Course Syllabus – Fall 2025

Course	ECON 6336 Section 001, PPPE 7319 Section 001
Course Title	Economics of Education
Professor	Dr. Trey Miller, Associate Professor of Economics
Term	Fall 2025
Meetings	Tuesday / Thursday 2:30 – 3:45 PM CT
Location	Green (GR) 4.204

Professor's Contact Information

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Office Hours	Tuesday / Thursday 1:00 – 2:00 PM CT in GR 3.524

General Course Information

Pre-requisites, Co-requisites, & other restrictions

Students should have a thorough understanding of microeconomics and statistics. This course requires students to read and understand current research on education, much of which utilizes advanced econometric methods.

Course Description

This course covers topics relevant to contemporary research on education, including both theory and empirical analyses. The course will rely primarily on journal articles. Learning will be achieved through careful reading and discussion of research, coupled with student presentations and critical assessment of scholarly work. This course will provide a foundation for students to produce original research on education-related topics.

Learning Outcomes

Upon completing this course, students should:

1. Demonstrate a thorough understanding of the research base on select topics in the field of education.
2. Understand key research methods that are commonly utilized in cutting edge education research.
3. Critically evaluate research on education, provide feedback, and identify gaps in the current literature.

Required Texts & Materials

There is no required textbook for this class. The course will draw upon journal articles, research reports, and other documents, most of which are accessible online through the UTD McDermott Library. Materials that are not available through the UTD Library will be made available via weblinks or PDFs in eLearning.

Academic Calendar

The course begins with an overview of selected research methods that are commonly utilized in education research including randomized controlled trials and lottery-based assignment studies, regression discontinuity designs, differences-in-differences, implementation research, and mixed methods research. This part of the course is primarily lecture-based, but draws upon published research studies that utilize the research methods to promote understanding and foster in-class discussion. Students are expected to read the articles prior to class, and there will be a take-home exam covering the content of this section of the course.

The second part of the course surveys key research on selected topics in education research, primarily focused on empirical studies in leading economics, education and policy journals. Two papers, denoted with a (*) in the academic calendar below, will be assigned each class day. All students should read these two papers in advance of class and be prepared to engage in a class discussion. To enhance discussion, one student will be assigned as a presenter and discussion leader for each paper. The presenter will prepare a short 20 minute presentation that succinctly and accurately describes the context for the research and the research questions addressed, the methods employed including the identifying assumptions if the study makes causal claims, the data used, the key findings of the study, the challenges and limitations of the study, and any relevant implications for policy and / or future research. Presenters will be asked to moderate a 10 minute class discussion following the presentation and post their comments to facilitate group virtual discussion using the discussion post content area in eLearning. Note that for some class meetings, I have also assigned one or more optional readings that students are encouraged to read in advance of class. These readings primarily serve to provide additional context on key topics.

A key focus of the class is the development and presentation of a formal proposal for research on an education-related topic that is important to policymakers and / or practitioners and draws upon data housed at the UTD Education Research Center. Students will form two groups of 5-6 students, each focused on a specific education research topic that can inform education policy and / or practice. Groups will meet with a student mentor to discuss potential topics and agree upon one for the group. Each group will prepare a formal ERC proposal that documents the research need, formal research questions, and benefits of the research for education in Texas. The proposal should document the ERC data necessary to conduct the research, and describe the research methods in a manner that can be understood by an audience of policymakers and practitioners.

Each team should also prepare a 10-minute presentation that highlights the significance and potential impact of their proposed research topic, summarizes what we know from the current research base and what your study will add, and then lays out the proposed data and methods. After presenting, each group will facilitate a 25 minute class discussion about their topic.

DATE	TOPIC	READINGS
1 **8/26**	Course Introduction And Expectations	No readings
2 **8/28**	Methods Overview: Intro to Randomized Controlled Trials (RCTs)	Miller, T., Daugherty, L., Martorell, P, and Russell Gerber (2022). "Assessing the Effect of Corequisite English Instruction Using a Randomized Controlled Trial." *Journal of Research on Educational Effectiveness*. Pre-print. Mosteller F. (1995). "The Tennessee Study of Class Size in the Early School Grades." *The Future of Children*. 5(2).
3 **9/2**	Methods Overview: Lottery Based Assignment Studies	Steele, J., Slater, R., Zamarro, G., Miller, T., Li, J., Burkhauser, S., and Michael Bacon (2017). "Effects of Dual-Language Immersion Programs on Student Achievement: Evidence From Lottery Data." *American Educational Research Journal*. 54(1 - Centennial Edition). Edmunds, J., Unlu, F., Furey, J., Glennie, E., and Nina Arshavsky (2020). "What Happens When You Combine High School and College? The Impact of the Early College Model on Postsecondary Performance and Completion." *Educational Evaluation and Policy Analysis*. 42(2).
4 **9/4**	Methods Overview: Implementation Analysis in Randomized Studies	Daugherty, L., Gomez, C., Gehlhaus, D., Mendoza-Graf, A., and Trey Miller (2018). *Designing and Implementing Corequisite Models of Developmental Education.* RAND Report RR-2337-IES. Li, J., Steele, J., Slater, R., Bacon, M., and Trey Miller (2016). "Teaching Practices and Language Use in Two-Way Dual Language Immersion Programs in a Large Public School District." *International Multilingual Research Journal*. 10(1).
5 **9/9**	Methods Overview: Regression Discontinuity (RD) Designs	Martorell, F., and Isaac McFarlin (2011). "Help or Hindrance? The Effects of College Remediation on Academic and Labor Market Outcomes." *Review of Economics and Statistics*. 93(2). Daugherty, L., Gerber, R., Martorell, F., Miller, T., and Emily Weisburst (2021). "Heterogeneity in the Effects of College Course Placement." *Research in Higher Education.* 62(7).

DATE	TOPIC	READINGS
6 **9/11**	Methods Overview: Regression Discontinuity (RD) Designs (Cont.)	Angrist, J. and Victor Lavy (1999). "Using Maimonides' Rule to Estimate the Effect of Class Size on Scholastic Achievement." *Quarterly Journal of Economics.* 114(2). Bloom, H., Bell, A., and Kayla Reiman (2020). "Using Data from Randomized Trials to Assess the Likely Generalizability of Educational Treatment Effect Estimates from Regression Discontinuity Designs." *Journal of Research on Educational Effectiveness*. 13(3).
7 **9/16**	Methods Overview: Differences-in-Differences (DID)/ Comparative Interrupted Time Series (CITS)	Cunha, J., Miller, T., and Emily Weisburst (2018). "Information and College Decisions: Evidence from the Texas GO Center Project." *Educational Evaluation and Policy Analysis*. 40(1). Roth, J., Sant'Anna, P., Bilinski, A., and John Poe (2023). "What's trending in difference-in-differences? A synthesis of the recent econometrics literature." Econometrica. 235 (2023): 2218-2244.
8 **9/18**	Methods Overview: Mixed Methods Research	Miller, T., Kosiewicz, H., Wang, E., Marwah, E., Delhommer, S., and Lindsay Daugherty (2017). *Dual Credit Education in Texas: Interim Report.* RAND Report RR-2043-CFAT. Miller, T., Kosiewicz, H., Tanenbaum, C., Atchison, D., Knight, D., Ratway, B., Delhommer, S., and Jesse Levin (2018). *Dual Credit Education Programs in Texas: Phase II Report*. AIR Report. Available at https://reportcenter.highered.texas.gov/reports/data/dual-credit-education-programs-in-texas-phase-ii1/
9 **9/23**	Education Production Function and Effects of Educational Inputs	*Hanushek, Eric (1971). "Teacher Characteristics and Gains in Student Achievement: Estimation Using Micro Data." *American Economic Review*. 61(2). Hanushek, E. (1986). "The Economics of Schooling: Production and Efficiency in Public Schools." *Journal of Economic Literature*. 24(3). Hanushek, Eric (1981). "Throwing Money at Schools." *Journal of Policy Analysis and Management*. 1(1). *Card, D. and Alan Krueger (1992). "Does School Quality Matter? Returns to Education and the Characteristics of Public Schools in the United States." *Journal of Political Economy*. 100(1).

DATE	TOPIC	READINGS
10 **9/25**	Exam	No Readings
11 **9/30**	Education Production Function and Effects of Educational Inputs (cont.)	*Card, D. and Abigail Payne (2002). "School Finance Reform, the Distribution of School Spending, and the Distribution of Student Test Scores." *Journal of Public Economics.* 83(1). *Jackson, K., Wigger, C., and Heyu Xiong (2021). "Do School Spending Cuts Matter? Evidence from the Great Recession." *American Economic Journal: Economic Policy*. 13(2).
12 **10/2**	Education Production Function and Effects of Educational Inputs (cont.)	*Jackson, K., Johnson, R., and Claudia Perisco (2016). "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms*." Quarterly Journal of Economics*. 131(1). *Martorell, P., Stange, K., and Isaac McFarlin (2016). "Investing in Schools: Capital Spending, Facility Conditions, and Student Achievement." *Journal of Public Economics*. 140(1).
13 **10/7**	Education Production Function and Value-Added Modeling	*Rivkin, S., Hanushek, E., and John Kane (2005). "Teachers, Schools and Academic Achievement." *Econometrica.* 73(2). *Hanushek, E. (2011). "The Economic Value of Higher Teacher Quality." *Economics of Education Review*. 30(3).
14 **10/9**	Education Production Function and Value-Added Modeling (cont.)	*Chetty, R., Friedman, J., and Johah Rockoff (2014). "Measuring the Impacts of Teachers II: Teacher Value-Added and Student Outcomes in Adulthood." American Economic Review. 104(9). Gordon, R., Kane, T., and Douglas Staiger (2006). *Identifying Effective Teachers Using Performance on the Job.* Brookings Institution Discussion Paper 2006-01. Available online at https://www.brookings.edu/wp-content/uploads/2016/06/200604hamilton_1.pdf *Fryer, R. (2013). "Teacher Incentives and Student Achievement: Evidence from New York City Public Schools." *Journal of Labor Economics*. 31(2).

DATE	TOPIC	READINGS
15 **10/14**	Education Production Function and Value-Added Modeling (cont.)	*Kane, T., McCaffery, D., Miller, T., and Douglas Staiger (2013). *Have We Identified Effective Teachers? Validating Measures of Effective Teaching Using Random Assignment.* Bill and Melinda Gates Foundation, Measures of Effective Teaching Report. Available online at https://files.eric.ed.gov/fulltext/ED540959.pdf *Bitler, M., Corcoran, S., Domina, T., and Emily Penner (2021). "Teacher Effects on Student Achievement and Height: A Cautionary Tale." *Journal of Research on Educational Effectiveness*. 14(4). Los Angeles Times (2010). "Los Angeles Times Teacher Ratings." Available online at https://projects.latimes.com/value-added/index.html
16 **10/16**	TSP Student Papers Student authors will present	*Vargas, D., Antoine, D., and Trey Miller (2025) "Closing the Gaps: An Examination of Early Impacts of Dallas ISD's Opt-out Policy on Advanced Course Enrollment." EdWorkingPaper No 25-1184. Available online at https://edworkingpapers.com/ai25-1184 *Luo, S., Fu, N., Miller, T., and Taylor Odle (2025). "Student and Faculty Same-Race Matching at Research Universities.
17 **10/21**	School Choice – Effects of Magnet and Charter Schools	*Baude, P., Casey, M., Hanushek, E., Phelan, G., and Steven Rivkin (2019). "The Evolution of Charter School Quality." *Economica*. 87(345). *Hoxby, C., Murarka, S., and Jenny Kang (2009). *How New York City's Charter Schools Affect Achievement, August 2009 Report.* Cambridge, MA: New York City Charter Schools Evaluation Project, September 2009. Available online at: http://users.nber.org/~schools/charterschoolseval/how_NYC_charter_schools_affect_achievement_sept2009.pdf
18 **10/23**	Effects of Educational Programs, Policies and Strategies English Language Learners	*Chin, A., Daysal, N., and Scott Imberman (2013). "Impact of Bilingual Education Programs on Limited English Proficient Students and their Peers: Regression Discontinuity Evidence from Texas." *Journal of Public Economics*. 109(November 2013). *Shin, N. (2018). "The Effects of the Initial English Language Learner Classification on Students' Later Academic Outcomes." *Educational Evaluation and Policy Analysis*. 40(2).

DATE	TOPIC	READINGS
19 **10/28**	Effects of Educational Programs, Policies and Strategies Promise Scholarships	*Bartik, T., Hershbein, B., and Marta Lachowska (2021). "The Effects of the Kalamazoo Promise Scholarship on College Enrollment and Completion." *Journal of Human Resources*. 56(1). *Page, L., Iriti, J., Lowry, J., and Aaron Anthony (2019). "The Promise of Place-Based Investment in Postsecondary Access and Success: Investigating the Impact of the Pittsburgh Promise." *Education Finance and Policy*. 14(4).
20 **10/30**	Effects of Educational Programs, Policies and Strategies (cont.) Special Education	*Schwartz, A., Hopkins, B., and Leanna Stiefel (2021). "The Effects of Special Education on the Academic Performance of Students with Learning Disabilities." *Journal of Policy Analysis and Management*. 40(2). *Ballis, B. and Katelyn Heath (2021). "The Long-Run Impacts of Special Education." *American Economic Journal: Economic Policy*. 13(4).
21 **11/4**	Test-Based Accountability	*Davidson, E., Reback, R., Rockoff, J., and Heather Schwartz (2015). "Fifty Ways to Leave a Child Behind: Idiosyncrasies and Discrepancies in States' Implementation of NCLB." *Educational Researcher*. 44(6). *Hanushek, E. and Macke Raymond (2005). "Does School Accountability Lead to Improved Student Performance?" *Journal of Policy Analysis and Management*. 24(2).
22 **11/6**	Test-Based Accountability (cont.)	*Rockoff, J. and Lesley Turner (2010). "Short-Run Impacts of Accountability on School Quality." *American Economic Journal: Economic Policy*. 2(4). *Deming, D., Cohodes, S., Jennings, J., and Christopher Jencks (2016). "School Accountability, Postsecondary Attainment and Earnings." *Review of Economics and Statistics*. 98(5).

DATE	TOPIC	READINGS
23 **11/11**	Postsecondary Success Strategies Aid and Wraparound Supports	*Evans, W., Kearney, M., Perry, B., and James Sullivan (2020). "Increasing Community College Completion Rates Among Low Income Students: Evidence from a Randomized Controlled Trial Evaluation of a Case-Management Intervention." *Journal of Policy Analysis and Management*. 39(4). *Daugherty, L., Johnston, W., and Tiffany Berglund (2020). *Connecting College Students to Alternative Sources of Support: The Single Stop Community College Initiative and Postsecondary Outcomes.* RAND Research Report RR-1740-1. Available online at https://www.rand.org/pubs/research_reports/RR1740-1.html
24 **11/13**	TSP Student Papers Student authors will present	*Luo, S. (2025) "Peer Effects of International Students in US Higher Education." EdWorkingPaper 25-1207. Available online at https://edworkingpapers.com/ai25-1207 *Khalid, A. (2025). "Impact of Four-Day School Week on Teacher Turnover."
25 **11/18**	Postsecondary Success Strategies (cont.) Nudging	*Castleman, B. and Lindsay Page (2015). "Summer Nudging: Can Personalized Messages and Peer Mentor Outreach Increase College Going Among Low-Income High School Graduates?" *Journal of Economic Behavior and Organization*. 115(July 2015). *Bettinger, E., Castleman, B., Choe, A., and Zachary Mabel (2021). "Finishing the Last Lap: Experimental Evidence on Strategies to Increase College Completion for Students at Risk of Late Withdrawal." Annenberg Brown EdWorkingPaper No. 21-488. Available online at https://behavioralscientist.org/why-arent-text-message-interventions-designed-to-boost-college-success-working-at-scale/ Goldrick-Rab, S., Clark, K., Baker-Smith, C. and Collin Witherspoon (2021). Supporting the Whole Community College Student: The Impact of Nudging for Basic Needs Security. HOPE Center Working Paper, available online at https://hope4college.com/wp-content/uploads/2021/10/ARC_ImpactPaper.pdf Castleman, B (2021). "Why Aren't Text Message Interventions Designed to Boost College Success Working at Scale?" *Behavioral Scientist*. Available online at https://behavioralscientist.org/why-arent-text-message-interventions-designed-to-boost-college-success-working-at-scale/

DATE	TOPIC	READINGS
26 **11/20**	Postsecondary Success Strategies (cont.) Comprehensive Strategies	*Weiss, M., Ratledge, A., Sommo, C., and Himani Gupta (2019). "Supporting Community College Students from Start to Degree Completion: Long-Term Evidence from a Randomized Trial of CUNY's ASAP." *American Economic Journal: Applied Economics*. 11(3). *Bettinger, E., and Rachel Baker (2014). "The Effects of Student Coaching: An Evaluation of a Randomized Experiment in Student Advising." *Educational Evaluation and Policy Analysis*. 36(1). Feygin, A., Miller, T., Poole, J., Hatcher, M., Choi, L., Shimmel, L., Bettinger, E., and Madison Dell (2022). *Information and Advising for College Success: An Evidence and Practice Gaps Analysis.* Forthcoming – Will post link when available.
11/24 – 11/28: Fall Break / Thanksgiving Holiday / No Class!		
27 **12/2**	Career and Technical Education	*Dougherty, S. (2018). "The Effect of Career and Technical Education on Human Capital Accumulation: Causal Evidence from Massachusetts." *Education Finance and Policy*. 13(2). *Brunner, E., Dougherty, S., and Stephen Ross (2021). "The Effects of Career and Technical Education: Evidence from the Connecticut Technical High School System." Review of Economics and Statistics. 2021. Shaun Dougherty, Vanderbilt University, Presentation. "Introduction to Career and Technical Education: Policies and Theories." Available online at: https://www.youtube.com/watch?v=iYTav4sNIPE Rosen, R., Visher, M., and Katie Beal (2018). Career and Technical Education: Current Policy, Prominent Programs, and Evidence. MDRC Report, available online at: https://files.eric.ed.gov/fulltext/ED590008.pdf

DATE	TOPIC	READINGS
28 **12/4**	Career and Technical Education (cont.)	*Kemple, J. (2008). *Career Academies: Long-Term Impacts on Labor Market Outcomes, Educational Attainment, and Transitions to Adulthood.* MDRC Report, available online at: https://www.mdrc.org/sites/default/files/full_50.pdf *Rosen, R., Byndloss, C., Parise, L., Alterman, E., and Michelle Dixon (2023). *P-TECH 9-14 Pathways to Success Implementation, Impact, and Cost Findings from the New York City P-TECH 9-14 Schools Evaluation.* MDRC Report, available online at: https://www.mdrc.org/work/publications/p-tech-9-14-pathways-success
29 **12/9**	Education Research Proposals	Group Student Presentations. ERC Proposals Due before class.

Course Assignments

Midterm Exam

A take-home midterm exam will assess knowledge and understanding of the material on select research methods utilized in education research that will be covered during the first part of the course. The take-home exam will be designed to take approximately 1.5 hours to complete, but students will have a 16-hour window in which to complete it. Students may draw on their notes, the papers discussed in class, and any other publicly available material to help answer the questions on the exam, but students should not consult one another or other individuals for help in answering questions on the exam.

Presentation and Guided Discussion

Each student will prepare a formal presentation on 3 of the papers denoted with a (*) on the reading list. Presentations should be approximately 20 minutes and focus on describing the context for the research and the research questions addressed, the methods employed including the identifying assumptions if the study makes causal claims, the data used, the key findings of the study, the challenges and limitations of the study, and any relevant implications for policy and / or future research. Presenters will be asked to moderate a 10 minute class discussion following the presentation and post their comments to facilitate group virtual discussion using the discussion post content area in eLearning. Please refer to eLearning for detailed guidelines, due dates, and useful resources.

ERC Proposal

Students will form two groups of 5-6 students, each focused on a specific education research topic that would leverage ERC data to inform education policy and / or practice. Each group will be assigned a current TSP PhD student to serve as a mentor. Group members will meet with the assigned mentor to discuss potential topics and agree upon one for the group by 10/17. Each group will work with their mentor to develop a formal ERC proposal that highlights the importance of the research, outlines the specific research questions and ERC data required to address them, and clearly articulates the benefits of the research for education in Texas. The proposal should describe the research methods in a way that is accessible to policymakers and practitioners.

Group Presentation and Guided Discussion on ERC Proposal

On the last class day, each group will prepare a 10 minute presentation that highlights the significance and potential impact of their proposed research topic, summarizes what we know from the current research base and what your study will add, describes the research methods and data requires, and highlights the benefits to education in Texas. The format for the presentation is meant to mimic the presentations that researchers must give before the ERC Advisory Board to gain approval for their project. After presenting, each group will facilitate a 25 minute class discussion about their topic and proposed methods.

Course Policies

Class Materials	The instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.
Class Attendance	The University's attendance policy requirement is that individual faculty set their course attendance requirements. Regular and punctual class attendance is expected. Students who fail to attend class regularly are inviting scholastic difficulty. In some courses, instructors may have special attendance requirements; these should be made known to students during the first week of classes. Faculty have the discretion to set an attendance policy for their in-person meetings, but the absences due to COVID-19 cannot be counted against a quarantined student.
Class Participation	Regular class participation is expected. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.
Class Recordings	Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct. ***NOTE: if the instructor records any part of the course, then the instructor will need to add the following syllabus statement:***

	The instructor may record meetings of this course. These recordings will be made available to all students registered for this class if the intent is to supplement the classroom experience. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law.
Grading (credit) Criteria	**Take-Home Midterm**: 30% **Paper Presentations:** 30% (10% each presentation) **ERC Proposal**: 30% **Group Presentation and Guided Discussion**: 10% **A: 100-90 B: 89-80 C: 79-70 D: 69-60 F: 59 or below**. Pluses and Minuses will be distributed at the instructor's discretion.
Make-up Exams	There will be no make-up exams unless there are documented circumstances that prevent a student from taking the exam within the 24-hour window.
Late Work	Students are expected to present and facilitate discussion on their assigned papers during the scheduled class day as indicated in the Academic Calendar. Students will not receive credit for missed presentations unless there is a documented circumstance that prevented class attendance during that day. Students with documented reasons for missing class will be permitted to record a presentation and post it on e-Learning and then facilitate an in-class discussion on the paper at a later class day.
Classroom Citizenship	Students are expected to regularly attend class, read all assigned papers and actively engage in class discussion.
Comet Creed	*This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:* *"As a Comet, I pledge honesty, integrity, and service in all that I do."*
Academic Support Resources	*The information contained in the following link lists the University's academic support resources for all students.* *Please go to http://go.utdallas.edu/academic-support-resources.*
UT Dallas Syllabus Policies and Procedures	*The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please review the sections regarding the credit/no credit grading option and withdrawal from class.* *Please go to http://go.utdallas.edu/syllabus-policies for these policies.*

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.