

COURSE OUTLINE

Course Coordinator	Prof Nattavudh Powdthavee (Nick)
Course Code	HE3034
Course Title	Economics of Education
Pre-requisites	HE1001 Microeconomics I or HE2003 Econometrics I or HE2005 Principles of Econometrics or HE2004 Introductory Econometrics with at least a B+
No of AUs	3
Contact Hours	39 hours (2 hours lecture + 1 hour seminar)

Course Aims

This course combines economic theory and empirical findings to examine different aspects of the economics of education. Topics include (but not limited to): The basic theory of investment and signalling in education; the empirical problem of disentangling the private return to education from the return to innate ability; evidence on the non-pecuniary return to education; externalities; the role of early childhood education; the problems associated with giving incentives to teachers and students to boost performance; the role of income and inequality of access to education; the roles of school inputs such as class size and peers on educational attainment; the effects of teachers; the role of non-economic factors in education such as grit and aspirations. Through this course, students will gain a basic understanding of different issues in the economics of education literature and how to analyse educational policy outcomes, which will be relevant for policy making in the real world.

Intended Learning Outcomes (ILO)

By the end of this course, you should be able to:

1. Understand basic theories behind the educational production function and the economic perspective on education
2. Read and understand articles on the research frontier of economics of education and child development
3. Understand econometric identification issues in the economics of education literature
4. Understand and analyse educational policy outcomes

Course Content

Topics include (but not limited to)

- The basic theory of investments in education
- Signalling theory
- Identification of private and public returns to education
- Early childhood intervention and skill formation
- The pros and cons of giving incentives to teachers and students to boost performance
- The roles of school inputs such as class size and peer effects
- The effects of teachers and family
- The importance of soft skills such as personality traits and grit
- The roles of institutions and educational policies

Assessment (includes both continuous and summative assessment)

Component	Weighting
Continuous Assessment:	40%
Final examination:	60%
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Total:	100%

Reading and References

The reading-materials listed here are the limitations readings only and should only be used for guidelines. I will include many more materials from other sources in the lecture notes.

- Harmon, C., Oosterbeek, H., & Walker, I. (2003). The returns to education: Microeconomics. *Journal of Economic Surveys*, 17(2), 115-156.
- Cunha, F., & Heckman, J. (2007). The technology of skill formation. *American Economic Review*, 97(2), 31-47.
- Heckman, J. J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science*, 312(5782), 1900-1902.
- Card, D., & Krueger, A. B. (1992). Does school quality matter? Returns to education and the characteristics of public schools in the United States. *Journal of political Economy*, 100(1), 1-40.
- Card, D., & Krueger, A. B. (1992). Does school quality matter? Returns to education and the characteristics of public schools in the United States. *Journal of political Economy*, 100(1), 1-40.
- Card, D. (2001). Estimating the return to schooling: Progress on some persistent econometric problems. *Econometrica*, 69(5), 1127-1160.
- Oreopoulos, P., & Salvanes, K. G. (2011). Priceless: The nonpecuniary benefits of schooling. *Journal of Economic perspectives*, 25(1), 159-84.
- Angrist, J. D., & Lavy, V. (1999). Using Maimonides' rule to estimate the effect of class size on scholastic achievement. *The Quarterly journal of economics*, 114(2), 533-575.
- Hoxby, C. M. (2000). Does competition among public schools benefit students and taxpayers?. *American Economic Review*, 90(5), 1209-1238.
- Kremer, M., Miguel, E., & Thornton, R. (2009). Incentives to learn. *Review of Economics and Statistics*, 91(3), 437-456.
- Jacob, B. A., & Levitt, S. D. (2003). Rotten apples: An investigation of the prevalence and predictors of teacher cheating. *The Quarterly Journal of Economics*, 118(3), 843-877.
- Chowdry, H., Crawford, C., Dearden, L., Goodman, A., & Vignoles, A. (2013). Widening participation in higher education: analysis using linked administrative data. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 176(2), 431-457.
- Vignoles, A. F., & Powdthavee, N. (2009). The socioeconomic gap in university dropouts. *The BE journal of economic analysis & policy*, 9(1).

Instructor	Office Location	Email
Nattavudh Powdthavee (Nick)	SHHK-04-72	nick.powdthavee@ntu.edu.sg

Planned Weekly Schedule

Week	Topic	ILO	Readings/ Activities
1	Introduction to the economics of education	1, 2	Lecture notes
2	Estimating the economic return to education (I)	1, 2, 3, 4	Lecture notes
3	Estimating the economic return to education (II)	1, 2, 3, 4	Lecture notes
4	Are there any non-pecuniary returns to education?	1, 2, 3, 4	Lecture notes
5	Technology of skill formation and the role of early interventions (I)	1, 2, 3, 4	Lecture notes
6	Technology of skill formation and the role of early interventions (II)	1, 2, 3, 4	Lecture notes
7	Education policy: The importance of school inputs (I)	1, 2, 3, 4	Lecture notes
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8	Education policy: The importance of school inputs (II)	1, 2, 3, 4	Lecture notes
9	Education policy: vouchers and school choice (III)	1, 2, 3, 4	Lecture notes
10	The roles of incentives in boosting educational attainment	1, 2, 3, 4	Lecture notes
11	The importance of growth mindset, grit, and aspirations on educational performance	1, 2, 3, 4	Lecture notes
12	Higher education	1, 2, 3, 4	Lecture notes
13	Revision	1, 2, 3, 4	