

## ECONOMICS OF EDUCATION ECONOMICS 3040

---

Sarah Turner  
Fall, 2017  
244 Monroe Hall  
sturner@virginia.edu

### ***Introduction:***

The economics of education is about understanding how and why people make decisions to invest in education, the effect of education on long-term social and economic outcomes, the behavior of those institutions that “produce” education, and how best to design and implement public policies affecting the level and distribution of education resources. The basic tools of economics provide a framework to evaluate education policies including K-12 school finance, student financial aid, and college admissions. The course begins by considering individual decisions to invest in schooling and then turns to the examination of the collegiate and K-12 markets. Throughout the course, there is an emphasis on examining empirical tests of the economic theory and measuring the effects of policy initiatives on educational outcomes.

### ***Requirements, Assignments, and Grading:***

*Problem Sets:* There will be no more than six problem sets over the course of the semester. No late assignments will be accepted. Students are encouraged to work together in solving problems, but the final analysis should be independent. Problem sets will be marked for completeness.

*Participation Exercises:* There will be approximately 8 short exercises at the beginning of class and discussion section. There is no ‘makeup’ option.

*Exams:* There will be two midterms and a final. Each in-class exam will focus primarily on the material covered in the most recent part of the course, but may also draw on earlier topics. The format of exams will include multiple choice, computation, and essay questions.

The TA for the course (Mr. Phipps) will hold weekly discussion sessions to expand on lecture material and review problem sets. These sessions are required, not optional.

*Grades will be computed as follows:*

Problem sets	10 %
Participation exercises	10 %
Midterms	40 %
Final	40 %

Students are encouraged to come to office hours with questions about readings, course assignments, and research related to the economics of education.

*Honor System:*

It is my assumption and expectation that students in this class will be truthful in their dealings with me and will not plagiarize homework or writing assignments or otherwise cheat on exams. In the unlikely event that you observe a violation of the University's honor code, I assume you will contact an Honor Advisor.

Discussion and collaboration on problem sets is encouraged in this class. However, the final analysis is expected to reflect independent thinking and replication of another student's answers is unacceptable.

It should go without saying that participation in social media and text messaging are inappropriate behaviors in class.

*Readings:*

There are two types of readings for this course. The first is a new textbook on the economics of education, creatively titled *Economics of Education* (co-authored with Michael Lovenheim from Cornell). Feedback on this textbook is welcome. Access options include an ebook and rental.

The textbook will be used in conjunction with original research papers and short policy articles. Some of the research articles assigned for this course contain technical material that is beyond the scope of this course, and students will not be expected to master techniques beyond those discussed in lecture. Students should do the reading with the aim of understanding the research question, the test employed, and the resulting policy implications.

I reserve the right to substitute, add, and delete articles through the course of the term. Please note that if you are concerned by the volume of readings, this course is *not* for you. All readings are available on the course Collab website, unless a web link is provided below.

## **Economics 3040: Outline and Readings**

### **I. Introduction – Why Study the Economics of Education?**

#### Introduction to Education Economics

*Economics of Education* (EoE) Textbook Chapter 1 & Chapter 2

#### Education and Economic Growth

Autor, D. (2014) “Skills, Education, and the Rise of Earnings Inequality Among the ‘Other 99 Percent’.” *Science*, 23 May, 344(6186), 843–851.

Goldin, C. and L. Katz (2008) “The Human Capital Century” *The Race Between Education and Technology*. Harvard University Press: Cambridge, MA. pp. 11-53

Hanushek, E.; D. Jamison, E. Jamison and L. Woessmann. (2008) “Education and Economic Growth.” *Education Next*. Volume 8, No. 2 (Spring).

### **II. Investing in Education**

#### The Human Capital Model

EoE Textbook Chapter 4

Becker, G. (1993) “Human Capital Revisited” (Ryerson Lecture) Chapter II, *Human Capital*. Chicago: University of Chicago Press (3<sup>rd</sup> Edition).

#### The Signaling Model

EoE Textbook Chapter 5

Page, M. (2010). “Signaling in the Labor Market,” in Dominic Brewer and Patrick. McEwan, eds., *Economics of Education*, pp. 33-36.

#### Econometric Methods Overview

EoE Textbook Chapter 3

Angrist, J. (2004) “American Education Research Changes Tack,” *Oxford Review of Economic Policy*, Summer.

#### Empirical Estimates of the Return to Education

EoE Textbook Chapter 6

Angrist, J. and A. Krueger (1991) “Does Compulsory School Attendance Affect Schooling and Earnings?” *The Quarterly Journal of Economics*, 106(4), pp. 979-1014. [skim 985-986]

Hoekstra, M. (2009) “The Effect of Attending the State Flagship University on Earnings: A Discontinuity-Based Approach.” *Review of Economics and Statistics* 91(4): 717-724 [Selected pages].

Clark, D. and F. Martorell (2014). “The Signaling Value of a High School Diploma.” *Journal of Political Economy* 122(2): 282-318 [Selected pages].

Lochner, L. and E. Moretti. (2004). “The Effect Of Education On Crime: Evidence From Prison Inmates, Arrests, And Self-Reports,” *American Economic Review* 94(1), pp. 155-189 [Selected pages].

### **III. Primary and Secondary Education: Behavior, Market Structure, and Policy Questions**

#### Educational Production Functions: Does Money Matter?

EoE Textbook Chapter 7

Jackson, K.; R. Johnson and C. Persico. (2015) “Boosting Educational Attainment & Adult Earnings: Does School Spending Matter After All?” *Education Next*, Fall Vol. 15, No. 4.

#### School Finance

EoE Textbook Chapter 8

Hoxby, C. (1996) “Are Efficiency and Equity in School Finance Substitutes or Complements?” *Journal of Economic Perspectives*, 10(4), pp. 51-72

#### Do Measured Inputs Matter?: Class Size

EoE Textbook Chapter 9

Krueger, A. and D. Whitmore (2001) “The Effect of Attending a Small Class in the Early Grades on College-Test Taking and Middle School Test Results: Evidence from Project STAR.” *The Economic Journal* 111(January): 1-28. [skip Section 2 and Section 5]

Schanzenbach, D. (2010) “\$320,000 Kindergarten Teachers.” *Phi Delta Kappan* 92(3): 322-25.

Chetty, R., J. Friedman and J. Rockoff (2012) “Great Teaching: Measuring its Effect on Students’ Future Earnings.” *Education Next* 12(3): <http://educationnext.org/great-teaching/#>.

#### Market-Based Interventions: Charter Schools, School Choice and Incentive Pay

EoE Textbook Chapters 10

Chabrier, J.; S. Cohodes, and P. Oreopoulos. (2016) “What Can We Learn from Charter School Lotteries?” *Journal of Economic Perspectives*, 30(3): 57-84.

#### Accountability

EoE Textbook Chapter 11

Dee, T. & B. Jacob (2011) “The impact of No Child Left Behind on Student Achievement.” *Journal of Policy Analysis and Management*. Vol. 30(3), pages 418-446, Summer

Jacob, Brian, and Jesse Rothstein. (2016) “The Measurement of Student Ability in Modern Assessment Systems.” *Journal of Economic Perspectives*, 30(3): 85-108.

Kane, T. and D. Staiger. (2002) “The Promise and Pitfalls of Using Imprecise School Accountability Measures.” *Journal of Economic Perspectives* 16 (4), Fall.

Kane, T., D. Staiger, and J. Geppert. (2002) “Randomly Accountable,” *Education Next* 2 (1), pp. 56-61.

### Teacher Labor Markets and Compensating Teachers

EoE Textbook Chapter 12

Raymond, M. and S. Fletcher. (2002) “Teach for America.” *Education Next* 2(1), pp. 62-68.

Kane, T.; J. Rockoff and D. Staiger. (2007) “Photo Finish: Certification Does Not Guarantee a Winner” *Education Next* 7 (1), pp. 60-67.

Dee, T. & J. Wyckoff (2015) “Incentives, Selection, and Teacher Performance: Evidence from IMPACT.” *Journal of Policy Analysis and Management*, Vol. 34(2), pages 267-297.

## **III. Higher Education: Economics and Public Policy**

### Market Dimensions of Higher Education

EoE Textbook Chapter 13

Goldin, C. and L. Katz. (1999) “The Shaping of Higher Education: The Formative Years in the United States, 1890-1940.” *Journal of Economic Perspectives* 13 (Winter), pp. 37-62.

Courant, P., M. McPherson, and A. Resch. (2006) “The Public Role in Higher Education” *National Tax Journal* 59 (June), pp. 291-318.

Hoxby, C. (2009) “The Changing Selectivity of American Colleges” *Journal of Economic Perspectives*, 23(4): 95-118.

Deming, D.; C. Goldin and L. Katz. (2012) “The For-Profit Postsecondary School Sector: Nimble Critters or Agile Predators?” *Journal of Economic Perspectives*, 26(1), pp. 139-64.

### Student Aid Policy & Collegiate Outcomes

EoE Textbook Chapter 14

Dynarski, S. and J. Scott-Clayton (2006) “The Cost of Complexity in Federal Student Aid.” *National Tax Journal* 59, pp. 319-56.

Bettinger, E., B. Long, P. Oreopoulos and L. Sanbonmatsu (2012) “The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment.” *Quarterly Journal of Economics* 127(3): 1205-1242.

### *Student Aid Policy: Federal Grants*

Dynarski, S. (2003) “Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion.” *American Economic Review* 93(1): 279-288.

Seftor, N. and S. Turner. (2002) “Back to School: Federal Student Aid Policy and Adult College Enrollment.” *Journal of Human Resources* 37(2): 336-352.

### *Student Aid Policy: State Merit Aid*

Cohodes, S. and J. Goodman. (2014) “Merit Aid, College Quality and College Completion: Massachusetts’ Adams Scholarship as an In-kind Subsidy.” *American Economic Journal: Applied Economics*, 6(4): 251-85 [Designated pages].

Scott-Clayton, J. (2011) “On Money and Motivation: A Quasi-Experimental Analysis of Financial Incentives for College Achievement.” *Journal of Human Resources* 46(3): 614-646 [Designated pages].

### *Student Loans*

Avery, C. and S. Turner. (2012) “Student Loans: Do College Students Borrow Too Much--Or Not Enough?” *Journal of Economic Perspectives*, 26(1): 165-92.

Looney, A. and C. Yannelis. (2015) “A crisis in student loans? How changes in the characteristics of borrowers and in the institutions they attended contributed to rising loan defaults.” *Brookings Papers on Economic Activity*.

### College Choice, College Admission and College Life

#### EoE Textbook Chapter 15

Avery, C. and C. Hoxby (2013) “The Missing ‘One-Offs’: The Hidden Supply of High-Achieving, Low-Income Students” *Brookings Papers on Economic Activity* (Spring).

Hoxby, Caroline M., and Sarah Turner. (2015) “What High-Achieving Low-Income Students Know about College.” *American Economic Review*, 105(5): 514-17.

Pallais, A. (2014) “Small Differences that Matter: Mistakes in Applying to College” *Journal of Labor Economics*.

Kane, T. (1998) “Racial and Ethnic Preferences in College Admissions” in *The Black-White Test Score Gap*, Jencks and Phillips, (eds.) Washington, D.C.: Brookings Institution, pp. 480-500.