

**Course Outline**

**EE473 ECONOMICS OF EDUCATION**

**Semester 2/2023**

**Class Time and Logistic**

**Class day:** Wednesday

**Class time:** 13:00 – 16.00 hours

**Venue:** Room 201, 2nd Floor, Faculty of Economics

**Teaching Materials Platform:** BE moodle and GroupLINE



**Instructor:**

**Name:** Assoc Prof. Dr. Kaewkwan Tangtipongkul

**Office Hours:** Wednesday 10-11:30 A.M. and By appointment Faculty of Economics 458

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**Course Description**

Prerequisite: *EE311*

Principles of investment in education. Measuring return on education. Theory of human capital. Choice theory explaining educational investment. Principles of investment in on-the-job training. Analyzing educational impact on key economic variables such as wages throughout the entire working period, growth in wage rate, job switching, and expansion of the economy as a whole. Evaluating efficiency and equality in governmental budget allocation within the educational system.

### **Class Objectives:**

The goal of this course is to introduce you to economic analysis of education. It covers concepts such as theory of human capital, investment in education, measuring return on education, principles of investment in school and on-the-job training, education production function, education as signaling. We will also learn about efficiency and equality in governmental budget allocation within the educational system.

The topics include teacher labor market, education and economic growth, development and inequality, education finance, problems of education in Thailand and other countries, accountability in education, effectiveness of investment in different levels of education (early childhood, basic education, higher education), the linkage between university and industry, education and innovation, Education ranking game (PISA, TIMSS, University Ranking etc), topic in technology and education (MOOC, Online Education).

### **Evaluation**

2 Individual/Team Article /Journal presentations (15-20 mins)	10 %
Guest lecture's short report, class participations and attendance (Attend the whole session and participate in guest lecture discussion 10 %, attend and give feedback in research proposal 2.5% and attend and give feedback in the final research proposal 2.5%)	15 %
Research Paper and presentations (Proposal and Final) (Research paper 10%, proposal presentation 5%, and final presentation 5%)	20 %
Midterm Exam	25 %
Final Exam	30 %
<b>Total</b>	<b>100%</b>

**Note:** The mid-term and final exams are closed books and closed notes.

Midterm and final exam dates are not changed due to the official schedule from BE program. Only physical condition with approval medical document is allowed for postponing the exam.

- 1. For all presentation, the presenter should provide a copy of PowerPoint handout (PDF file by email is acceptable) for instructor.**
- 2. Submission of all works should be done both in electronic (via email)**
- 3. We will emphasize resource conservation over artistic looks. There is no need for a printed cover page, plastic cover, or blank page(s) on any of the work. The instructor would prefer, however, that students add their names and IDs on the top right corner of the first page (for easy identification and grading).**

### **Materials**

Brewer, Dominic and Patrick J. McEwan (2010). *Economics of Education*. New York: Elsevier  
This is an excellence volume which has gathered articles from authors who are considered to be experts on their subjects. Each chapter is concise and provides the key theories and findings on a topic. The book will serve as the main text in this course.

Borjas, G.J. (2016). *Labor Economics*. New York: McGraw Hill. Belfield, C.R. (2000). *Economic Principles for Education: Theory and*

*Evidence*. Edward Elgar Publishing, Inc.

Carnoy, M., Luschei, T., and Miller, L. (2005) *The Economics of Education*

(Module 1 – Module 5)

Several readings will be posted on BE Moodle website.

The readings will cover extensive materials from academic journals, book chapters and news articles. Students are expected to read articles before coming to class for a meaningful and enjoyable classroom experience. I will put the available materials in my website <https://sites.google.com/site/pumsaran> under 'Teaching' section (or in BE-Moodle) or send them by email.

### **Academic Honesty**

You are expected to be honest in all your academic work. Copying is plagiarism and will be treated as an honor code violation. Potential sanctions include failure in the course and suspension from the university.

### **Conduct and Manner**

Ethics is all above everything, far more valuable than merely subject knowledge. Accordingly, plagiarism and cheating, including any possible plagiarism and cheating, will be subject to penalties as stated in the University Regulations. More importantly, to achieve overall objectives of learning, it is strongly advised that all students of EE473 classes behave in proper manner with socially acceptable and right conduct.

Below is advised code of conduct to be performed in EE473 class. Achieving and maintaining the code of conduct throughout the course will surely be awarded.

1. No mobile phones used. This includes silent mode, message sending, LINE, and all social network communication that would interfere teaching and learning.
2. Be punctual. Yet it is understood that students may have continuing classes that cause delay. It is acceptable if it is a few minutes late. But unnecessary delay should be avoided. Even if students are on time, they are advised not to leave the room without unnecessary purposes.
3. Behave. Other socially acceptable manner should be practiced here. For example, this is a classroom whereby food and drink is not allowed. This is the university whereby students wear proper dress.

### **Expected Learning Outcomes:**

#### **1. Morality and Ethics**

Applicability	Learning Goals
●	1.1 Students demonstrate integrity.
○	1.2 Students prioritize social and public benefits over personal ones.
●	1.3 Students are punctual and comply with the code of conduct of the institution and society at large.
○	1.4 Students are responsible and accountable to society, the nation, and the subject of economics.
○	1.5 Students realize the cultural and environmental value of the sustainable society.

#### **2. Knowledge**

Applicability	Learning Goals
●	2.1 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.2 Students know and understand Thai and global economic structure, and the importance of major international economic events.
●	2.3 Students know and understand instruments of economic analysis.
●	2.4 Students know and understand applied fields in economics, including monetary, public, international, business, natural resource and environmental, industrial, agricultural, cooperative, political, developmental, and entrepreneurial economics as well as agribusiness.
●	2.5 Students are informed about related fields including sociology, business administration, education, law policy, and science.

### 3. Intellectual Development

Applicability	Learning Goals
●	3.1 Students have developed individual critical thinking.
●	3.2 Students are sufficiently trained in research skills.
●	3.3 Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate economics concepts to understand causes of current economic problems in Thailand. Based on analysis and synthesis, students demonstrate an ability to propose policy guidelines to resolve problems.

### 4. Interpersonal Skills and Responsibilities

Applicability	Learning Goals
●	4.1 Students are responsible for assigned tasks and work in groups effectively.
●	4.2 Students have problem-solving skills.
●	4.3 Students show leadership skills and team spirit.
●	4.4 Students are always improving themselves.
●	4.5 Students have good interpersonal skills, adapting and working under different conditions.

### 5. Quantitative Analysis, Communication and Information Technology

Applicability	Learning Goals
●	5.1 Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.
●	5.2 Students communicate effectively and select appropriate presentation methods.
●	5.3 Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.

## Teaching Plans

Week	Date	Topic
1	Jan 10th, 2024	Introduction and Overview: <ul style="list-style-type: none"> <li>Theoretical Concepts in the Economics of Education</li> <li>Empirical Research Methods in the Economics of Education</li> <li>Data in the Economics of Education</li> </ul>
2	Jan 17th, 2024	Education in the Labor Markets The Private and Social Returns to Human Capital Investments: <ul style="list-style-type: none"> <li>Human Capital</li> <li>Signaling in the Labor Market</li> <li>Returns to Education in Developed and Developing Countries</li> <li>Education and Economic Growth</li> <li>Education and Inequality</li> </ul> +Article /Journal student presentations
3	Jan 24th, 2024	
4	Jan 31st, 2024)	
5	Feb 7th, 2024	Education Production Functions <ul style="list-style-type: none"> <li>Education Production Functions</li> <li>Neighborhoods and Peers in the Production of Schooling</li> </ul> +Article /Journal student presentations
6	Feb 14th, 2024	
7	Feb 21st, 2024	Research proposal presentation +Paper advisory
<b>Midterm Exam: 28 February 2024</b>		
8	March 6th, 2024	Education Production Functions & Financing Education <ul style="list-style-type: none"> <li>Education Production Functions</li> <li>Neighborhoods and Peers in the Production of Schooling</li> <li>Teacher Quality in Education Production</li> <li>The Economics of Class Size</li> <li>Cost Benefit Analysis and Cost Effective Analysis</li> </ul> +Article /Journal student presentations
9	March 13th, 2024	
10	March 20 th, 2024	
11	March 27 th, 2024	Special Guest Lecture session Economics of Education in Practice: Exploring How Theory and Empirical Evidence Help Policymakers Make Informed Decisions
12	April 3rd, 2024	Education Production Functions & Financing Education <ul style="list-style-type: none"> <li>Cost Benefit Analysis and Cost Effective Analysis</li> <li>School Finance</li> <li>School Finance Reform</li> </ul> +Article /Journal student presentations
13	April 10th, 2024	
14	April 24th, 2024	Teachers and Teacher Labor Markets: <ul style="list-style-type: none"> <li>Teacher Labor Markets</li> <li>Teachers in Developing Countries</li> <li>Teacher Supply</li> </ul> Education Markets, Choice, and Incentives: <ul style="list-style-type: none"> <li>The Efficacy of Educational Vouchers</li> <li>The Economics of School Accountability</li> </ul> +Article /Journal student presentations
15	May 1st, 2024	Final research paper presentation Class wrap-up
<b>Final Exam: 21st May 2024</b>		

## Other details

### OVERVIEW

#### **Week 1 Introduction to Economics of Education (January 10th, 2024)**

Reading Lists:

- Brewer, Dominic and Patrick J. McEwan (2010) page 3-15
- Carnoy, M., Luschei, T., and Miller, L. (2005) (Module 1)
- Carnoy, Martin. Policy Research in Education: The Economic View. Stanford University, 2007 (mimeo) (E).
- Levin, Henry M. Mapping the Economics of Education: An Introductory Essay, Educational Researcher, May, 1989.

### **THE PRIVATE AND SOCIAL RETURNS TO HUMAN CAPITAL INVESTMENTS**

#### **Week 2 -4 (Jan 17th, 2024, January 24th and 31st, 2024)**

#### **Human Capital & Signaling in the labor market**

Reading Lists:

- Brewer, Dominic and Patrick J. McEwan (2010) page 27-36
- Borjas, G.J. (2013). Chapter 6.
- Carnoy, M., Luschei, T., and Miller, L. (2005) (Module 2)
- Schultz, T.W. 1961. Investment in Human Capital. The American Economic Review, 51.
- Becker, Gary S. 1993. Human Capital: a theoretical and empirical analysis, with special reference to education. The University of Chicago Press.
- Murphy, K. & Welch, F. 1989. Wage Premiums for College Graduates: Recent Growth and Possible Explanations. Educational Researcher. May, 17-26.
- Murnane, R.J., Tyler, J.H., & Willet, J.B. 2000. Estimating the Impact of the GED on the Earnings of Young Dropouts Using a Series of Natural Experiments. Quarterly Journal of Economics. 115(2), 431-468.
- M.Spence 1974. Market Signaling, Introduction and Chapters 1-2. Cambridge: Harvard University Press

### **Returns to Education in Developed and Developing Countries**

#### **Education and Economic Growth, Role of government on education and research investment, Problems of Education in Thailand, and some selected countries.**

Reading Lists:

- Brewer, Dominic and Patrick J. McEwan (2010) page 37-60 & 99-108
- Goldin, C. 2001. The Human Capital Century and American Leadership: Virtues of the Past. Journal of Economic History.
- Hanushek, E.A. & Woessmann, L. 2007. The role of School Improvement on Economic Development. NBER Working Paper.
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- Psacharopoulos, G. 1994. Returns to Investment in Education: A Global Update. World Development. 22(9), 1325-1343.
- Tangtipongkul, K. 2015. Rates of Return to Schooling in Thailand. Asian Development Review. 32(2), 38-64.

- Ahuja, A., Chucherd, T. and Pootrakool, K. *Human Capital Policy: Building a Competitive Workforce for 21st Century Thailand* Monetary Policy Group, Bank of Thailand

### **Week 5 -7 (February 7th, 14th, and 21 th 2024)**

#### **THE PRODUCTION COSTS AND FINANCING OF EDUCATION**

##### **Education Production Functions**

Reading Lists:

- Brewer, Dominic and Patrick J. McEwan (2010) page 127-196
- Carnoy, M., Luschei, T., and Miller, L. (2005) (Module 3) Education Production Function, Factors influencing the quality of education
- Glewwe, P. and Kremer, M. 2005. Schools, Teachers, and Education Outcomes in Developing Countries. Harvard University working paper.
- Hanushek, E. 1998. Conclusions and Controversies about the Effectiveness of School Resources. *Economic Policy Review*, March, 11- 27.
- Banerjee, A., Cole, S., Duflo, E., & Linden, L. 2005. Remedying Education: Evidence from Two Randomized Experiments in India. MIT working paper.
- Malamum, O. & Wozniak, A. 2012. The impact of College on Migration Evidence from the Vietnam Generation. *Journal of Human Resources*, 47(4), 913-950.
- Akerlof, G. & Kranton R. 2002. Identity and schooling: Some lessons for the economics of education. *Journal of Economic Literature*. 40(4), 1167- 1200.
- Hoxby, C. & Weingarh, G. 2006. Taking Race Out of the Equation: School Reassignment and the Structure of Peer Effects.
- Krueger, A. 2003. Economic Considerations and Class Size. *The Economic Journal*. 113(485), 34-63.

### **Week 8, 9 and 10 (March 6th 13th and 20 th, 2024)**

Research Proposal Presentation (March 13th, 2024)

#### **Education Production Functions & Financing Education**

##### **Factors such as Peer Effect, Class size on education achievement**

##### **Neighborhoods and Peers in the Production of Schooling Teacher Quality in Education Production The Economics of Class Size**

Reading Lists:

- Brewer, Dominic and Patrick J. McEwan (2010) page 127-196
- Carnoy, M., Luschei, T., and Miller, L. (2005) (Module 3)
- Glewwe, P. and Kremer, M. 2005. Schools, Teachers, and Education Outcomes in Developing Countries. Harvard University working paper.
- Hanushek, E. 1998. Conclusions and Controversies about the Effectiveness of School Resources. *Economic Policy Review*, March, 11- 27.
- Banerjee, A., Cole, S., Duflo, E., & Linden, L. 2005. Remedying Education: Evidence from Two Randomized Experiments in India. MIT working paper.
- Malamum, O. & Wozniak, A. 2012. The impact of College on Migration Evidence from the Vietnam Generation. *Journal of Human Resources*, 47(4), 913-950.
- Akerlof, G. & Kranton R. 2002. Identity and schooling: Some lessons for the economics of education. *Journal of Economic Literature*. 40(4), 1167- 1200.
- Hoxby, C. & Weingarh, G. 2006. Taking Race Out of the Equation: School Reassignment and the Structure of Peer Effects.

- Krueger, A. 2003. Economic Considerations and Class Size. *The Economic Journal*. 113(485), 34-63.

**Role of government on education provision, resource allocation in education, school choice, demand side financing, privatization in education**

- Friedman, Milton (1962), "The Role of Government in Education," in *Capitalism and Freedom* pp.85-107
- Poterba, James (1996). "Government Intervention in the Markets for Education and Health Care," in *Individual and Social Responsibility* Victor Fuchs, editor (Cambridge, MA: National Bureau of Economic Research), pp. 277-307

**Week 11 Special Guest Lecture session (March 27th, 2024)**

**Economics of Education in Practice: Exploring How Theory and Empirical Evidence Help Policymakers Make Informed Decisions**

**Week 12&13 (April 3rd and 10th, 2024) Education Production Functions & Financing Education Cost Benefit Analysis and Cost Effective Analysis**

**School Finance**

**School Finance Reform**

Reading Lists:

- Brewer, Dominic and Patrick J. McEwan (2010) page 197-201
- Carnoy, M., Luschei, T., and Miller, L. (2005) (Module 5)
- Friedman, M. 1962. The Role of Government in Education in Capitalism and Freedom. 85-107.
- Poterba, J. 1996. Government Intervention in the Markets for Education and Health Care in Individual and Social Responsibility Victor Fuchs, editor (Cambridge, MA: National Bureau of Economic Research), 277- 307.
- Tangkitvanich, S. & Manasboonpheapool, A. 2010. Evaluating the Student Loan Fund of Thailand. *Economics of Education Review*. 29(5), 710-721.
- Armstrong & Chapman, B. Financing Higher Education and Economic Development in East Asia. Australian National University.
- Chapman, B. et al. 2009. Thailand's Student Loan Fund: An Analysis of Interest Rate Subsidies and Repayment Hardships. CEFR Discussion Paper 592, Centre for Economic Policy Research, Research School of Economics, Australian National University.

**Week 14 TEACHERS AND TEACHER LABOR MARKETS (April 24th, 2024)**

**Teacher Labor Markets**

**Teachers in Developing Countries**

**Teacher Supply**

**Teacher incentives**

Reading Lists:

- Brewer, Dominic and Patrick J. McEwan (2010) page 235-276
- Carnoy, M., Luschei, T., and Miller, L. (2005) (Module 4)
- Murnane, R. & Steele J. 2006. What is the Problem? The Challenge of Providing Effective Teachers for All Children. Harvard University working paper.
- Duflo, E. 2005. Monitoring Works: Getting Teachers to Come to School. MIT working paper.
- Dubner, S. & Levitt, S. 2005. What do School teachers and Sumo Wrestlers have in Common. *Freakonomics*, 19-51.

**EDUCATION MARKETS, CHOICE AND INCENTIVES**

**The Efficacy of Educational Vouchers**

**The Economics of School Accountability Class presentation**

Reading Lists:

- Brewer, Dominic and Patrick J. McEwan (2010) page 343 - 355

**Week 15 Final research paper presentation (May 1st, 2024)**

## ACADEMIC CALENDAR

### Semester 2/2023

**(January 8-May 4, 2024)**

<b>Semester 2/2023 (January 8 – May 4, 2023)</b>	
Registration (Create Plan from Quota via TU Greats App) (*ID.62-66)	December 18 – 21, 2023.
Tuition Fee Payment Period (Via TU Greats App)	December 18 2023 - January 5, 2024.
Classes Begin	January 8, 2024
Add-drop period	January 8 – 21, 2024 <i>(from 9.00 AM of January 8 to 10.30 PM of January 21).</i>
Tuition Fee Payment Period (Via TU Greats App)	January 8 – 22, 2024 <i>(9 AM - 10.30 PM)</i>
Mid-term Examination Period	25, 27 - 29 February - 4 March, 2024
<i>Substitution for Makha Bucha Day *</i>	<i>February 26, 2024</i>
Withdrawal period with "W" on record	January 24 – March 17, 2024 <i>(from 9.00 AM of January 24 to 10.30 PM of March 17).</i>
Special Withdrawal with "w" on record	March 18 – April 22, 2024
<i>Substitution for Chakri Memorial Day*</i>	<i>April 8, 2024</i>
<i>Songkran Festival Day*</i>	<i>April 11 – 17, 2024</i>
Last day of class for Semester 2/2023	May 4, 2024
<i>Substitution for Coronation Day*</i>	<i>May 6, 2024</i>
Final exam period	May 7 - 21, 2024
Submitting Forms for Degree Conferral	January 8 – 21, 2024

**Remark\* Holiday, No classes during this period**