# Economics 147 <br> The Economics of Education <br> Spring 2015 <br> Professor Julian Betts 

This course covers the economics of education. This is one of the most important policy areas that economists study because education provides the skills that can increase a person's "human capital", and through that, increase earnings.

Prerequisites: Economics 2 or 100A; and Econ 120B or Math 181B. (We will occasionally use calculus during the course to solve for optimal solutions to various problems individuals face in determining how much education to require. We will also survey a great deal of econometric evidence, and so the econometric tools you have learned in Econ 120B are vital as well.)

Textbook: There is no textbook for this course but I will provide a detailed set of readings, often with web links, on the following pages.

## Class Meeting Times

Class meets MWF 9-9:50 in Solis 104. Note: There will be no class on Friday April 24.

## Outline for Lectures - Subject to Change

## I. INTRODUCTION AND REVIEW OF EMPIRICAL METHODS

1. Introduction and Overview

The Role of Government in Education
Education Policy and Economic Growth
Trends in Education in the US
Group Differences in Educational Outcomes
2. Empirical Methods Used in Studying the Economics of Education

Correlation vs. Causality
Problems of Omitted Variable Bias and Endogenous Regressors
An Overview of the Instrumental Variable Approach to Endogenous Regressors
True Experiments
Natural Experiments
Difference-in-Difference Models
Before-After Studies
Summary

## II. INVESTING IN EDUCATION: THE PRIVATE AND SOCIAL RETURNS TO EDUCATION <br> 3. Human Capital and Signaling <br> Relation between Education and Adult Outcomes <br> Human Capital Theory <br> Signaling Theory <br> 4. Empirical Estimates of the Private Return to Education

The Mincer Model and Non-Causal Estimates of the Causal Returns to Education Attempts to Obtain Causal Estimates of the Causal Returns to Education Attempts to Distinguish between Signaling and Human Capital Theory

## 5. Externalities in Education

Introduction
Crime
Civic Participation
Intergenerational Transfers
General Increases in Labor Productivity

## III. PRODUCING K-12 EDUCATION IN THE UNITED STATES: BACKGROUND, REFORM AND EVIDENCE <br> 6. Producing Education <br> Basic Facts on K-12 Expenditures and School Resources <br> Testing for a Link between School Resources and Student Achievement Looking at Longer Term Outcomes like Earnings and Educational Attainment Randomized Control Trials of the Impact of Reducing Class Size and Improving Teacher Training <br> 7. The Labor Market for Teachers <br> Who Teaches, How Has This Changed Over Time, and Could This Explain Why Test Scores Have Not Risen Much Over Time? <br> Teacher Mobility Across Schools and Out of The Profession <br> A Closer Look at What Teacher Characteristics Matter for Learning How Are Teachers Paid? Could Merit Pay Lead to Higher Teaching Effectiveness?

## 8. School Accountability

9. The Economics of School Choice

Definitions of Types of School Choice
Overview of Theoretical Strengths and Weaknesses of Offering School Choice
Voucher Programs
Charter Schools
Other Types of School Choice: Open Enrollment and Magnet Programs
10. Peer Groups and Tracking in Education

Peer Groups - Basic Issues and Results
Tracking

- Theoretical Foundations
- How Does Ability Grouping Change the Resources Students Receive?
- Empirical Approaches to Estimating Impact on Achievement Conclusion

11. Early Childhood Education
12. An Introduction to School Finance
IV. POSTSECONDARY EDUCATION
13. Postsecondary Education: An Introduction

## Grading:

Test 1 -- in class Wednesday Week 4 (April 22), covering sections I, and
part of II
Test 2 -- in class Friday Week 7 (May 15), covering any parts of section II not already covered, and elements of section III that will be announced in class
Final exam (covering entire course, with roughly a 50:50 weight on new material and material already tested in tests 1 and 2)

## Letter Grades

Letter grades will be determined by final $\%$ in the course, as follows: $90-100=\mathrm{A}+$, $85-89=\mathrm{A}, 80-84=\mathrm{A}-, 75-79=\mathrm{B}+, 70-74=\mathrm{B}, 66-69=\mathrm{B}-, 62-65=\mathrm{C}+, 58-61=\mathrm{C}, 54-57=\mathrm{C}-$, $50-53=\mathrm{D},<50 \%=\mathrm{F}$.

## Teaching Assistants and Office Hours

My office hours are Monday 1:00-2:30 Room 212, Department of Economics. After class is also a good time to ask questions.

You can also reach me at jbetts@ucsd.edu. If you do use email, please make sure that " 147 " is in the message title so that I can organize my course-related email easily. This will also reduce the chances that your email gets lost in the spam.

There will be two teaching assistants for this course:
Sam Young (smyoung@ucsd.edu)
Pablo Ruiz Junco (pruizjun@ucsd.edu) and a reader, who will assist with grading:
Jiajun Lu(ji1465@ucsd.edu)
I will announce the TAs' office hours shortly. They will tend to bunch their office hours towards exam times.

## Class Web Page and Class Notes

The class web page is at ted.ucsd.edu.
In week 1 I will hand out notes for Lecture 1 in class. For all later sets of lecture notes you are responsible for going to the class web page and printing out notes before class. (We may start Lecture 2 in the second class so be prepared!) In class you will be able to complete your notes based on my lecture. Attendance at lecture is extremely important, both to ensure that you have a complete set of notes and to ensure that you have a chance to take in and learn how to use the concepts taught in class. We will have frequent in-class reviews and mini-reviews based on sample questions and practice assignments, all available on the class TED site. We will also discuss assigned readings. Being in class for these frequent reviews is really key to doing well in the course.

## Policy on Regrading Midterms

Students who believe that their midterm has been misgraded must appeal with a written statement of what is wrong with the grading, either by contacting the relevant grader (TA) within one lecture of the lecture in which the midterm is handed back or if
that TA misses class that day, by the TA's next available office hour. The TA will regrade the question. The grade could rise, stay the same, or fall, as a result of regrading.

The written statement must be paper-clipped to the midterm in question with your name written on the appeal.

Midterm questions answered in pencil or other erasable medium, or answered in pen but corrected with "whiteout", cannot be submitted for regrading. Of course, if the graders have made an addition error we will fix that, though.

## Policy on Regrading Final Exams

1. Students who are unhappy with their final letter grade in a course cannot simply request that their final exam be regraded. If you want a regrade, you must submit the exam plus a written explanation of why you think you deserve extra points, and on which question(s).
2. As always, exams written in pencil cannot be submitted for regrading. The same applies to exams written with pen but corrected with "whiteout". Of course, if the graders have made an addition error I will fix that, though.
3. If a student submits the final exam for regrading, here is what will happen:
a) The entire exam, not just the question(s) indicated by the student, will be regraded.
b) The final letter grade in the course will be recalculated based on the final exam score after the regrading. The student's letter grade could rise, remain unchanged, or fall. 4. Students who want a final regraded must submit their exam and written explanation of the basis for the regrade by no later than Wednesday a week and a half after exams end. 5. Sometimes students who are disappointed with their grade ask whether they can do additional work to increase their grade. The answer is no, because to do so would be completely unfair to other students in the class.

## Policy on Missed Midterms/Exams and Cheating

Exam dates are not negotiable. If you miss a midterm because of documented illness or UCSD sports, the weight of the missed midterm will be added to the weight of the final exam. Unexcused missed exams will receive scores of 0 . There are no acceptable excuses for missing the final (apart from documented illness) -- if you miss the final, you will receive a failing grade for the course. Any student caught cheating will receive a failing grade for the course. In addition to this academic sanction, the Council of Deans of Student Affairs will impose a disciplinary penalty.

