UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Research in Human Capital: Education, Training, and Skills Development

2627-111R010

Title

Research in Human Capital: Education, Training, and Skills Development

Teacher(s)

Simona Lorena Comi

Language

English

Short description

This course introduces the economics of education, emphasizing microeconomic theories related to investment in and returns from education and training. It explores the application of econometric methods to study key educational issues, with a focus on causal inference to uncover the effects of individual choices in human capital investment.

Students will engage with rigorous economic arguments and empirical evidence to evaluate various human capital

policies, with special attention to investments in tertiary education (e.g., college choice and further education) and training from both individual and firm perspectives.

The course delves into contemporary theories on skill formation over the life cycle, including intergenerational transmission, the role of multiple skills, and the technology of skill formation. It also examines the gender dimensions of educational investment, fostering a comprehensive understanding of the subject.

Reading list

**Lecture 1: Becker vs. Spence - Competing Theories of Human Capital

Focus:

Becker's Human Capital Theory: Education as an investment in skills and productivity.
Spence's Signaling Theory: Education as a signal to employers about an individual's innate ability.
Critique and synthesis of the two models in modern labor economics.

Key Readings:

Becker, G. S. (1964). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. University of Chicago Press. (Chapters 1-3)
Spence, M. (1973). "Job Market Signaling." The Quarterly Journal of Economics, 87(3), 355–374.
Weiss, A. (1995). "Human Capital vs. Signaling Explanations of Wages." Journal of Economic Perspectives, 9(4), 133–154.

Lecture 2: Intergenerational Mobility - Becker and Tomes & Heckman's Skill Formation Model

Focus:

Becker and Tomes Model: Intergenerational transmission of human capital and earnings.
Heckman's Skill Formation Model: Dynamic interplay between early childhood investments and later life outcomes.
Recent empirical findings on intergenerational mobility and their implications for policy.
Policy implications for reducing inequality through education.

Key Readings:

Becker, G. S., & Tomes, N. (1979). "An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility." Journal of Political Economy, 87(6), 1153–1189.
Heckman, J. J. (2006). "Skill Formation and the Economics of Investing in Disadvantaged Children." Science, 312(5782), 1900–1902.
Black, S. E., & Devereux, P. J. (2011). "Recent Developments in Intergenerational Mobility." In Card, D., & Ashenfelter, O. (Eds.), Handbook of Labor Economics (Vol. 4B, pp. 1487–1541). Elsevier. DOI: 10.1016/S0169-7218(11)02414-2

Lecture 3: Training - Becker, Acemoglu, and Pischke

Focus:

Becker's distinction between general and specific training.
Acemoglu and Pischke's critique: The role of imperfect labor markets in training investment.
The implications for firms and workers in policy and practice.

Key Readings:

Becker, G. S. (1962). "Investment in Human Capital: A Theoretical Analysis." Journal of Political Economy, 70(5, Part 2), 9–49.
Acemoglu, D., & Pischke, J. S. (1999). "Beyond Becker: Training in Imperfect Labor Markets." The Economic Journal, 109(453), F112–F142.
Leuven, E., & Oosterbeek, H. (2008). "An Overview of the Economics of Education." Handbook of the Economics of Education, 1, 1–39.

Lecture 4: College Choice Determinants and Wage Outcomes

Focus:

Factors influencing college choice: socioeconomic status, family background, financial constraints, and informational barriers.

The relationship between college selectivity, field of study, and future earnings.
Empirical challenges in establishing causality between college choice and wage outcomes.
Key Readings:
Hoxby, C. M., & Avery, C. (2013). "The Missing ‘One-Offs’: The Hidden Supply of High-Achieving, Low-Income Students." Brookings Papers on Economic Activity, 2013(1), 1–65.
Dale, S. B., & Krueger, A. B. (2002). "Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables." The Quarterly Journal of Economics, 117(4), 1491–1527.
Deming, D. J., & Dynarski, S. M. (2010). "College Aid." In Hanushek, E. A., Machin, S., & Woessmann, L. (Eds.), Handbook of the Economics of Education (Vol. 3, pp. 283–342). Elsevier.
Zimmerman, S. D. (2014). "The Returns to College Admission for Academically Marginal Students." Journal of Labor Economics, 32(4), 711–754.

CFU / Hours

1 CFU / 8 ore

Teaching period

II semester I year

Sustainable Development Goals

NO POVERTY | QUALITY EDUCATION | GENDER EQUALITY | DECENT WORK AND ECONOMIC GROWTH | REDUCED INEQUALITIES