

**Introduction to Economics of Education
ECON 16700**

Lectures: Lectures take place on Tuesdays and Thursdays, between 3:30pm and 4:50pm in Stuart Hall 102. Lectures are taught in person. You are expected to attend.

Office hours: Tuesdays 10:30am-11:30am (in person-Saieh Hall 313A), Wednesdays 10:30am-11:30am (on zoom, not recorded), or by appointment (fulya@uchicago.edu).

TA: Bhavya Pandey (bhavyapandey@uchicago.edu)

- Discussion sessions: Discussion sections will take place on Wednesdays 06:30pm-07:20pm in Saieh Hall 203.
- Office hours: Your TA will hold one hour of office hours on Thursdays 12:00pm-1:00 pm. These office hours will be in person. Location will be announced.

Course Description: This course investigates economic issues related to education. We will first discuss the theory behind the decision to invest in education. We will talk about private and social returns to education as well as signaling value of education. We will investigate which factors (class size, teachers, incentives, peers, etc.) matters in determining the success of students. Throughout the course, we will learn how different methods (experiments, difference-in-differences, instrumental variables, and regression discontinuity) are used to answer the economics of education questions.

Prerequisite: ECON10000/20000/20010 and STAT22000/STAT23400/STAT24400/ECON11010

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Explain the limitations of observational data.
- Compare and contrast different quasi-experimental methods such as regression discontinuity, instrumental variables and difference-in-differences.
- Use Stata to analyze data.
- Evaluate the appropriateness of procedures for investigation of a question of causation.
- Separate facts from inferences.
- Separate relevant information from irrelevant information.

Textbook (Required):

Michael Lovenheim and Sarah Turner (2018). Economics of Education.

Software:

We will use Stata in this course. Discussion sections will help you learn the basics of Stata so you can use it to answer problem set questions. IT Services has three computer labs and vLab that have Stata accessible within the lab and also remotely. For more on how to connect to the remote application service, check out academictech.uchicago.edu/vlab.

Discussion Board Usage:

We will use **Ed discussion board** which you can reach through canvas. Please post all your questions on the discussion board.

Assessments

Problem sets (20% of your course grade): There will be three problems sets. Problem sets can be accessed through Canvas. You should upload your answers to Gradescope. If you email them to the TA or me, it is NOT considered submitted. A “how-to-submit” video and guide is available: https://www.gradescope.com/get_started#student-submission. You are encouraged to work in groups (at most 3 please), but you must submit individual answers. If you work with a group, indicate the names of other group members on top of your submission. I expect answers to be similar but not identical among group members.

Policy on Late Problem Sets: Late submissions will be accepted with penalties. There is a 5% penalty if your submission is one-day late, a 10% penalty if your submission is two-day late, 20% penalty if your submission is three-day late and 30% penalty if your submission is four or more date but submitted within a week of the submission deadline. If you submit your problem set after a week passed but before the final, there will be a 50% penalty. There are **no exemptions** to this rule. Don’t wait until the last day to work on your problem set.

Don’t wait until the last minute to upload your problem sets to Gradescope as you might encounter some technical difficulties. Examples of technical difficulties include but are not limited to being unable to reduce the file size sufficiently, not knowing how to submit assignments, forgetting to upload a file, uploading the wrong file, uploading a file that is illegible, internet going down, etc. The teaching team cannot help you with technical difficulties, but canvas and Gradescope has help and contact sections.

Presentation (10% of the grade): You will identify a policy change related to education that happened in the last 10 years. In the light of the literature we covered throughout the quarter, you will argue what type of effects this policy might have and propose how you will study the effects of this policy. This will be a group project. More details about the project will be given later in the quarter.

Exams (70% of the grade): You will have a midterm exam (30% of the grade) and a final exam (40% of your grade). You will take these exams individually.

Policy on Missed Exams: If you will need to miss an exam due to a medical reason or university-sanctioned event, you need to communicate with the instructor before the exam.

Special Exam Accommodations. Some of you may have approved exam accommodations through Student Disabilities Services. If you are in this category, you **must** provide me your documentation letter from the appropriate university authority **and** contact Student Disabilities Services to schedule your exam **at least a week before the exam**. Failure to do so may compromise the University’s ability to provide reasonable accommodations.

Grades

Your grades will be assigned based on the scheme below. I reserve the right to adjust the cutoffs.

Letter Grade	Number Grade		
A	93-100	C+	75-79.99
A-	90-92.99	C	70-74.99
B+	87-89.99	C-	65-69.99
B	83-86.99	D	55-64.99
B-	80-82.99	F	0-54.99

Pass/Fail Grading and Withdrawal

Pass/Fail Grading: You have until before the start of your final exam to exercise the options to take the course as Pass/Fail qualitative grade, using the form on the final exam cover sheet or email the instructor in advance. Once your final exam has started, this option expires.

Caution: “Pass” is a non-quality grade, which does not count towards the economics major. You are strongly encouraged to extensively discuss with the instructor and your College Adviser before choosing the Pass/Fail grading option. Before exercising the option for Pass/Fail grading, please speak with your College Adviser, and the Undergraduate Student Affairs Administrator, Julie Wong, to fully understand the ramifications of your choice of Pass/Fail grading.

Course Withdrawal: You may request for Withdrawal with W recorded on your transcript by speaking to your academic advisor and finishing the requests with the Registrar before 5:00pm on the Monday of the 9th Week of the quarter. Per College regulations, you cannot request for Withdrawal by emailing the instructor.

Incomplete Request: Should extenuating circumstance or emergency warrants and in consultation with your College Adviser, you may request for Incomplete to fulfill the requirements at the latter date according to the agreement as noted on the Incomplete form. Per College regulations, to be eligible for Incomplete request, you must have (1) regularly attended the classes, and (2) completed significant (50% or more) portion of the assignments and evaluations items at the passing quality.

Policy on Religious Accommodation: Students must inform their instructors **in writing** of their need to observe a religious holiday reasonably well in advance of the absence, preferably at the beginning of the quarter. See <https://studentmanual.uchicago.edu/university-policies/policy-on-religious-accommodation-for-missed-classes-assignments-and-exams/> for the university policy on religious accommodation.

Technology: The course has a **Canvas** website. We will use Canvas for announcements, assignments, and other course related materials. We will use **Gradescope** for assignment submission. **Stata/R** will be needed for problem sets. We will use **Ed Discussion Board** for your questions. Some office hours will be conducted over **Zoom**. I will communicate urgent messages **through your school email**, so please check it regularly.

AI tools: In this course, we will be developing skills and knowledge that are important to discover and practice on your own. Because of this, you are NOT allowed to use any AI tools, such as ChatGPT or Dall- E 2, for this class.

Academic Integrity and Honesty Statement: As a University of Chicago student, you have agreed to abide by the University's academic honesty policy. All academic work must meet the standards described in Academic Integrity & Student Conduct found at: <https://college.uchicago.edu/advising/academic-integrity-student-conduct>, as well as in the Student Manual of University Policies & Regulations.

You must complete all the work using materials or resources explicitly allowed. Work from others, if used, or others' contribution to the work must be properly cited or referred according to the University standard. You are hereby cautioned that any plagiarism and cheating incidents of any evaluation will be reported to the College. The use of answers of current peers and/or solutions from previous quarters, partially or wholly, to complete the problem sets is considered plagiarism as you have not completed the work by yourself.

Title IX Statement: Faculty members, instructors, and TAs are designated as "Individuals with Title IX Reporting Responsibilities," which are required to report all incidents of sexual misconduct (including sexual harassment), dating violence, domestic violence, and stalking to the Title IX Coordinator for the University. For more information, see <https://harassmentpolicy.uchicago.edu/>.

Statement of Diversity and Inclusion: The University of Chicago is committed to diversity and rigorous inquiry that arises from multiple perspectives. I concur with this commitment and also believe that we have the highest quality interactions and can creatively solve more problems when we recognize and share our diversity. I thus expect to maintain a productive learning environment based on open communication, mutual respect, and non-discrimination. I view the diversity that students bring to this class as a resource, strength, and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, generational status, socioeconomic status, ethnicity, race, religious background, and immigration status. Please correct me on your preferred names or gender pronouns.

Campus Resources: Campus resources available to support you and ensure your successful learning experiences.

- If you have any concerns regarding physical or mental health, please speak with the Student Health Service (773-702-4156 or <https://wellness.uchicago.edu/>) or Student Counseling Service (773-702-9800) right away.
- If you have emergency concerns related to referrals, advice, information, and support, please speak with the 24/7 Dean-on-Call (773-834-HELP) right away.
- If you believe that you need additional classroom resources and accommodations, or exam facilities, please speak with the Student Disability Services (773-702-6000 or <https://disabilities.uchicago.edu/>) so that arrangements can be made in a timely fashion.

- The College Core Tutor Program is available in Harper Memorial Library. The tutors are experienced and select undergraduate students who can also provide guidance outside of classroom. See <http://core-tutors.uchicago.edu/> for more information.
- Should you have any questions regarding curricular planning of economics major, please speak with me during the Drop-In Advising Hours, or the Undergraduate Student Affairs Administrator, Julie Wong at juliew@uchicago.edu.
- Along with members of the Undergraduate team, I offer Drop-In Advising Hours to answer any questions regarding your research interests, career choices, and curricular planning.

Tentative Class Schedule (Subject to Change)

Weeks	Topics	Materials	Assignments
Week 1 (3/19 and 3/21)	Introduction to Economics of Education	Chapter 1, 2, 3.1	
Week 2 (3/26 and 3/28)	Human Capital Model	Chapter 4	
Week 3 (4/2 and 4/4)	Returns to Education (Instrumental Variables)	Chapter 6, 3.2, 3.3	Problem Set 1 due 4/4 5:00pm
Week 4 (4/9 and 4/11)	Returns to Education (Regression Discontinuity)	Chapter 6, 3.3	
Week 5 (4/16 and 4/18)	Signaling Model (Difference-in-Differences)	Chapter 5, 3.3	Problem Set 2 due 4/18 5:00pm
Week 6 (4/23 and 4/25)	Midterm Exam Education Production Function	Chapter 7	Midterm Exam on 4/23
Week 7 (4/30 and 5/2)	Relationship between Educational Inputs and Outcomes	Chapter 9, 3.3	
Week 8 (5/7 and 5/9)	Economics of College Life	Chapter 15	Problem Set 3 due 5/8 5:00pm
Week 9 (5/14 and 5/16)	Presentations		Presentations
Week 10 (5/21 to 5/25)	Finals Week		Final Exam