

# ECON 300 601: Economics of Education

TU TR 3:00 - 4:15 p.m.

Boston College

Fall 2018

## Course Overview

This course combines economic theory, econometric literature and institutional literature to examine current issues in U.S. education. By signing up for this course, you have accepted the responsibility of being an active learner. More importantly, you need to be committed to learning the subject matter. If you are not open to new ideas, or are not committed, expect your grade to reflect this. Moreover, your continued enrollment in this course means that you accept these responsibilities and are aware of the guidelines set forth in the syllabus.

I want everyone to do well. Keep up with the assigned readings, apply yourself and take advantage of the opportunities available to improve your grade. While it is my goal to help you understand the topics, the ultimate responsibility lies upon your shoulders. Work hard, practice the problems from class, and make use of all the resources available to you and you will do well.

## So You Want to Be a Millionaire?

*It's easy, here is your chance!*

In this class you buy your grade. Therefore, you have to work hard to earn enough income to afford the grade you would like. The good news is that it is easy to make money in this course; the downside is that if you don't have quite enough money you will have to settle for the next best grade. The primary ways of earning income is by doing well on the two non-cumulative exams, completing the homework assignments, and not waiting until the last minute to work on your course project.



## Contact Information

*Professor:* Chandini Sankaran, Ph.D.

*Office hours:* Tuesdays & Thursdays 11:00 am - 12:00 pm (Maloney 387). You are also welcome to stop by when my office door is open.

*Email:* [Chandini.Sankaran@bc.edu](mailto:Chandini.Sankaran@bc.edu)

## Course Description

The basic theory of investments in education (human capital theory); disentangling the return to education from the return to innate ability; the role of education in individual mobility and national economic growth; the association between education and individual earnings and reasons why that relationship has changed over time; the role of early childhood education; the main approaches to K-12 school reform (money, choice, educational standards, and teacher selection/training); and issues in higher education as well as higher education policy. We will also discuss the effectiveness of teaching methods.

## Course Prerequisites

Econometric Methods (Econ 2228) and Microeconomic Theory (Econ 2201).

## COMING ATTRACTIONS

EXAM 1 (\$250,000)

THURSDAY OCTOBER 4<sup>TH</sup> (IN-CLASS)

EXAM 2 (\$250,000)

THURSDAY NOVEMBER 29<sup>TH</sup> (IN-CLASS)

FINAL PROJECT (\$200,000)

DUE DECEMBER 8<sup>TH</sup> @ 11:59 P.M.

HOMEWORK ASSIGNMENTS (\$200,000)

FIVE @ \$40,000 EACH

PARTICIPATION (\$100,000)

## Tentative Grading Scale

A	\$933,333 or more
A-	\$900,000 to \$933,332
B+	\$866,666 to \$899,999
B	\$833,333 to \$866,665
B-	\$800,000 - \$833,332
C+	\$766,666 to \$799,999
C	\$733,333 to \$766,665
C-	\$700,000 to \$733,332
D+	\$666,666 to \$699,999
D	\$633,333 to \$666,665
D-	\$600,000 to \$633,332
F	\$599,999 or less

*\*subject to change*

## Teaching Philosophy

Each of the principles that follow is the direct result of me asking how I would want to be treated as a student. The rules give you a lot of leeway.

It is my hope that these policies will make you feel more comfortable and help create an environment conducive for learning for all of us!

## Academic Integrity

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, *graded work must be the product of independent effort* unless otherwise instructed. You are allowed to discuss the homework assignment with other students but the solution to your homework must be your independent work. Students are expected to adhere to the Code of Academic Integrity as described in BC's Catalog. [http://www.bc.edu/offices/stserv/academic/univcat/undergrad\\_catalog/policies\\_procedures.html#integrity](http://www.bc.edu/offices/stserv/academic/univcat/undergrad_catalog/policies_procedures.html#integrity)

## Attendance Policy

You are responsible for your attendance and class participation. You are expected to be regular and punctual in class attendance, and to fully participate in the course throughout the semester. If you miss class for any reason, you are responsible for the missed announcements, material and assignments. BC's policy concerning Class Attendance is available at [http://www.bc.edu/offices/stserv/academic/univcat/undergrad\\_catalog/policies\\_procedures.html#attendance](http://www.bc.edu/offices/stserv/academic/univcat/undergrad_catalog/policies_procedures.html#attendance)

## Is it possible to earn more than a million dollars?

*Sure! All you have to do is work a little harder for your bonus!*



EXAM RE-DO

You have the opportunity to earn up to \$40,000 bonus dollars. Correct solutions to exams will not be provided immediately after the exam. Rather, you will have an opportunity to re-do both exams for extra credit before the correct solutions are provided. Your bonus will be calculated as your percentage grade on the re-do multiplied by \$20,000 for each exam re-do submitted. Remember that this must be your independent work.



## Disability Access

At BC we strive to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, you are welcome to let me know so that we can discuss options. You are also encouraged to contact Disability Resources explore reasonable accommodation. For additional information on the Disability Resource Center and reasonable accommodations, please visit [http://www.bc.edu/offices/dos/subsidiary\\_offices/disabilityservices.html](http://www.bc.edu/offices/dos/subsidiary_offices/disabilityservices.html)

## Student Code of Conduct

The University seeks to promote a safe environment where students and employees may participate in the educational process without compromising their health, safety, or welfare. The Student Conduct System has been developed to ensure the existence of an environment fostering the intellectual, personal, ethical, psychological, social, and spiritual potential of all students. Refer to the following for more information <http://www.bc.edu/publications/studentguide/judicial.html>

## Final Project

For the project, you will write an empirical paper dealing with a topic of your choice in Economics of Education. Further guidelines will be provided in class.

## **FREQUENTLY ASKED QUESTIONS AND ANSWERS:**

**Q: I text 24/7, can I text in class?**

A: No. Cellphones are not allowed in class. Please turn off your cellphone when you enter the classroom.

**Q: What about my laptop or tablet? Can I use those in class?**

A: Yes, but only for note taking purposes. I will ask you to put your laptop away if it becomes a distraction. See <https://www.educationnext.org/should-professors-ban-laptops-classroom-computer-use-affects-student-learning-study/> and <https://www.brookings.edu/research/for-better-learning-in-college-lectures-lay-down-the-laptop-and-pick-up-a-pen/>

**Q: What will happen if I fall asleep in class?**

A: Nothing. I'll probably wake you up, but if you snore, that would create a negative externality!

**Q: What should I do if I'm late to class?**

A: Enter the room as quietly as possible. Take a seat near the back to avoid disturbing others.

**Q: Why should we care so much about the Code of Conduct?**

We're all in this together! Let's make this a conducive learning environment for everyone!

**Q: What is the secret to making an A in this course?**

A: Coming to class, reading the assigned articles before class, actively listening to the lecture, taking notes, completing all the homework assignments, practicing the problems, starting on your project early, studying early for the exams and doing more than the minimum.

**Q: I can't make it to class on exam day. What should I do?**

A: Every student is expected to take both exams as scheduled. No exam scores are dropped. It is your responsibility to notify me (in-person during my office hours or through email) of an excused absence at least two weeks before the exam is scheduled to be held in class. When this is the case, we will find an alternative time for you to take the exam. If your absence is unexcused, or you notify me after the exam has been administered to class, you will receive \$0 for the exam.

**Q: What is an "excused" absence?**

A: For exam purposes, an excused absence must be accompanied with a Dean's Excuse for university-sponsored events/activities for academic, non-academic, and recognized student organizations. Remember that these documents need to be given to me two weeks before the start of the missed exam. For the policy on absences due to religious reasons, please see [http://www.bc.edu/offices/stserv/academic/univcat/undergrad\\_catalog/policies\\_procedures.html#religious](http://www.bc.edu/offices/stserv/academic/univcat/undergrad_catalog/policies_procedures.html#religious)

**Q: I am sick on the day of the exam or have a personal emergency. What should I do?**

A: For personal emergencies or illnesses, a Dean's Excuse letter must be provided. Depending on the circumstances and timeline, you will be allowed to either take a make-up exam or count your other exam twice.

**Q: I missed the deadline for a Homework Assignment. What can I do?**

A: All homework assignments are due at 3:05 p.m. After that, you will receive a zero on the assignment. Pay close attention to my announcements on which assignments are to be submitted on Canvas and which ones are to be submitted on paper in-class.

**Q: How are the Participation Points awarded?**

A: At the end of the semester, I will evaluate your participation in the class by reviewing your answers to the *daily in-class exercises* and your *comments on the assigned readings* on Canvas.

**Q: What kind of comments should I make on the readings on Canvas?**

A: I evaluate the comments based on how well they reflect the content of the assigned article. You can make any comments on the key concepts, connect the reading material with class discussions/other assigned articles/current affairs, or ask questions on anything that is unclear from reading the article. You can also answer another student's question or comment on someone else's comments. Use the tool responsibly: avoid entering comments that you may wish to have returned or destroyed at the end of the semester, and avoid entering any personally identifiable information about yourself or your classmates.

**Q: How many comments should I make on each article?**

A: While there is no maximum number, you only need to make one comment per article. What matters is the quality of your comments!

## **Tentative Schedule and Reading List (subject to change)**

Class	Topic	Readings
1-2	Introduction: Defining the educational problem	Oreopoulos, Philip and Uros Petronijevic. " <a href="#">Making College Worth It: A Review of Research on the Returns to Higher Education</a> ." National Bureau of Economic Research Working Paper no. 19053, May 2013. Oreopoulos, Philip, and Kjell G. Salvanes. 2011. " <a href="#">Priceless: The Nonpecuniary Benefits of Schooling</a> ." <i>Journal of Economic Perspectives</i> , 25 (1): 159-84. Osterman, Paul. " <a href="#">College for All? The Labor Market for College-Educated Workers</a> ." Center for American Progress, August 2008.
3	Econometrics Review	Material accessible on Canvas from Wooldridge, Jeffrey M. "Introductory Econometrics: A Modern Approach."
4	Computer Lab Session	Stata Review in O'Neil Library Computer Lab (tentatively Room 307).
	<i>Homework 1</i>	<i>Due Thursday September 13<sup>th</sup></i>
5-6	Human capital theory: The basic economic perspective on education	Material accessible on Canvas from Borjas, George. <i>Labor Economics</i> . Boston, MA: McGraw-Hill.
7-8	The Causal Effects of Education on Earnings	Card, David. " <a href="#">The Causal Effect of Education on Earnings</a> ." in Handbook of Labor Economics, ed. by O. Ashenfelter, and D. Card, no. 5 (1999), 1801–1863. North-Holland, New York. ( <i>read only 1801-1809</i> ). Krueger, Alan B. and Joshua Angrist. " <a href="#">Does Compulsory Schooling Affect Schooling and Earnings?</a> " <i>The Quarterly Journal of Economics</i> , 106, no. 4 (November 1991): 979-1014. Krueger, Alan B., and Orley Ashenfelter. " <a href="#">Estimates of the Economic Return to Schooling from a New Sample of Twins</a> ." <i>American Economic Review</i> , Vol. 84, no.5, (December 1994): 1157-73. Blau, Francine D., and Lawrence M. Kahn. " <a href="#">Gender Differences in Pay</a> ." <i>Journal of Economic Perspectives</i> , 14, no. 4 (Fall 2000): 75-99.
9	Earnings and education? Skills learned, signaling and ability bias	Arcidiacono, Peter, Patrick Bayer, and Aurel Hizmo. " <a href="#">Beyond Signaling and Human Capital: Education and the Revelation of Ability</a> ." NBER Working Paper No. 13951 (April 2008, Revised February 2009). Heckman, James J. and Yona Rubinstein. " <a href="#">The Importance of Noncognitive Skills: Lessons from the GED Testing Program</a> ." American Economist Association's Papers and Proceedings, <i>American Economic Review</i> , 91, no.2 (May 2001): 145-149. Tyler, John H., Richard J. Murnane, and John B. Willett. " <a href="#">Estimating the Labor Market Signaling Value of a GED</a> ." <i>The Quarterly Journal of Economics</i> 155, no. 2 (2000): 431-468.
	<i>Homework 2</i>	<i>Due Thursday September 27<sup>th</sup></i>
10-11	Why has the rate of return to education increased?	Levy, Frank, and Peter Temin. " <a href="#">Inequality and Institutions in 20th Century America</a> ." National Bureau of Economic Research Working Paper No. 13106, May 2007. Borjas, George J., and Valerie A. Ramey. " <a href="#">Foreign Competition, Market Power, and Wage Inequality</a> ." <i>The Quarterly Journal of Economics</i> , 110, no. 4 (Nov., 1995): 1075-1110. Krueger, Alan. " <a href="#">How Computers Have Changed the Wage Structure: Evidence From Microdata, 1984-1989</a> ." <i>The Quarterly Journal of Economics</i> , 108, no. 1, (February 1993): 33-61.
12	<b>Exam1</b>	<b>Thursday, October 4<sup>th</sup></b>

Class	Topic	Readings
	No class	Fall Break - Tuesday, October 9 <sup>th</sup>
13-14	Early childhood education and school resources: How important?	<p>Feinstein, Leon. "<a href="#">Inequality in the Early Cognitive Development of British Children in the 1970 Cohort</a>." <i>Economica</i>, 70, no. 277 (2003): 73-97.</p> <p>Knudsen, Eric I., James J. Heckman, Judy L. Cameron, and Jack P. Shonkoff. "<a href="#">Economic, Neurobiological, and Behavioral Perspectives on Building America's Future Workforce</a>." <i>Proceedings of the National Academy of Sciences</i> 103, no. 27 (2006): 10155-10162.</p> <p>Krueger, Alan B. "<a href="#">Inequality, Too Much of a Good Thing</a>." Paper to the Princeton University Industrial Relations Section. Princeton, NJ: Princeton University Press, April 16, 2002: 10-23.</p> <p>Garces, Eliana, Duncan Thomas, and Janet Currie. 2002. "<a href="#">Longer-Term Effects of Head Start</a>." <i>American Economic Review</i>, 92 (4): 999-1012.</p> <p>Krueger, Alan B. and David Card. "<a href="#">Does School Quality Matter? Returns to Education and the Characteristics of Public Schools in the United States</a>." <i>Journal of Political Economy</i>, 100, no.1, (February 1992): 1-40.</p>
	Homework 3	Due Thursday October 18 <sup>th</sup>
15-16	Student Achievement: Do smaller classes, or peer effects influence performance?	<p>Krueger, Alan B. "<a href="#">Experimental Estimates of Education Production Functions</a>." <i>Quarterly Journal of Economics</i> 114, no. 2 (1999): 497-532.</p> <p>Jepsen, Christopher and Steven Rivkin. "<a href="#">Class Size Reduction and Student Achievement: The Potential Tradeoff between Teacher Quality and Class Size</a>." <i>The Journal of Human Resources</i>, 44, no. 1 (winter 2009): 223-250.</p> <p>Bruce Sacerdote. "<a href="#">Peer Effects in Education: How Might They Work, How Big Are They and How Much Do We Know Thus Far?</a>" Chapter 4 from <i>Handbook of the Economics of Education</i>, 3, (2011), Elsevier B.V.</p> <p>Burke, Mary A., and Tim R. Sass. <a href="#">Classroom Peer Effects and Student Achievement</a>." <i>Journal of Labor Economics</i>, 31, no. 1 (January 2013): 51-82.</p>
17	School vouchers and parental choice	<p>Rose, Lowell C., and Alec M. Gallup. "<a href="#">The 49th Annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes toward the Public Schools</a>." Phi Delta Kappa International Inc., (2017).</p> <p>Epple, Dennis, Richard E. Romano and Miguel Uruquiola. "<a href="#">School Vouchers: A Survey of Literature</a>." <i>Journal of Economic Literature</i>, American Economic Association, 55, no.2 (2017): 441-492.</p>
18-19	School accountability, standards and testing	<p>Kane, Thomas J., and Douglas O. Staiger. "<a href="#">The Promise and Pitfalls of Using Imprecise School Accountability Measures</a>." <i>Journal of Economic Perspectives</i>, 16, no.4 (2002): 91-114.</p> <p>Jacob, Brian A. "<a href="#">Accountability, Incentives and Behavior: The Impact of High-stakes Testing in the Chicago Public Schools</a>." <i>Journal of Public Economics</i> 89, no. 5-6 (2005): 761-796.</p> <p>Ladd, Helen. "<a href="#">Holding Schools Accountable Revisited</a>." Association for Public Policy Analysis and Management, Spencer Foundation Lecture in Education Policy and Management, 2007.</p> <p>Darling-Hammond, Linda, Soung Bae, Channa M. Cook-Harvey, Livia Lam, Charmaine Mercer, Anne Podolsky, and Elizabeth Leisy Stosich. <a href="#">Pathways to New Accountability through the Every Student Succeeds Act</a>. Learning Policy Institute, Stanford Center for Opportunity Policy in Education (April 2016).</p>
	Homework 4	Due Thursday November 1 <sup>st</sup>

Class	Topic	Readings
20	Teacher quality, teacher training and wages	Clotfelter, Charles T., Helen F. Ladd and Jacob L. Vigdor. " <a href="#">Teacher Credentials and Student Achievement in High School: A Cross-Subject Analysis with Student Fixed Effects</a> ." <i>The Journal of Human Resources</i> , 45 no. 3 (Summer 2010): 655-681. Loeb, Susanna, and Marianne E. Page. " <a href="#">Examining the Link between Teacher Wages and Student Outcomes: The Importance of Alternative Labor Market Opportunities and Non-pecuniary Variation</a> ." <i>Review of Economics and Statistics</i> 82, no. 3 (2000): 393-408.
21	Higher education: Basic issues and structure	Winston, Gordon. " <a href="#">Subsidies, Hierarchy and Peers: The Awkward Economics of Higher Education</a> ." <i>Journal of Economic Perspectives</i> 13, no. 1 (1999): 13-36. Dynarsky, Susan. " <a href="#">Building the Stock of College-educated Labor</a> ." <i>The Journal of Human Resources</i> , University of Wisconsin Press, vol. 4, no. 3 (2008): 576-610.
22-23	Higher education policy	" <a href="#">The Economics of Higher Education</a> ." A Report Prepared by the Department of the Treasury with the Department of Education, December 2012. Bettinger, Eric P., and Bridget Terry Long. " <a href="#">Addressing the Needs of Under-prepared Students in Higher Education: Does College Remediation Work?</a> " <i>The Journal of Human Resources</i> , University of Wisconsin Press, 44, no. 3 (2009): 736-771. Angrist, Joshua, Daniel Lang, and Philip Oreopoulos. " <a href="#">Incentives and Services for College Achievement: Evidence from a Randomized Trial</a> ." <i>American Economic Journal: Applied Economics</i> , 1 (January 2009): 136-163. Gordanier, John, William Hauk and Chandini Sankaran. "Early Intervention in College Classes and Improved Student Outcomes." under review, (2018).
	Homework 5	Due Thursday November 15 <sup>th</sup>
24	What skills are now rewarded in the workplace?	McGivney, Eileen and Rebecca Winthrop. " <a href="#">Education's Impact on Economic Growth and Productivity</a> ." Brookings Paper on Economic Activity, July 2016. Levy, Frank and Richard J. Murnane. " <a href="#">Dancing with Robots: Human Skills for Computerized Work</a> ." Third Way, June 2013.
	No Class	Thanksgiving Break – Thursday, November 22 <sup>nd</sup>
25	Effective teaching strategies, processes and evaluation.	Rosenshine, Barak " <a href="#">Principles of Instruction: Research Based Strategies that All Teachers Should Know</a> ." <i>American Educator</i> , 36, no.1, (Spring 2012): 1-9. Teaching Techniques for Undergraduate Economics: Large enrollment vs. low enrollment classes - what works? Some useful activities for K-12 economics education: <a href="https://www.philadelphiafed.org/education/teachers/lesson-plans">https://www.philadelphiafed.org/education/teachers/lesson-plans</a> <a href="https://www.fte.org/teachers/teacher-resources/lesson-plans/">https://www.fte.org/teachers/teacher-resources/lesson-plans/</a>
26	Exam 2	Thursday November 29 <sup>th</sup>
27		Project work in O'Neil Library Computer Lab (tentatively Room 307)
28	Computer Lab Session	Project work

*Note: you can skip the theoretical parts you do not understand (which we don't discuss in class). We will mostly focus on the methodology and findings of the papers in our discussions. I will be highlighting the specific sections that I would like for you to focus on when you read so that you don't feel overwhelmed!*

**GET READY FOR A FAST-PACED RIDE INTO THE WORLD OF ECONOMIC EDUCATION!!**  
**ARE YOU UP FOR THE CHALLENGE?**

