

THE UNIVERSITY OF TEXAS AT AUSTIN

ELP 390G: ECONOMICS OF EDUCATION PROFESSOR JEFF DENNING

COURSE SYLLABUS: FALL 2026

Time: Tuesday 4:00pm to 7:00 pm

Location: SZB 3.222

Instructor: Prof. Jeff Denning

Email: jeffdenning@utexas.edu

Office Hours: W, 1-4

<https://calendly.com/jeffdenning86/office-hours>

DESCRIPTION

This graduate-level course is an introduction to the economics of education. Each week pairs one core economic idea with one area of education policy and the empirical evidence on it. The ideas are scarcity and tradeoffs, opportunity cost, thinking at the margin, supply and demand, equilibrium, incidence, and competition. The aim is that you leave able to use them on the policy questions you encounter.

We apply these tools to substantive topics in the economics of education, including human capital and the returns to schooling, school finance, the education production function, teacher quality and incentives, peer effects, school choice and accountability, and higher education enrollment, financial aid, and student debt.

The course has two central objectives: to improve how you reason about education policy questions, and to improve how you communicate that reasoning in writing. A third is to extend your knowledge of the empirical evidence on the major education policy debates in the United States.

A note on the empirical readings. Many of the readings use econometric methods, and some of them are hard going. You are not expected to work through the econometrics. You are expected to understand what question a study asks, what comparison it makes, what it finds, and how much weight that finding can bear when you use it to argue for a policy. One full session is devoted to exactly that skill: Week 5, on telling a causal claim from a descriptive one and on what it takes to project an outcome.

OBJECTIVES

- Apply core economic concepts — scarcity and tradeoffs, opportunity cost, marginal analysis, supply and demand, equilibrium, incidence, and competition — to questions in education policy
- Differentiate causal from descriptive evidence, and judge whether a research finding will generalize to a new setting
- Evaluate the empirical evidence on school finance, teacher quality and incentives, peer effects, school choice and accountability, and higher education access and financial aid

COURSE REQUIREMENTS

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| 1. Problem Sets | 25% of grade |
| 2. Paper Presentation/Discussion | 10% of grade |
| 3. Midterm | 30% of grade |
| 4. Summative Exercise | 25% of grade |
| 5. Seminar Participation and Attendance | 10% of grade |

READING ASSIGNMENTS

One required book.

1. **Economics of Education** (2018), by Michael Lovenheim and Sarah Turner (ISBN: 9781464156946). Cited below as **L&T**. For rent or purchase from MacMillan: <https://store.macmillanlearning.com/us/product/Economics-of-Education/p/1319282202> The e-book and paperback can be rented for 6 months. Also available via VitalSource: <https://www.vitalsource.com/referral?term=9781464156946>

All other readings are available via Canvas. These include chapter excerpts from:

- Stevenson, B., & Wolfers, J. (2019). *Principles of Microeconomics*. Worth Publishers.

Scholarly blogs that often cover education, education policy, and economics of education issues:

- Brookings Institution's Brown Center Chalkboard blog: <https://www.brookings.edu/blog/brown-center-chalkboard/>
- The Conversation: <https://theconversation.com/us/education>

Podcasts covering economic, behavioral economic, and policy topics in an approachable format:

- Freakonomics: <http://freakonomics.com/>
- Planet Money: <https://www.npr.org/sections/money/>

Supplemental Reading Guide:

The following questions are intended to guide you in identifying key pieces of information when reading an academic article. Some of the readings for this class are complex or use fairly sophisticated statistical methods and, frankly, can be quite difficult to read. This guide is aimed at helping you focus on important elements of research when reading an article. As you read an article, if you are confused or have a lot of questions, use this guide to direct your reading and bring any questions you have to class. For several sessions I will post more specific study questions on Canvas; when those are posted, read them before you begin the readings, and use them instead of this general guide.

1. What is the issue/problem the paper addresses?
2. What economic theory or concept does the paper address?
3. What are the research questions?
4. Which data source is used to answer the research questions?
5. What comparison does the paper make in order to answer the question? Who or what is being compared to whom or what?
6. Is the paper's central claim causal or descriptive? How do you know?
7. What are the strengths of the data? What are the limitations? What does this mean for the generalizability of the findings?
8. What are the main findings?
9. What do the findings mean for policy and practice? What would you tell a policymaker or school/campus administrator about the findings?
10. Do the findings conform to the economic theory or concept being tested?
11. How does this article relate to the other readings for the week?
12. What questions do you have after reading the article?

SEMINAR PARTICIPATION

Class participation will be comprised of: (1) required attendance; (2) substantive contributions to the class discussion reflecting preparation; (3) discussion leadership; and (4) contributions to in-class workshops and exercises (5) buy in to discussing the topics through the economics framework. You can miss two class periods without consequence, after 2 class periods your participation grade will be produced proportionally.

PROBLEM SETS

There will be problem sets due at the beginning of class. Bring a paper copy to class. We exchange them, mark against a key I hand out, and the marker signs their name. Then we work the hardest problem(s) together on the board. Your grade is for completion and good-faith effort, not for the number you got right — the peer mark is feedback, not a score. I may collect the problem sets myself at some point during the semester and grade them to check for completeness and good faith effort. **Problem sets are due at the start of class and late work cannot be accepted.** This is not strictness for its own sake: the answers become public the moment class begins. If you cannot attend, submit on Canvas before class starts. Your two lowest problem set grades will be dropped.

EXAM

There will be an exam in class. This will be similar to the problem set in terms of question structure. The midterm will be handwritten and will be closed note, closed book, etc. We will discuss the details of the exam in class as it approaches.

DISCUSSION OF READING

Students will create presentations to summarize the reading for the class period. This should take about 40 minutes and should include activities that engage the class. It is okay not to know all the details of the relevant paper but rather provide an overview of what the main points of discussion are. Good uses of time include mapping the reading material to the concepts discussed in class, questions that ask the class to dig deeper in their analysis of the issue. We will discuss whether this will be done in groups or on your own in class. Every class member will submit a question about the readings 24 hours before class that the presenter will address in their presentation

SUMMATIVE EXERCISE

The course's final project, done in groups of two. Your group advises a Texas school district that must absorb a multi-million dollar shortfall. I will distribute the scenario and the district's actual financial data in week 8. You decide what gets cut and what is protected.

The assignment is deliberately a cut rather than a windfall. Allocating new money is pleasant and teaches very little. A shortfall forces a central idea of this course, opportunity cost, to bite: everything you protect is paid for by something you do not.

Required components (about 2,500 words):

1. What you are solving for, and how you know that is the binding problem rather than the most visible one.
2. Three or four candidate cuts or reallocations.
3. Your criteria for choosing among them — including cost per unit of outcome, who bears the consequences, and what is actually feasible.
4. The projected effect of each option, using evidence from the course. Where the evidence does not exist, say so.
5. Your decision — stating explicitly **what you are not protecting, and why.**

6. What you would need to learn to change your mind.

Dates. Groups form and the scenario goes out in week 8. A one-page proposal is due in week 9. Week 13 is a work session with me available for consultation. Presentations are December 1 and the written version is due December 8.

Group members receive the same grade, and every student must write a substantive portion.

SEMINAR EXPECTATIONS

General expectations for the seminar include the following:

1. *Reasonable reading comprehension of multidisciplinary literature.* The problem sets and class discussions are intended to push your thinking on the role of public policy in education. A number of the readings use economic frameworks and econometric methods that are beyond the training of most students who have not studied them. For these readings I expect you to understand the research question, the data used, the comparison being made, the main ideas, and the general conclusion. I do not expect you to spend significant time on the econometric models. The purpose is to understand these readings well enough to bring them into your own work and into policy discussion.
2. *Substantive and respectful class participation.* In addition to completing the readings, it is expected that you will participate in an intellectual and respectful manner with your peers. It is possible to provide critical and challenging feedback respectfully. You also will need to “buy in” to the course by focusing on learning the economics approach to education.
3. *No computer use during class.* Please pay attention to directions in class regarding when computer use is appropriate.
4. *No plagiarism.* If you use someone else's ideas, give them credit. For this course, please use the most recent APA citation style in the project; footnotes or endnotes are acceptable in the memos.
5. *Adherence to deadlines.* There are limited reasons for a late memo or paper, such as a medical or family emergency. Technology reasons are not an excuse. Please plan ahead and allow time for a technology-related breakdown.
6. *AI policy.* Cite all AI technology use. See the UT-Austin guidelines at the end of this syllabus for details. The memos in this course are a key learning outcome: just as you would not ask another person to write your memo for you, do not ask a generative AI system to write it.

ADDITIONAL ACTIVITIES — NOT GRADED BUT HELPFUL FOR THIS COURSE

1. Sign up for education- and economics-related news and research listservs. Some suggestions include: (1) *Chronicle of Higher Education*; (2) *Inside Higher Ed*; (3) National Bureau of Economic Research; and (4) *Education Week* (5) *EdWorkingPapers*, among others.

Use of Canvas in Class

In this class, I use Canvas to communicate and collaborate online, to post grades, and to submit assignments. You can find support in using Canvas at canvas.utexas.edu. Course materials that I produce such as problem sets, lecture notes, etc will appear on my website jeffdenning.com/teaching.

Incomplete & Late Policy

I will not grant incompletes as a matter of course policy; such requests will only be discussed in extremely extenuating circumstances. If you anticipate any difficulty in completing the course assignments prior to the posted deadlines, you should reconsider taking this course. Late assignments will not be accepted.

University of Texas Honor Code

The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual

opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

COURSE SCHEDULE — FALL 2026

Class meets Tuesdays, 4:00–7:00pm. Thirteen meetings. **No class September 15** (instructor away; asynchronous work assigned) and **no class November 24** (Thanksgiving break, November 23–28). First class day of the semester is August 24; last class day is December 7.

Date	Topic	Assignment Due
Week 1 Aug 25	Why do economists study education? Readings: Lovenheim, M., & Turner, S. (2018). Economics of Education, Chapter 1. Brewer, D. J., Hentschke, G. C., Eide, E. R., Hardaway, T., & Le, T. (2014). The role of economics in education policy research. In Handbook of Research in Education Finance and Policy (pp. 21-40). Routledge.	Presentation sign-up; written companion due one week after your assigned presentation
Week 2 Sep 1	Scarcity and Tradeoffs / School Finance Readings: Jackson, C. K., Johnson, R. C., & Persico, C. (2015). Boosting educational attainment and adult earnings. Education Next, 15(4), 69-76. Hanushek, E. A. (2015). Money matters after all? Education Next blog, July 17. Hanushek, E. A. (2016). What matters for student achievement: Updating Coleman on the influence of families and schools. Education Next, 16(2), 18-26. Biasi, B., Lafortune, J., & Schönholzer, D. (2025). What works and for whom? Effectiveness and efficiency of school capital investments across the US. The Quarterly Journal of Economics, 140(3), 2329-2379.	
Week 3 Sep 8	Opportunity Cost / College Enrollment Readings: L&T §13.1-13.2. Goldin, C., Katz, L. F., & Kuziemko, I. (2006). The homecoming of American college women: The reversal of the college gender gap. Journal of Economic Perspectives, 20(4), 133-156. Black, S. E., Denning, J. T., & Rothstein, J. (2023). Winners and losers? The effect of gaining and losing access to selective colleges on education and labor market outcomes. American Economic Journal: Applied Economics, 15(1), 26-67. Barr, A., & Turner, S. E. (2013). Expanding enrollments and contracting state budgets: The effect of the Great Recession on higher education. The ANNALS of the American Academy of Political and Social Science, 650(1), 168-193. Denning, J. T. (2017). College on the cheap: Consequences of community college tuition reductions. American Economic Journal: Economic Policy, 9(2), 155-188.	Problem Set 1 due at the start of class

Week 4 Sep 15	Same-Race Teachers (Asynchronous—Professor Traveling) Readings: Lindsay, C., & Hart, C. (2017). Teacher race and school discipline: Are students suspended less often when they have a teacher of the same race? <i>Education Next</i> , 17(1), 72-78. Lindsay, C., & Blom, E. (2017). Diversifying the classroom: Examining the teacher pipeline. Urban Institute. Gershenson, S., Hart, C., Hyman, J., Lindsay, C., & Papageorge, N. (2022). The long-run impacts of same-race teachers. <i>American Economic Journal: Economic Policy</i> , 14(4), 300-342.	
Week 5 Sep 22	Causality Readings: L&T Chapter 3. Causal Inference: The Remix (https://mixtape.scunning.com/), Ch 1, 6, 7, 9	Problem Set 2 due at the start of class
Week 6 Sep 29	Gains from Trade / Tracking and Instructional Time Fryer (2018), "The 'Pupil' Factory: Specialization and the Production of Human Capital in Schools," <i>AER</i> 108(3), 616–656. Card & Giuliano (2016), "Can Tracking Raise the Test Scores of High-Ability Minority Students?" <i>AER</i> 106(10), 2783–2816. Figlio, Schapiro & Soter (2015), "Are Tenure Track Professors Better Teachers?" <i>Review of Economics and Statistics</i> 97(4), 715–724. Evans (2018), "A school is not a factory: Why teacher specialization in early grades may not work" — World Bank Blogs.	Problem Set 3 due at the start of class
Week 7 Oct 6	Marginal / Class Size Readings: L&T Chapter 7 and §9.3. Schanzenbach, D. W. (2014). Does class size matter? National Education Policy Center. Chetty, R., Friedman, J. N., Hilger, N., Saez, E., Schanzenbach, D. W., & Yagan, D. (2011). How does your kindergarten classroom affect your earnings? Evidence from Project STAR. <i>The Quarterly journal of economics</i> , 126(4), 1593-1660. Cortes, K. E., & Goodman, J. S. (2014). Ability-tracking, instructional time, and better pedagogy: The effect of double-dose algebra on student achievement. <i>American Economic Review</i> , 104(5), 400-405.	Problem Set 4 due at the start of class
Week 8 Oct 13	Supply and Demand / Higher Education Readings: L&T §6.3-6.4. Mountjoy, J. (2024). Marginal returns to public universities. NBER Working Paper 32296. Cellini, S. R. (2009). Crowded colleges and college crowd-out: The impact of public subsidies on the two-year college market. <i>American Economic Journal: Economic Policy</i> , 1(2), 1-30.	Problem Set 5 due at the start of class Summative exercise groups formed; scenario and district data distributed

Week 9 Oct 20	Equilibrium / Peer Effects L&T §15.3. Hoxby, C. M. The power of peers. <i>Education Next</i> , 2(2). Carrell, S. E., Sacerdote, B. I., & West, J. E. (2013). From natural variation to optimal policy? The importance of endogenous peer group formation. <i>Econometrica</i> , 81(3), 855-882. Carrell, S. E., Fullerton, R. L., & West, J. E. (2009). Does your cohort matter? Measuring peer effects in college achievement. <i>Journal of Labor Economics</i> , 27(3), 439-464. Duflo, E., Dupas, P., & Kremer, M. (2009). Can tracking improve learning? Evidence from Kenya. <i>Education Next</i> , 9(3), 64-71.	Problem Set 6 due at the start of class
Week 10 Oct 27	Incidence / Financial Aid L&T Chapter 14. Denning, J. T., Marx, B. M., & Turner, L. J. (2019). ProPelled: The effects of grants on graduation, earnings, and welfare. <i>American Economic Journal: Applied Economics</i> , 11(3), 193-224. Bettinger, E., Gurantz, O., Kawano, L., Sacerdote, B., & Stevens, M. (2019). The long-run impacts of financial aid: Evidence from California's Cal Grant. <i>American Economic Journal: Economic Policy</i> , 11(1), 64-94. Turner, L. J. (2017). The economic incidence of federal student grant aid. University of Maryland, College Park, MD, 1000.	Problem Set 7 due at the start of class
Week 11 Nov 3	Competition / Accountability & Charters Readings: L&T Chapters 10-11. Rockoff, J., & Turner, L. J. (2010). Short-run impacts of accountability on school quality. <i>American Economic Journal: Economic Policy</i> , 2(4), 119-147. Cohodes, S. R., & Parham, K. S. (2021). Charter schools' effectiveness, mechanisms, and competitive influence.	Problem Set 8 due at the start of class
Week 12 Nov 10	Uncertainty / College Enrollment Avery, C. (2021). Advice and caution on investing in a college education: An economist and a financial journalist offer their strategies. <i>Education Next</i> , 21(3), 69-70. Webber, D. A. (2016). Are college costs worth it? How ability, major, and debt affect the returns to schooling. <i>Economics of Education Review</i> , 53, 296-310. Stinebrickner, R., & Stinebrickner, T. R. (2014). A major in science? Initial beliefs and final outcomes for college major and dropout. <i>Review of Economic Studies</i> , 81(1), 426-472.	—
Week 13 Nov 17	Exam	Exam in class

Week 14 Nov 24	NO CLASS — THANKSGIVING BREAK (November 23–28)	
Week 15 Dec 1	Summative Exercise Presentations Conference-style panels, twenty minutes per group, followed by questions.	Summative exercise presentations in class

Submission Instructions

1. **Problem sets** are due on paper at the start of class, because we mark them in class. Late sets cannot be accepted. If you must miss class, submit on Canvas before class begins.
2. **The summative exercise memo go on Canvas** in Microsoft Word format.
3. Word limits are enforced: Summative exercise memo about 2,500 words. Tables, figures, footnotes and references do not count.
4. Allow time for technical problems. Email me directly if Canvas is failing.

University of Texas at Austin – Policies & Resources

Grading Policies

Grading for the semester will be done as follows: First, a total score for the semester will be calculated using the weights from above. Second, a distribution of grades will be determined based on a subjective evaluation by the instructor that determines grade cutoffs for each letter grade. Course grades will be regularly posted on Canvas

Absences

Being present is critical to achieving our goals for this course. You are welcome to utilize two (2) class absences during the semester as needed without explanation to me. In this case, you will be allowed to make up assignments or participation points you may have missed during this session. However, please keep in mind that if you miss multiple classes, you will begin to see a dip in your attendance and participation points.

If you are absent on the day that your team meets, you are responsible for providing your team with the necessary information to compensate for your absence. *It is crucial to keep in communication with your team members; you are responsible for letting both us and your team know if you cannot make it to a class.*

Excused Absence: Absences will be considered excused if they are for religious holidays or extenuating circumstances due to medical or family emergencies. If you plan to miss class due to observance of a religious holiday, please let me know at least two weeks in advance. You will not be penalized for this absence, although you will still be responsible for any work you will miss on that day if applicable.

If you have to be absent, use your resources wisely. Ask your team and other classmates to get a run-down and notes on any lessons you miss. If you find there are topics that we covered while you were gone that raise questions, you can also schedule a meeting with me to discuss. Please email specific questions you have in advance so that we can make the most of our time. “What did I miss?” is not specific enough.

Important Safety Information

If you have concerns about the safety or behavior of fellow students, TAs or Professors, call BCAL (the Behavior Concerns and Advice Line): 512-232-5050. Your call can be anonymous. If something doesn't feel right – it probably isn't. Trust your instincts and share your concerns.

The following recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512-471-5767, <http://www.utexas.edu/safety/>

Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.

- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.
- Link to information regarding emergency evacuation routes and emergency procedures can be found at: www.utexas.edu/emergency

Title IX Reporting

Title IX is a federal law that protects against sex and gender-based discrimination, sexual harassment, sexual assault, unprofessional or inappropriate conduct of a sexual nature, dating/domestic violence and stalking at federally funded educational institutions. UT Austin is committed to fostering a learning and working environment free from discrimination in all its forms. When unprofessional or inappropriate conduct of a sexual nature occurs in our community, the university can:

1. Intervene to prevent harmful behavior from continuing or escalating.
2. Provide support and remedies to students and employees who have experienced harm or have become involved in a Title IX investigation.
3. Investigate and discipline violations of the university's [relevant policies](#).

Beginning January 1, 2020, Texas Senate Bill 212 requires all employees of Texas universities, including faculty, report any information to the Title IX Office regarding sexual harassment, sexual assault, dating violence and stalking that is disclosed to them. Texas law requires that all employees who witness or receive any information of this type (including, but not limited to, writing assignments, class discussions, or one-on-one conversations) must be reported. **I am a Responsible Employee and must report any Title IX related incidents** that are disclosed in writing, discussion, or one-on-one. Before talking with me, or with any faculty or staff member about a Title IX related incident, be sure to ask whether they are a responsible employee. If you

would like to speak with someone who can provide support or remedies without making an official report to the university, please email advocate@austin.utexas.edu. For more information about reporting options and resources, visit <http://www.titleix.utexas.edu/>, contact the Title IX Office via email at titleix@austin.utexas.edu, or call 512-471-0419.

University Policies

Academic Integrity

Each student in the course is expected to abide by the University of Texas Honor Code: “As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity.” **Plagiarism is taken very seriously at UT.** Therefore, if you use words or ideas that are not your own (or that you have used in previous class), you must cite your sources. Otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course. You are responsible for understanding UT’s Academic Honesty and the University Honor Code which can be found at the following web address: <https://deanofstudents.utexas.edu/conduct/standardsconduct.php>

Recording of lectures is prohibited

HOP 2-9970 prohibits students from recording class instruction (audio or video) unless a student obtains the instructor’s permission or Disability & Access has approved audio recording as an accommodation.

AI Statement

Generative AI use shall be permitted on a partial basis for academic work in this course, provided that students 1) use AI responsibly, 2) practice critical discernment and conduct meaningful human review of any output generated by AI, and 3) properly disclose use according to the disclosure policies in this syllabus. You are also welcome to seek prior approval to use of generative AI on any assignment. Using generative AI tools without authorization or failing to disclose generative AI use according to the disclosure policy in this course, even when AI use is permitted, may constitute academic misconduct under UT Austin’s Institutional Rules and may be referred to Student Conduct and Academic Integrity in the Office of the Dean of Students for resolution. *You must not use generative AI to write your first draft of any assignment including (and most importantly) the summative writing assignment.*

Student Disabilities

If you are a student with a disability, or think you may have a disability, and need accommodations, please contact Disability and Access (D&A). Contact and more details are available on D&A’s website: <http://disability.utexas.edu>.

If you are already registered with D&A, please share your accommodation letter with me as early as possible in the semester so we can discuss how your approved accommodations will be implemented in this course.

You can see university policies and resources for students [here](#).