Economics 3980

## **Economics of Education**

## Instructor

Matthew Larsen, Department of Economics E-Mail: mlarsen1@tulane.edu Office Location: 303 Richardson Hall Office Hours: Wednesday & Thursday 10:00am-11:00am or By Appointment Office Phone: 504-314-7358

## Class

Lecture Times: Monday, Wednesday, Friday: 2:00-2:50pm Lecture Location: Tilton Memorial Hall 301

## **Course Objective**

ECON-3980 studies the role of economics in evaluating education and education policy. This course will study topics like Human Capital Theory, Education Production, Peer Effects, Externalities, Public vs Private schools and several others. This course will familiarize you with both the theory behind these topics and the empirical evidence and methods used by economists.

## **Program Objective**

1. Apply standard economic theories to understand how individuals make education choices.

2. Apply standard economic theories to explain and predict education markets and their inefficiencies.

3. Understand the role of economic theory and thinking in evaluating education policies.

## Learning Outcomes

Students should be able to:

1. Define and understand the differences between the human capital model and the signaling model.

- 2. Understand methods used by economists to evaluate education policies.
- 3. Understand and Model the Education Production Function.
- 4. Define the return to education and understand its empirical estimates.
- 5. Understand and evaluate the debate regarding school accountability.
- 6. Define and understand externalities and peer effects in education.

7. Understand the various degrees of school choice and their effects.

8. Contribute to debates regarding many education policies using economic theory and evidence.

## Organization of the Class

*Prerequisite:* The prerequisite for this course is ECON 1010.

- *Textbook:* There are currently no good textbooks for Economics of Education (though one is in the works). Because of this there will be no required textbook for this course. There will, however, be assigned articles to be read links to these articles will be available on this course's *Blackboard* website as well as below.
- Web Page: All information for this class including homework assignments and class notes can be accessed through mytulane.blackboard.com
  - *Grading:* Your grade will be determined as a combination of your participation, exam scores, and your homework scores. The breakdown is as follows:

| Participation | 5~%  |
|---------------|------|
| Homeworks     | 15~% |
| Exam 1        | 20~% |
| Exam 2        | 20~% |
| Final Exam    | 40~% |

- Participation: Your participation grade will be based on a combination of attending class, participating in class discussions, and posting on the blackboard "discussion board." For posting on blackboard, each student should post at least 3 times during the course. These posts should be comments or questions about the reading *before* the class in which that paper will be discussed. If you post these 3 times and regularly attend class and are involved, you will receive full marks for this portion of your grade.
- Problem Sets: There will be 5 problem sets due during the class, your lowest scoring homework grade will be dropped. These will be due *in class* on the day designated. Answer keys will be provided so *no late problem sets will be accepted*. If you are unable to attend class that day, you either need to make arrangements to turn it in early or have a classmate hand it in for you.

You may collaborate with others on the concepts in the problem sets, however, each student must individually write up their own answers. In addition, you must write the names of all the people you worked with on top of your assignment. Problem sets that are simply duplicates of each other will receive a score of 0.

The assignments will be due the following days:

Jan  $31^{st}$ , Feb  $12^{th}$ , March  $21^{st}$ , April  $2^{nd}$ , April  $25^{th}$ 

Each assignment will be posted at least 1 week before it is due.

*Exams:* There will be 2 midterms and a final exam for this course. The dates are:

Midterm 1: Monday Feb<br/>  $17^{th}$ , during class Midterm 2: Friday March<br/>  $28^{th}$ , during class Final Exam: Friday May<br/>  $2^{nd}$ , 9:00-11:30am, same classroom

There will be no alternate dates provided for the exams. Exams are to be taken as scheduled except in the case of a *documented* illness or family emergency. Students are required to inform me before the exam date if this is the case, except when this is impossible. If you have an **excused** absence your final exam will be reweighed to include the weight of the missing midterm. Unexcused absences will result in an exam grade of zero.

The final exam must be taken in order to pass the class, so please make any summer plans for *after* the final exam date.

*Exam Re-grade Policy:* If an administrative error has been made in calculating your grade (such as an arithmetic error in adding up your score) no re-grade needs to be submitted. Merely bring the error to my attention so I can correct it. If you desire an exam re-grade, please do the following:

- Submit a written request for the re-grade within one week of the exam hand back date.
- In your written request, enumerate questions deserving special attention and an explanation of why the questions require more attention.
- Attach the original version of your exam to this written statement.

Note, that your whole exam may be re-graded upon submission of a re-grade.

## **Class Policies**

- Attendance: Attendance for this class is mandatory. This is especially important for this course because there is no textbook, which means that all of the material for this class is given in in the class notes and readings.
- Academic Honesty: I believe that everyone should pass this course on their own merits. It is unfair to yourself, your classmates, and your future employers if you cheat. All students are responsible for knowing and adhering to Tulane Universitys Honor Code, available at <a href="http://www.tulane.edu/~jruscher/dept/Honor.Code.html">http://www.tulane.edu/~jruscher/dept/Honor.Code.html</a>. Any violations of the Honor Code will be punished in accordance with University policy.

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Course Updates: It is possible that I will need to contact you all with updated information regarding the course. This will either come through your university e-mail or via announcements on mytulane.blackboard.com. It is your responsibility to regularly check your Tulane registered e-mail account and the course website. Note that grades may not be distributed be email.

## **Course Outline**

The following is an outline of the topics covered in this course. As the course progresses topics and other details may be added or removed from the outline.

## Week 1 (Jan $13^{th}$ , $15^{th}$ , $17^{th}$ )

Introduction, Historic Trends in Education, Education & Economic Growth Readings:

- Goldin, C. 2003. "The Human Capital Century." *Education Next* 3(1), 73-78. http://educationnext.org/the-human-capital-century/
- Hanushek, E., Woessmann, L., Jamison, E., and Jamison, D., 2008. "Education and Economic Growth." *Education Next* 8(2), 73-78. http://educationnext.org/education-and-economic-growth/

## Week 2 (Jan 22<sup>nd</sup>, 24<sup>th</sup>)

(Monday - MLK Jr. Day) Education Demand, Education Supply, and Equilibriums Readings:

• "In Africa, Free Schools Feed a Different Hunger" NY Times http://www.nytimes.com/2004/10/24/international/africa/24africa.html?pagew

## Week 3 (Jan 27<sup>th</sup>, 29<sup>th</sup>, 31<sup>st</sup>)

Human Capital Theory & Signaling Readings:

- Optional Supplemental Reading (Copy in Library) Borjas, G. J. 2010. Labor Economics, 5<sup>th</sup> Edition (New York: McGraw Hill/Irwin) Ch. 6, "Human Capital," pp.236-81
- Optional Supplemental Reading Spence, M. 1973. "Job Market Signaling." The Quarterly Journal of Economics 87(3), 355-374. http://www.jstor.org/stable/10.2307/1882010

## Week 4 (Feb $3^{rd}$ , $5^{th}$ , $7^{th}$ )

Introduction to Regression analysis, HCT vs Signaling Readings:

• Weiss, A. 1995. "Human Capital vs. Signalling Explanations of Wages." Journal of Economic Perspectives 9(4), 133-154 http://www.jstor.org/stable/2138394

## Week 5 (Feb $10^{th}$ , $12^{th}$ , $14^{th}$ )

Estimating Returns to Education, Estimates of Signaling Readings:

- Ashenfelter, O and Rouse, C 1999. "Schooling, Intelligence, and Income in America: Cracks in the Bell Curve." NBER Working Paper 6902. http://www.nber.org/papers/w6902
- Jaeger, D and Page, M. 1996. "Degrees Matter: New Evidence on Sheepskin Effects in the Returns to Education." *The Review of Economics and Statistics* 78(4), 733-740. http://www.jstor.org/stable/2109960

## Week 6 (Feb 17<sup>th</sup>, 19<sup>th</sup>, 21<sup>st</sup>)

### MIDTERM 1 - Monday

Midterm, Education Production Function, Review Midterm Readings:

• Hanushek, E. 1986. "The Economics of Schooling: Production and Efficiency in Public Schools," *Journal of Economic Literature* 24(3): 1141-59. http://www.jstor.org/stable/2725865

## Week 7 (Feb $24^{th}$ , $26^{th}$ , $28^{th}$ )

School Resources, Class Size Readings:

- Card, D and Krueger, A. 1996. "School Resources and Student Outcomes: An Overview of the Literature and New Evidence from North and South Carolina," *Journal of Economic Perspectives* 10(4), 31-42.
  <u>http://www.jstor.org/stable/1049605</u>
- Hanushek, E. 1999. "Some Findings from an Independent Investigation of the Tennessee STAR Experiment and from Other Investigations of Class Size Effects," *Educational Evaluation and Policy Analysis* 21(2), 143-163. http://www.jstor.org/stable/1164297

## Week 8 (SPRING BREAK)

## Week 9 (March 10<sup>th</sup>, 12<sup>th</sup>, 14<sup>th</sup>)

Teachers, Teacher Quality, Teachers in the Job Market, Teacher Pay Readings:

• Goldhaber, D. 2002. "The Mystery of Good Teaching," *Education Next* 2: 50-55.

http://educationnext.org/the-mystery-of-good-teaching/

- Corcoran, Sean P., Evans, William N., and Schwab, Robert M. 2004. "Changing Labor Market Opportunities for Women and the Quality of Teachers, 1957-2000," *American Economic Review* 94(2): 230-35. https://files.nyu.edu/sc129/public/papers/aea\_published\_may\_2004.pdf
- Dee, Thomas S. and Keys, Benjamin J. 2005. "Dollars and Sense," *Education* Next 2(1): 62-68.
  http://educationnext.org/dollars-and-sense/

## Week 10 (March 17<sup>th</sup>, 19<sup>th</sup>, 21<sup>st</sup>)

School Accountability Readings:

> • Kane, T. and Staiger, D. 2002. "The Promise and Pitfalls of Using Imprecise School Accountability Measures," *Journal of Economic Perspectives*, 16(4), 91-114.

http://www.dartmouth.edu/~dstaiger/Papers/kanestaigerjeparticle.pdf

• Jacob, Brian A. 2003. "High Stakes in Chicago: Did Chicago's Rising Test Scores Reflect Genuine Academic Improvement?" Education Next (Winter) 66-72.

http://educationnext.org/highstakesinchicago/

 Figlio, David N. and Winicki, J., (2005), "Food for Thought: The Effects of School Accountability Plans on School Nutrition," *Journal of Public Economics*, 89, 381-394.

http://www.sciencedirect.com/science/article/pii/S0047272704000209

## Week 11 (March 24<sup>th</sup>, 26<sup>th</sup>, 28<sup>th</sup>)

### MIDTERM 2 - Friday March 28th

Desegregation. Black-White Test Gap, Review, Midterm Reading:

• Reber, Sarah, 2010. "School Desegregation and Educational Attainment for Blacks" *Journal of Human Resources*, 45(4), 893-914. http://educationnext.org/fallingbehind/ • Fryer, Roland G. and Levitt, Steven D., 2004. "Falling Behind: New Evidence on the Black-White Test Gap" Education Next. http://educationnext.org/fallingbehind/

## Week 12 (March $31^{st}$ , April $2^{nd}$ , $4^{th}$ )

Discrimination, Peer Effects Readings:

- Figlio, David N., (2005), "Names, Expectations and the Black-White Test Score Gap," NBER Working Paper. http://faculty.smu.edu/Millimet/classes/eco7321/papers/figlio.pdf
- Hoxby, C. (2002) "The Power of Peers," Education Next 2(2) 56-63. http://educationnext.org/the-power-of-peers/
- Carrel, S., Fullerton, R., and West, J. (2009) "Does Your Cohort Matter? Measuring Peer Effects in College Achievement," *Journal of Labor Economics*, 27(3), 439-464. http://www.econ.ucdavis.edu/faculty/scarrell/peer3.pdf

# Week 13 (April $7^{th}$ , $9^{th}$ , $11^{th}$ )

Externalities: Crime Health Readings:

• Deming, D. (2012) "Does School Choice Reduce Crime?," Education Next 12(2).

http://educationnext.org/does-school-choice-reduce-crime//

• Jacob, Brian A. and Lefgren Lars (2003) "Are Idle Hands the Devil's Workshop? Incapacitation, Concentration, and Juvenile Crime," *The American Economic Review* 93(5), 1560-1577.

http://www.aeaweb.org/articles.php?doi=10.1257/000282803322655446

• Lleras-Muney, Adriana (2005) "The Relationship Between Education and Adult Mortality in the United States," *Review of Economic Studies* 72, 189-221. http://restud.oxfordjournals.org/content/72/1/189.full.pdf+html

## Week 14 (April 14<sup>th</sup>, 16<sup>th</sup>)

(Friday - Easter Break) Misc. College Topics Readings:

> • Kremer, M. and Levy, D. (2008) "Peer Effects and Alcohol Use among College Students," *Journal of Economic Perspectives*, 22(3), 189-206. http://www.jstor.org/stable/27648267

• Carrell, S., Maghakian, T., West, J. (2010) "A's from Zzzz's? The Causal Effect of School Start Time on the Academic Achievement of Adolescents." Revisions Requested, *American Economic Journal: Economic Policy*. http://www.econ.ucdavis.edu/faculty/scarrell/sleep.pdf itemize

## Week 15 (April 23<sup>rd</sup>, 25<sup>th</sup>)

(Monday - Easter Break) Misc. College Topics Readings:

- Neal, D. 2002. "How Vouchers Could Change the Market for Education," *Journal of Economic Perspectives* 16(4), 25-32. http://www.jstor.org/stable/3216913
- TBA

## Week 16 (April $28^{th}$ )

Final Review/Catch-Up Readings: None