

UNIVERSITY of **HOUSTON**

Introduction to Economic Research

Fall Semester – 2023

10:00 am - 11:15 am, Tuesday - Thursday

Contact information

Prof. Andrea Szabo

E-mail: aszabo2@uh.edu

Office: Online

Office hours: By appointment only. Mostly on Thursdays, check the online schedule.

You can schedule an appointment at <http://www.uh.edu/~aszabo2/appointments.htm>

Course Description

To expose students to common tools that are essential to academic research in economics, Introduction to Economic Research offers a comprehensive series of lectures and workshops. Topics include (1) introduction to economic journals, finding the relevant literature and how to effectively summarize them, (2) introduction to various data sources used in economic research, locating datasets and creating surveys, (3) data management, including data entry, merging, cleaning datasets, creating graphs and tables using STATA, (4) introduction to writing in economics, and (5) how to prepare presentation slides for an academic audience.

The class is complemented by a 3 week individual research assignment linked to ongoing research by faculty and PhD students at the department, and allows you to gain hands-on experience with skills acquired during this class.

Interested students have the opportunity to develop their own research proposals and seek faculty advisors for future semesters to conduct independent research.

Prerequisites

Students are expected to have taken an introductory course in probability and statistics (Econ 3320) and Introduction to Econometrics (Econ 3370).

Textbook

There is no textbook for this class which covers all the topics we will discuss. Attending classes is a must. For each topic, I will provide a set of materials posted in Blackboard.

Course Requirements

This course will be time intensive. You should come prepared to discuss the readings in detail. The class time will be used for regular class meetings and required one-on-one consultation based on the class schedule.

There will be 3 homework assignments and 4 additional assignments (see below). Please prepare and submit all your homework assignments knowing that it is possible that I will share it with other students enrolled in the class (without your name or grade).

All homework assignments will be done online through the University of Houston Blackboard Learn website. **All Problem Sets are due on the day listed below by 8.30 am.**

Homework assignments have multiple goals. First, they help you internalize the use of resources we discuss in class. Second, you will need to do your own work to get more hands-on experience with research. You will gather data; analyze data using a statistical software; collect, read and summarize newspaper articles and academic papers on specific questions. All these skills will equip you to successfully start your own research in the future.

Additional assignments:

1. The Department of Economics organizes two departmental seminars. You can find the schedules here. Read the schedule and choose one seminar which seems to be the most interesting to you. Submit your choice by the end of the second week. Attend the seminar and write a 300 word summary.
2. Contribute to the class website. Each week, we will discuss research-related issues, including problems you encountered during your assignments. One of you will be designated as the “coordinator” each week. The coordinator will contact students in the class to collect useful resources they found, and gather issues students could not solve individually. This includes for example, a list of STATA codes you found particularly useful, lists of new data sources or relevant online guides, etc. The coordinator will summarize these for the class website.
3. Participate in an online class designed to fulfill IRB requirements for Undergraduate Student Researchers (<https://about.citiprogram.org/en/homepage>). See registration details in Blackboard. Completing the class takes about 2-3 hours and you will receive a certificate once you passed the quiz. Please upload your certificate (the pdf file you received) in Blackboard.
4. At the end of the semester, present (1) a published (undergraduate) research paper (for example, from one of the undergraduate research journals listed here: <https://www.aeaweb.org/resources/students/undergrad-research>) or (2) present your own research proposal. Each presentation, depending on class size, is 20-30 minutes for which you will prepare about 20 presentation slides. If you choose (1), submit your chosen paper by the end of Week 8. If you choose (2), inform me by the end of Week 3.

Class Website

All assignments and handouts will be posted on the class website in Blackboard Learn. Go to <http://www.uh.edu/blackboard> and click the white "Blackboard Learn" button. Log in with your CougarNet ID and password.

You will be required to use STATA, a statistical software package. You can access STATA via the Libraries' Virtual Learning Commons. Please see the detailed instructions on how to access the software in Blackboard.

If you would like to get your own copy of STATA, please visit STATA's website for student pricing: <https://www.stata.com/order/new/edu/profplus/student-pricing/>

We won't devote much class time to learning how to use this software. I will assume that you learned the basics during your Introduction to Econometrics, which is a prerequisite for this class.

Grading

You are required to submit all homework assignments on time. Late assignments receive zero points.

Course Component	Percentages
Problem Sets, 10 percent each	30
Additional assignments, 10 percent each: Seminar summary CITI certificate Class coordinator	30
RA assignment	20
Final presentation	20
Total	100

The numerical course grade will be converted to a letter grade according to the following scale:

92%-100%	A
90%-91%	A-
88%-89%	B+
82%-87%	B
80%-81%	B-
70%-79%	C+
50%-69%	C
40%-49%	C-
38%-39%	D+
33%-37%	D
30%-32%	D-
-29%	F

There is no curve for the class. This means that you are not competing with other students, and you will always know exactly where you stand in the class based on your performance.

Additional required syllabus information TBA.

Tentative Course Schedule:

Week	Class #	Date/Day			Date/Day	Assignments Due
Week 1	1	Aug	22	T	Welcome to the class! Introduction and syllabus	
	2		24	Th	Examples of economic research -Highlight specifics of the research question -Highlight complexity of the data used: variety of data sources from survey to large administrative datasets, how these are collected and merged	
Week 2	3		29	T	Locate published research in economics; locate information on particular topics and issues in economics -Provide information on economic journals, explain fields -How to use Econlit, JSTOR, keyword search, reverse reference search -How to access NBER working papers	
	4		31	Th	Discussion of individual/group assignment. Undertaking a literature search.	
Week 3	5	Sept	5	T	Introduction to undergraduate economic research journals. Focus on the structure of the paper: What is an abstract? Stating the research question. Summarizing relevant literature, Data sources, Stating and interpreting results, Stating the contribution.	Assignment 1 due: literature search.
	6		7	Th	Required one-on-one meeting.	
Week 4	7		12	T	Locating datasets for economic research. Go through a list of commonly used datasets. Introduction to library resources. Explain the importance of the level of observation, understanding the structure of the dataset, variable definitions, how the data was collected.	
	8		14	Th	Discussion of individual/group assignment. Undertaking a database search.	

Week 5	9		19	T	Collecting your own data. Survey techniques, IRB requirements.	Assignment 2 due: collecting potential data sources
	10		21	Th	Example of research using survey data on University of Houston students: "Net Neutrality and Consumer Demand in the Video On-demand Market" (Szabo and Pham), <i>Information Economics and Policy</i> 61, 2022, 1-20.	
Week 6	11		26	T	Manipulating economic data. Introduction to STATA. Useful commands. Practical advice on how to keep a record of your own work: do files, log files, naming files etc.	
	12		28	Th	Appending and merging datasets. Working with different file extensions. Data entry.	
Week 7	13	Oct	3	T	Creating graphs and tables. Formatting tables in published papers. Explain how to understand and interpret numerical data found in published tables and figures.	
	14		5	Th	Consultation related Assignment 3. This is a required one-on-one meeting.	
Week 8	15		10	T	Writing the research paper. Introduction, required elements, etc. Progress report on individual research proposals.	Assignment 3 Due: data manipulation using STATA.
	16		12	Th	Tips on writing an undergraduate research paper. Length and organization of the paper. How to pick a topic?	
Week 9	17		17	T	Week 1 of individual research assignment. During the next 3 weeks, students are required to work on the assignments 4 hours per week. Each student will receive individual assignments to work on as an RA with faculty / PhD students.	
	18		19	Th		
Week 10	19		24	T	Week 2 of individual research assignment.	
	20		26	Th		
Week 11	21		31	T	Week 3 of individual research assignment.	
	22	Nov	2	Th		
Week 12	23		7	T	How to prepare presentation slides. Length and structure of effective presentations.	
	24		9	Th	Individual feedback on your presentation slides. This is a required one-on-one meeting.	
Week 13	25		14	T	Student presentations.	
	26		16	Th	Student presentations.	

Week 14	27		21	T	Student presentations. Feedback on presentations.	
	28		23	Th	No class: Thanksgiving Holiday	
Week 15	29		28	T	Advice on graduate school applications. Suggested timeline. Research opportunities at the Economics Department.	Final deadline on all additional assignments: seminar summary and CITI IRB certificate.
	30		30	Th	Closing.	