers. Our TF will be your first contact point to discuss your research projects and Stata problem sets. If you have any questions regarding the homework, please attend office hours or reach out to the TF.

4. Academic Integrity

You can find Boston University's Academic Conduct Code at <http://www.bu.edu/academics/academic-conduct-code/>. Please read the CAS Academic Conduct Code and adhere to its principles. Feel free to reach out to me if you have any questions or concerns. Plagiarism and academic misconduct of any kind will not be tolerated and will lead to severe consequences such as failing grades and/or suspension.

5. Students with Disabilities

Students with disabilities who require accommodations must provide me with a note from the BU Office of Disabilities Services (<https://www.bu.edu/disability/>). Students who are approved for special accommodations should inform me as soon as possible so that appropriate arrangements can be made.

6. Course Recording Policy

You may not record any classroom or other academic activity (including advising sessions or office hours) without my express written consent. If you have (or think you may have) a disability such that you need to record classroom activities, or need other assistive services, you should contact Disability Access Services to request an appropriate accommodation.

7. Emails

When sending emails, please use the subject line "EC204: [Email Issue]", where "email issue" is a brief summary of the email's content. This will help ensure that your email receives prompt attention and a response.