Economics 881.13
Human Capital

Goals

In this course, we cover the literature on Human Capital. We focus on primary focus on models of human capital acquisition, skill formation, choices made over schooling, returns to schooling, school quality, general equilibrium considerations, etc. We analyze the econometric issues that arise in analyzing the key questions in this literature, such how to estimate the rate of return to schooling and schooling quality in the face of ability sorting or the estimation of human capital production functions in the fact of unobserved (by the econometrician) inputs.

Course Pre-Requisites

This course presumes that students have successfully completed graduate-level coursework in econometrics and/or regression analysis and graduate-level coursework in microeconomic theory. Students who do not have this background may find that they need to either postpone taking this course or be prepared to consult graduate textbooks in econometrics (e.g., William Greene, *Econometric Analysis*, 7th Edition. Prentice Hall) and microeconomic theory (e.g., Andreu Mas-Colell, *Microeconomic Theory*, Oxford University Press; Ariel Rubinstein, *Lecture Notes in Microeconomic Theory: The Economic Agent*, 2nd Ed., Princeton University Press; David Kreps, *A Course in Microeconomic Theory*, Prentice Hall).

Course Structure, Requirements, and Grading

This will not be a lecture course. This is a “critically read and discuss papers” course.

All students in the course will be expected to read the papers before class and to actively participate in these discussions. To foster this participation and to fulfill the requirements of this course, all students are required to serve as a student leader for two classes and to post comments and questions on the readings for the classes for which they are not student leaders. Below, I describe each of these student responsibilities.

Student Leader

In their role as the student leader for a class session, the student is responsible for:

(a) preparing a written summary of the readings to be covered in the class notes (no more than 10-15 pages) and providing a set of key discussion questions for the class;

(b) make a short (10 minutes maximum) presentation of the key points of the papers and initiate
the discussion of the key questions. (It would be good to use slides, adapted from your written summary, for the presentation.)

In terms of the written summary, the student leader should address the following points:

- What is the main point(s) of the papers?
- If there were model developed in the papers, briefly summarize them. (This should be done with a minimum of equations, showing the models but not the derivations.)
- If the papers present empirical work, briefly summarize the (i) data used; (ii) econometric methods and/or identifying strategies that are used; and (iii) key empirical findings.
- Finally, the presenter may want to offer thoughts and/or questions about the contribution of the papers to the human capital literature and/or what concerns the presenter has about the approach taken in any of the papers.

The summary notes should be posted on the course website on Sakai in the folder for the class you are leading no later than 6:00 p.m. on the day before the class. These notes, and any slides that the student wishes to use during their class presentation, should be posted on the Sakai course website. More on where to post and find things on the course website below.

**Posting Comments & Questions on Readings for Classes**

As noted above, all students are expected to read all of the papers, whether they are acting as a student leader or not. To help encourage everyone to keep up with the readings and the class, all students are expected to post their comments and questions on the readings before class. These comments will be posted to the Forum section of the Sakai course website.

**Sakai Course Website**

All of the classes in this course will be organized on the course website on Sakai, under the Resources and Forums sections listed in the menu on the lefthand side of the screen when you are logged in to ECON.881.13.F15 on Sakai.

Within the folder “Student Leader Summaries & Slides” in the Resources section of the Sakai course website, there are subfolders for each class in the courses, labeled by the day and date of the class. Within each Class subfolder students will find:

(a) list of the papers to be covered for that class;

(b) copy of any of these papers (as an attachment) that may be difficult to find

(c) summary notes of the student leader(s) for that class, that the student will post before class as an attachment.

As noted above, the student leader(s) should have their summary notes posted by 6:00 p.m. on the day before the class. This will allow student notes at least 24 hours before the class she/he is
Within the folder use is labeled, “Course Topics and Papers Forum,” in the Forum section of the course website, a separate Topic has been set up for each class, with headings indicating the date of and topic for the class. Under each Class, all students are encouraged to post comments and questions about the readings for each class. To post their comments/questions, students should go to the Class listed in the Course Topics & Paper Forum and either click on the Start a New Conversation to start a new comment or click on Reply to Initial Message within an existing thread to add a comment/question. Students (and me!) should read the threads before class so that we can make efficient use of our time in class, focusing on issues that the class finds most interesting and/or about which there are more questions.

Schedule for Student Leaders

The following is the schedule for student leaders. I was not able to always assign you to one of your first three choices, given the extent of the overlaps in students’ preferences. Please consult with me before your presentation so we can talk over what you try to cover in your presentation.

<table>
<thead>
<tr>
<th>Class</th>
<th>Date</th>
<th>Student Leader</th>
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<tbody>
<tr>
<td>Class 1</td>
<td>10/14/15</td>
<td>Joe Hotz</td>
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<tr>
<td>Class 2</td>
<td>10/19/15</td>
<td>Joe Hotz</td>
</tr>
<tr>
<td>Class 3</td>
<td>10/21/15</td>
<td>Xian Jiang</td>
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<td>Class 4</td>
<td>10/26/15</td>
<td>Amanda Grittner</td>
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<td>Class 5</td>
<td>10/28/15</td>
<td>Chuhang Yin</td>
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<td>Class 6</td>
<td>11/02/15</td>
<td>Kanat Abdulla</td>
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<td>Class 7</td>
<td>11/04/15</td>
<td>Ning Fu</td>
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<td>Class 8</td>
<td>11/09/15</td>
<td>Joe Hotz</td>
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<td>Class 9</td>
<td>11/11/15</td>
<td>Ahmet Degerli</td>
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<td>Class 10</td>
<td>11/16/15</td>
<td>Allison Saito</td>
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<td>Class 11</td>
<td>11/18/15</td>
<td>Rebecca Sayers</td>
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<tr>
<td>Class 12</td>
<td>11/23/15</td>
<td>Daniel Garrett</td>
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Schedule of Classes, Topics and Papers

Those papers in **bold** will be the focus of class discussion. Papers that are underlined are papers that provide surveys and critical assessments of topics; they should be read by all students, even if they are not the focus of a particular class.

**Earnings functions and human capital investment models**

*Class 1:* Wed., Oct. 14  
Introduction (Hotz); *Willis (1986, pages 525-556)*; Ben-Porath (1967); Mincer (1974); *Heckman, Lochner & Todd (2006; pp. 310-341)*.

*Class 2:* Mon., Oct. 19  
*Willis and Rosen (1979)*; *Willis (1986, pages 556-590)*

**The Roy Model & Pricing of Skills**

*Class 3:* Wed., Oct. 21  
*Willis (1986; 574-581); Willis & Rosen (1979); Heckman & Sedlaceck (1986); Heckman & Honore (1990); Gould (2002)*

**Estimating the returns to education**

*Class 4:* Mon., Oct. 26  
*Card (1999), Card (2001); Carneiro, Heckman and Vytlacil (2011)*

*Class 5:* Wed., Oct. 28  
*Angrist and Krueger (1991); Rosenzweig and Wolpin (2000, especially Sect. 3)*

**Skill Formation and Human Development**

*Class 6:* Mon., Nov. 2  
*Cunha and Heckman (2007b); Cunha and Heckman (2008); Todd and Wolpin (2003)*

**Effects of School Quality**

*Class 7:* Wed., Nov. 4  
*Card and Krueger (1992a); Heckman, Layne-Farrar, and Todd (1996)*

**Heterogeneity in Human Capital Investment: College Major Choice & Consequences**

*Class 8:* Mon., Nov. 9  
*Altonji (1993); Arcidiacono (2004); Altonji, Blom and Meghir (2012); Arcidiacono, Hotz and Kang (2012)*

*Class 9:* Wed., Nov. 11  
*Grogger & Eide (1995); Malamud (2011); Arcidiacono, Aucejo & Hotz (2015)*
Heterogeneity in Human Capital Investment: Post-Educational Skill Acquisition

**Class 10:** Mon., Nov. 16  
Sanders and Taber (2012); Altonji & Williams (2005); Dustmann & Meghir (2005)

**Class 11:** Wed., Nov. 18  
Gathmann and Schonberg (2010); Kambourov & Manovskii (2009); Yamaguchi (2012)

Structural Models of Human Capital Accumulation

**Class 12:** Mon., Nov. 23  
Keane and Wolpin, (1997); Imai and Keane (2004)
Reading Lists by Topic

This a more comprehensive list of readings than we will cover in class. These papers are provided for students who wish to read further on particular topics and for those who are considering writing a field paper related to one or more of the topics we consider in this course. Papers in bold will be covered in class.

1. Human Capital Investment Models: Schooling, Work Experience and Earnings Functions


2. Estimating the Returns to Education


3. The Effects of School Quality


4. The Effects Types of Schools (Public vs. Private)


5. Education Production Functions


6. Skill Formation and Human Development


7. Models of Intergenerational Transmission of Human Capital and Skills


8. Signaling/Screening Models


9. Heterogeneity in Human Capital Investment: Courses of Study in High School and College


identifier for non-ignorable non-response bias,” *Journal of Econometrics*, 144: 479–91


10. Borrowing Constraints and College Education


11. Heterogeneity in Human Capital Investment: Post-Educational Skill Acquisition, General vs. Specific Human Capital and More


ical Economy, 93(6): 1077-1126.


12. Structural Models of Human Capital Accumulation


