# ECON 7063 Topics in Education Economics

#### NATIONAL TSING HUA UNIVERSITY

Spring 2024

Instructor: Eric S. Lin

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Time and Location: Friday 9-noon, CTM-832

Office Hours: By appointment

Course Webpage: Course materials will be available on the web through iLMS.

Teaching Assistant: Not Offered

Teaching Assistant Hours: Not Offered

### Course Description:

This is a topic course in economics of education. We will discuss central issues regarding this field such as estimating the returns to education, human capital and signaling theories of education, education and economic growth, education and economic equality, peer effects, entrance channels and students academic performance,..., etc. We will primarily focus on empirical applications while sometimes theoretical work will be referred to. The introduction of suitable empirical strategies (i.e., a variety of econometric techniques) along with the search for identification will be much emphasized throughout this course.

The utimate goal of this course is to motivate PhD or master students conducting a quality research on economics of education. Thereby, students will be required to initiate a new project related to the course, survey the literature, collect data, summarize basic statistics, estimate the specified model, test certain hypothesis, conduct sensitivity analysis, discuss empirical findings, propose policy suggestions (if any), present the process regularly in class, and lastly end up with writing a formal article (ready for submission if possible).

## Prerequisites:

ECON 5033 (ECON 7033 recommended) or equivalent graduate level econometrics

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# Required Reading:

 Angrist, J. and A. Krueger. Empirical strategies in labor economics. In O. Ashenfelter and D. Card, editors, Handbook of Labor Economics, volume 3, pages 1277–1366. Elsevier Science, 1999.

- ♦ Akerlof, G. and R. Kranton. Identity and Schooling: Some Lessons for the Economics of Education. Journal of Economic Literature, 40(4):1167–1201, 2002.
- Duflo. E. Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment. The American Economic Review, 91(4):795–813, 2001.
- ♦ Hsieh, Hsiao-Chin, Samuel S.M. Peng, S-Y Kou, Y-F Yan, Y-T Lin, Eric S. Lin, and Su-Yen Chen. One Campus, Diverse Experience: A Study on NTHU Students' Learning Experiences," Tsinghua Journal of Education, 35(3), 55–66, 2014. (in Chinese)
- Krueger, A. B. Inequality, too much of a good thing. Paper to the Princeton University
  Industrial Relations Section. Princeton, NJ: Princeton University Press, April 2002.
- ♦ Krueger, A. B. Economic Considerations and Class Size. Economic Journal, 2003.
- ♦ Levin, H. Mapping the Economics of Education. An Introductory Essay. Educational Researcher, 18(4):13–73, 1989.
- ♦ Lin, Ching-Hui, Jyun-Hong Chen, Eric S. Lin, and C. Owen Lo. "The Effects of College Student Experience on Degree Aspirations for Graduate Education," SAGE Open, July-September 2022: 1−13, 2022.
- ♦ Lin, Eric S. and Yu-Lung Lu. The Causal Effect of the Cram Schooling Timing Decision on Math Scores. Economics Bulletin, 30(3), 2330−2345, 2010.
- Lin, Eric S. Gender Wage Gaps by College Major in Taiwan: Empirical Evidence from 1978-2003 Manpower Utilization Survey. Economics of Education Review, 29(1), 156-164, 2010.
- Lin, Eric S. and Shih-Yung Chiu. Can a Doctoral Degree Be Completed Faster Overseas Than Domestically? Evidence from Taiwanese Doctorates. Higher Education, 68(2), 263–283, 2014.
- Lin, Eric S. and Yu-Lung Lu. The Educational Achievement of Pupils with Immigrant and Native Mothers: Evidence from Taiwan. Asia Pacific Journal of Education, 36(1), 48–72, 2016.

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 Lin, Eric S. and Shih-Yung Chiu. Does Holding a Postdoctoral Position Bring Benefits for Advancing to Academia? Research in Higher Education (Official journal of AIR), 57(3), 335-362, 2016.

- ♦ Lin, Ming-Chia, Hsiang Yu, and Eric S. Lin. Validating University Graduate Attribute Scale," Higher Education Evaluation and Development, 8(1), 59–84, 2014.
- Lu, Yu-Lung, Stephen Chou and Eric S. Lin. Gender Differences in the Impact of Weight Status on Academic Performance: Evidence from Adolescents in Taiwan. Children and Youth Services Review, 46, 300–314, 2014.
- ♦ Sacerdote, B. Peer Effects with Random Assignment: Results for Dartmouth Roommates. Quarterly Journal of Economics, 681–704, 2001.
- Shang, Li-Dan, Francisco Rowe and Eric S. Lin. "Estimating the causal impact of non-traditional household structures on children's educational performance using a machine learning propensity score," Asia Pacific Education Review, forthcoming, 2023.
- Tseng, Ya-Wen, Francisco Rowe and Eric S. Lin. "An Elon Musk generalist or a specialist? The impacts of interdisciplinary learning on post-graduation outcomes," Studies in Higher Education, forthcoming, 2023.
- Yun, Myeong-Su and Eric S. Lin. Alternative Estimators for the Gender Wage Gap by Industry: A Normalized Equation Approach. Pacific Economic Review, 20(4), 283-293, 2015.

#### References:

We will offer more references as the course progresses.

**Software:** You are welcome to use any econometric packages such as *GAUSS*, *STATA*, *Eviews*, or *Limdep*.

**Grading:** The final grade depends on regular (weekly or bi-weekly) in-class presentations, participation and quality of the final paper.

Presentation 40% Participation 10% Final Paper 50%.