Economic Statistics (Econ 121-10) Summer 2022 – First Session

Syllabus

Instructor Information:

Anwita Mahajan Email: <u>am3975@georgetown.edu</u> Office hours: Weds 12:00-1:00 pm, location TBA

Class information:

Lectures: MTWR 3:30 pm-5:35 pm, ICC 118 Recitation (Discussion) Section: W 7:00 pm – 9:00 pm, ICC 213

Teaching Assistant Information:

TBA

Course overview:

After overviewing descriptive statistics, and the theory of probability and random variables, this course covers statistical inference in detail. You will receive the firm foundation needed for Introduction to Econometrics. Regression analysis, the primary tool for empirical work in economics, is introduced. Electronic data acquisition and computer applications receive hands-on treatment.

Prerequisites:

To do well in this course, you will need basic knowledge of calculus (Math 035 or the equivalent). Being able to calculate derivatives and integrals, and work with concise mathematical notation like summations will be sufficient.

Course Materials:

Lecture slides provided by me will be the main material for this course. I will post lecture slides regularly to the class Canvas website, and you are responsible for noting down anything additional I may write or show on the blackboard during class.

There is no required text but the text *Vital Statistics* by Sandholm and Saraniti, Oxford University Press, 2019 is a recommended resource. This book is available for purchase online (on Amazon, for example) but I will also have the Georgetown library place this on reserve so you can borrow it for use, for free, from there.

Assignments and Grading:

There will be one midterm, one final, 3 problem sets and a class presentation. Below is the description and grade weightage for each:

Midterm: A short exam testing your understanding on the first half of the course. Date: June 22, 2022; in class. Weightage: **30%** of the final grade.

Final: A short exam testing your understanding of the entire course, but with higher weightage given to everything covered after the midterm.Date: July 7, 2022; in class.Weightage: 50% of the final grade.

Problem sets: Assignments with practice problems, graded on effort (0 points if not submitted, 1 point if partially complete, 2 points if fully complete) and not accuracy. The problem sets will also include assignments to be carried out using Stata, a statistical software standardly used by economists. You will need to download this software which is provided for free by Georgetown at https://georgetown.onthehub.com/WebStore/Welcome.aspx .

Date: Approximately every other week.

Weightage: **10%** of the final grade.

Class presentation: At the end of each class, I will give you 1 or 2 short problems relevant to the material I cover that day. You are expected to solve these before the start of the next class. At the start of the following class, I will select one person *at random* to come up to the blackboard and present the solution to one assigned question.

Depending upon how many people sign up for the course, every student may be selected to present one or more problems over the course of the semester. You will be graded on accuracy but also the clarity of the verbal explanation that will go with your solution. If you are randomly selected to present a problem but you are not present in class, or have entirely not attempted to prepare for the problem, you will get zero points for that problem. Date: Every class.

Weightage: **10%** of the final grade (will be split equally across the number of problems you will ultimately present).

Policies:

Syllabus:

I reserve the right to make any changes to the syllabus, including any shifts in exam or assignment due dates, during the course of the semester.

Make up exams:

There will be no make-up exams for the course. If you need to miss an exam due to a legitimate reason, supported by a doctor's note or letter from the Dean, I will allot the weightage of that exam to the other exam (for example, if you miss the midterm, I will allot 80% of the final grade to your final exam score).

Final grade curving:

Letter Grades will be assigned following the Economics Department Guidelines:

- A and A- top 50% of the class
- B+ to B- next 45% of the class
- C+ and below, bottom 5% of the class

Honor Code:

Students are expected to adhere to the Honor Code at all times. The honor code can be found here: <u>https://honorcouncil.georgetown.edu/system/</u>

According to the policy, a student found in violation of the Georgetown Honor Code will receive an F for the course in addition to any penalties imposed by the Honor Council.

You are allowed, and encouraged, to work on problem sets together but the solutions you submit must be your own. You may not discuss or collaborate on any question in the midterm or final.

Title IX statement:

Georgetown University and its faculty are committed to supporting survivors and those impacted by sexual misconduct, which includes sexual assault, sexual harassment, relationship violence, and stalking. Georgetown requires faculty members, unless otherwise designated as confidential, to report all disclosures of sexual misconduct to the University Title IX Coordinator or a Deputy Title IX Coordinator. If you disclose an incident of sexual misconduct to a professor in or outside of the classroom (with the exception of disclosures in papers), that faculty member must report the incident to the Title IX Coordinator, or Deputy Title IX Coordinator. The coordinator will, in turn, reach out to the student to provide support, resources, and the option to meet. [Please note that the student is not required to meet with the Title IX coordinator.]. More information about reporting options and resources can be found on the Sexual Misconduct Website: https://sexualassault.georgetown.edu/resourcecenter.

If you would prefer to speak to someone confidentially, Georgetown has a number of fully confidential professional resources that can provide support and assistance. These resources include:

Health Education Services for Sexual Assault Response and Prevention: confidential email sarp@georgetown.edu

Counseling and Psychiatric Services (CAPS): 202.687.6985 or after hours, call (833) 960-3006 to reach Fonemed, a telehealth service; individuals may ask for the on-call CAPS clinician

More information about reporting options and resources can be found on the <u>Sexual Misconduct</u> <u>Website</u>. (Above statement and TIX faculty resources found at: <u>https://sexualassault.georgetown.edu/get-help/guidance-for-faculty-and-staff-on-how-to-support-students/</u>)

Title IX Pregnancy Modifications and Adjustments:

Georgetown University is committed to creating an accessible and inclusive environment for pregnant students. At any point throughout their pregnancy students may request adjustments/modifications based on general pregnancy needs or accommodations based on a pregnancy-related complication or medical need. Students may also request accommodations following labor and delivery based on a complication or medical need.

SCS students must complete the <u>Pregnancy Adjustment Request Form</u>

(<u>https://titleix.georgetown.edu/title-ix-pregnancy/student-pregnancy/</u>) and submit it to the SCS Deputy Title IX Coordinator at <u>titleixscs@georgetown.edu</u>. Upon receiving the completed form, the Deputy Title IX Coordinator will schedule a meeting with the student to discuss the requested adjustments and implementation process.

More information about pregnancy modifications can be found on the <u>Title IX at Georgetown</u> <u>University Website</u>.