#### Economics 147 The Economics of Education Fall 2020 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 canvas.ucsd.edu.

## **Class Meeting Times**

Class meets T/Th 3:30-4:50 through Zoom on the link to the course at canvas.ucsd.edu. There will be no class on Thursday Nov. 26 (Thanksgiving Day).

## Late Adds, Enrollment Waitlists, Problems with Enrollment in Class due to Late Fees

Each quarter students will have a few questions like the ones I list in the heading above. Professors do not control late adds, waitlists and so on. To get assistance with questions like these, please talk to the great undergraduate affairs staff team in Economics. You can reach them through the Virtual Advising Center: <u>vac.ucsd.edu</u>

#### **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 Regression Discontinuity True Experiments An Overview of the Instrumental Variable Approach to Endogenous Regressors Natural Experiments Difference-in-Difference Models Before-After Studies

#### Summary

# II. INVESTING IN EDUCATION: THE PRIVATE AND SOCIAL RETURNS TO EDUCATION

## 3. Human Capital and Signaling

Relation between Education and Adult Outcomes Human Capital Theory Signaling Theory

## 4. Empirical Estimates of the Private Return to Education

The Mincer Model and Non-Causal Estimates of the Returns to Education Attempts to Obtain Causal Estimates of the 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**

## 6. Producing Education

Basic Facts on K-12 Expenditures and School Resources 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

#### 7. The Labor Market for Teachers

Who Teaches, How Has This Changed Over Time, and Could This Explain Why Test Scores Have Not Risen Much Over Time?

Teacher Mobility Across Schools and Out of The Profession

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 Tuesday Week 4 (October 27), covering sections I, and	
part of II	25%
Test 2 in class Thursday Week 7 (November 19), covering any parts of	
section II not already covered, and elements of section III that will be	
announced in class	25%
Final exam (covering entire course, with roughly a 50:50 weight on new	
material and material already tested in tests 1 and 2)	50%

#### Letter Grades

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

#### **Teaching Assistant and Office Hours**

My office hours are Tuesdays 1-2:30, on Zoom. After class is also a great time to ask questions. Simply hang out on Zoom after class ends and I will plan to be available after each class from 4:50-5:10.

You can also reach me at <u>jbetts@ucsd.edu</u>. *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 teaching assistants for this course. Tentatively they are:

Anjali Pai	(50% TA)	<u>a1pai@ucsd.edu</u>
Hannah Bae	(25% TA)	hbae@ucsd.edu
Steven Yee	(25% TA)	s1yee@ucsd.edu

We will also have additional office hours towards exam times.

#### **Class Web Page and Class Notes**

The class web page is at canvas.ucsd.edu.

For all lecture notes you are responsible for going to the class web page and printing out or downloading notes before class. 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 website on Canvas. We will also discuss assigned readings. Being in class for these frequent reviews is really key to doing well in the course.

#### Zoom and Zoom Recordings and Test Taking Online

All classes will be conducted on Zoom. You can get to the class by logging into the course at canvas.ucsd.edu. The classes will also be recorded so that you can view them at a later time. While we are all wishing that we could conduct classes in person, it will not be possible until the pandemic is under control. I will work hard to try to make this as engaging as an in-person classroom, and will stop regularly to ask for questions.

I may pre-record sections of lectures to allow the "real-time" lectures to focus on parts of a topic that experience has taught me are areas where there will be lots of questions and a need for discussion. I will send out announcements via email and also post them on the class web page about pre-recordings and other important class announcements.

We will likely use Zoom/LockDown Browser for proctoring this quarter. These programs use video and audio recording or other personal information capture for the purpose of facilitating the course and/or test environment. UC San Diego does not allow vendors to use this information for other purposes. Recordings will be deleted when no longer necessary. However, if cheating is suspected, the recording may become part of the student's administrative disciplinary record. Finally, I reserve the right to give an oral test if I feel it is necessary to uphold academic integrity.

## **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 sent by email to the TA's cc:ed to me.

#### **Policy on Regrading Final Exams**

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 a written explanation of why you think you deserve extra points, and on which question(s).
 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 written explanation of the basis for the regrade to jbetts@ucsd.edu 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 (hmmm, do even we have any sports in this pandemic?!!), 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.