Fall 2019 University of North Carolina – Chapel Hill Economics 880

Labor Economics I

Dr. Klara S. Peter

This syllabus contains important information about this class including important assignment dates, class policies, and topics to be covered. This syllabus provides a general plan for the course; deviations may be necessary.

Office: 306C Gardner Hall Office Hours: Tuesdays and Thursdays by appointment via Calendly: <u>https://calendly.com/ksp0101/office-hours</u> Office Phone: 966-3669 Email Address: <u>kpeter@unc.edu</u> Class Schedule: 8:00-9:15 am TTh, Gardner – Rm 209

I. COURSE DESCRIPTION

The course is designed to equip students with a variety of theoretical and empirical tools commonly used in the labor field. We will cover the advanced theory and empirical models of labor supply, human capital, income inequality, immigration, and informal labor markets. Using real-world survey data, we will replicate some of the published studies. We will learn how researchers evaluate policies affecting labor markets, including tax and welfare reforms, education programs, minimum wage and labor regulation, immigration policies, etc. Throughout this course, students will gain substantial data management skills as well as improve their programming skills in Stata. The class work will be done in various formats, such as a traditional lecture, discussion of research papers, working in groups, and a research workshop with supervised programming in class.

II. COURSE COMPONENTS

Your performance in this course will be evaluated based on the following assignments:

Homework assignments	15%
Prospectus of research project (2-3 pages)	5%
Research paper (15 pages)	25%
Presentations and peer-review (2 pages)	10%
Final Exam	45%

• Homework assignment (15%)

There will be a series of empirical exercises to help students gain experience dealing with data sets and estimation methods. You will chose one of the six data sets for your homework assignments. Questions will be generic and applicable to all six data sources. The data sets that will be used during class and for homework assignments represent the long panel surveys of individuals such as the U.S. Panel Study of Income Dynamics (PSID), the U.S. National Longitudinal Survey of Youth (NLSY), the U.S. Current

Population Survey (CPS), the China Health and Nutrition Survey (CHNS), the Russia Longitudinal Monitoring Survey (RLMS), and the German Socio-Economic Panel (SOEP). Because the answers will be provided on the due date, homework assignments submitted after the due date will receive no credit.

• Prospectus of research project (5%, due is September 24)

The prospectus is an extended plan of your research paper. It states your research question, briefly highlights why your research question is relevant/important to study, cites previous studies on a similar topic, indicates data sources, presents a simple model with the error structure, lists variables, and discusses potential issues with the validity of your model. I will provide examples and teach you how to minimize threats to the internal validity of your research. The length of prospectus is 2-3 pages. In the process of working on your research project, you will meet with me in my office to discuss your research question, proposed research methods, and empirical results.

• Research paper (25%, due is November 26)

The final paper is about 15-20 pages long. It should use micro-level longitudinal surveys of households or administrative labor data, estimate an empirical model that addresses the causality and demonstrate at least two new research methods learned during the course. The paper cannot be used for credit in another class. The paper must be submitted by the due date. Papers handed in after the due date but before the week of final examination will be marked down by 50%. Papers handed in during or after the week of final examination will receive no credit.

• Presentations and peer-review (10%)

You will be asked to lead the class discussion for one published article. You will also present your research for 10 minutes followed by a five to ten minute Q&A session. The date of presentation will be assigned randomly throughout the semester. This implies that some students will be presenting a preliminary version of their paper (or plan), while others will be presenting a complete (or nearly complete) version depending on the date. For each presentation, two random students will be assigned as discussants (or referees). The presenter must send the prospectus, the latest draft of the paper, and presentation slides to both discussants and myself at least 2 days prior to presentation. The discussants will prepare 1-2 pages of written comments ("referee report") aimed at improving the paper and also lead the Q&A session.

• Final exam (45%, December 12)

Your final exam will be held on **December 12th at 8:00 am**. Details on the format of the exam will be discussed as the semester progresses. Material for the exam will draw from your readings, empirical exercises, and class lectures.

III. GRADING SCALE

The following grading scale will be employed:

90-100	High Pass
80-89	Pass
70-79	Low pass
< 70	Fail

Grades of IN (Incomplete) and AB (Absent from the Final Exam):

Please refer to the Graduate School Handbook <u>http://handbook.unc.edu/grading.html</u> for rules regarding these grades.

IV. CLASS POLICIES

Course Materials

Course materials will be placed in the Dropbox folder "ECON580_2019DB". You should check your university email and the Dropbox folder on a regular basis for announcements, handouts, and assignments.

Late Work Policy

Due dates and times of assignments are firm. No late work will be accepted after the due date.

If you must miss the final exam for any excused reason, it is your responsibility to alert your instructor and Dean as soon as possible. You may only take the make-up exam with an official university exam excuse. Please see the University policy regarding final examinations (http://www.unc.edu/ugradbulletin/procedures1.html#final_exams).

Academic Integrity

As a student of the University of North Carolina you are expected to behave in accordance with the school's honor code. Plagiarism, forgery, unauthorized collaboration and the use of unauthorized materials are only some of the behaviors that will not be tolerated in this course. If you have any uncertainties about any of your work, please approach me before an assignment's due date. I take academic integrity very seriously and will not hesitate to report any instance where I feel academic integrity has been compromised, either intentionally or unintentionally.

The Instrument of Student Judicial Government can be found here:

https://studentconduct.unc.edu/sites/studentconduct.unc.edu/files/documents/Instrument.pdf

Computers and Cell Phones

Cell phones should be silenced or turned off and stored out of sight during class.

You will have to bring a laptop with the access to Stata during the research workshop.

Email Policy

Please feel free to contact me by email if you have any questions about course policies or any personal concerns. My email is listed on the first page of this syllabus. I will try to respond to emails promptly, but if you haven't heard from me in 48 hours, please do not hesitate to resend the email. Please use your UNC email, as emails from other clients could be sent to the spam folder. Please indicate in the subject of your email that you are in ECON880. For example the subject of your email might read, "[ECON880] question about office hours."

Using Gradescope

I will register you for Gradescope using your official UNC email address.

- Most of research homework assignments will require the submission of the Stata log file that needs to be saved or scanned as a pdf file. Make sure that pages are properly oriented.
- In addition to submitting the log file, I will also ask to write models, describe approaches, interpret results, etc. These assignments must be typed using font size 10-12, including equations (e.g., by using Equation Editor) and also saved as a pdf file. Please make sure that pages are properly oriented and clearly indicate where each problem appears.

- To submit an assignment, please follow instructions here: <u>https://www.gradescope.com/help#help-center-item-student-submitting</u>
- To view submissions and interpret the rubric: <u>https://www.gradescope.com/help#help-center-item-assignments-submissions-show</u>
- You will receive an email once an assignment has been graded.
- Since the answers to assignments will be given during the class on the due date, I cannot enable late submissions.
- In some weeks, you will be asked to submit assignments in groups. To submit an assignment as a
 group, please follow the instructions here: <u>https://gradescope.com/help#help-center-itemstudentgroup-members</u>
- Assignments will be weighted differently depending on their complexity. You will be able to see the maximum points for each assignment.
- Not all assignments will be graded based on the rubric, some will receive points for the submission only. The decision on how the assignment is graded will be random and determined after the submission.

V. TEXTBOOK, READINGS, AND SOFTWARE

There is no required textbook for this class. However, you may find it helpful to consult some of these labor and econometrics books throughout the semester for reference.

Labor:

Ashenfelter, Orley and Richard Layard, eds., *Handbook of Labor Economics*, North-Holland (Vol. 1-2, 1986; Vol. 3A-3C, 1999; Vol.4A-4B, 2010).

Borjas, George, 2016. Labor Economics. 7th Edition.

Cahuc, Pierre and Andre Zylberberg, 2004. Labor Economics (graduate level)

Applied econometrics:

Angrist, Joshua and Pischke, Jorn-Steffen, 2009. Mostly Harmless Econometrics: An Empiricist's Companion (https://www.stata.com/bookstore/mostly-harmless-econometrics/).
 Cameron, A.Colin and Trivedi, Pravin, 2010. Microeconometrics Using Stata, Revised Edition

(https://www.stata.com/bookstore/microeconometrics-stata).

Cameron, A.Colin and Trivedi, Pravin, 2005. *Microeconometrics: Methods and Applications*. Wooldridge, Jeffrey, 2016. *Introductory Econometrics: A Modern Approach*, 6th edition.

Readings:

We will be reading various articles throughout the semester. The majority of articles are available online at JSTOR (www.jstor.org) if they are older than 3 years. More recent articles are available through library electronic access, NBER working paper series, and on the author's SSRN, REPEC, or personal web sites. Please let me know if you have trouble finding any articles.

Stata: The software is available via high-speed Internet from the UNC Virtual Computing Laboratory <u>http://vlc.unc.edu</u>. You may also find it on computer lab machines and on computers at the UNC library. It is also available for purchase. A six-month Stata/IC student license may be purchased for \$45 at https://www.stata.com/order/.

VI. COURSE OUTLINE

1. Research in Labor Economics

Course and field introduction. Overview of key topics and issues. Research paper in labor economics.

2. Data in Labor Economics

Confidentiality and privacy. IRB process. Types of data. Major household surveys. Administrative data and record linkage. Data preparation. The role of summary statistics. Survey design. Sample weighting. Missing data. Attrition. Outliers.

3. Labor Supply Models

Static neoclassical model of labor supply. Selection bias. Estimating the labor supply model. Division bias. Measurement error. Non-random selection into employment. Tobit model. Heckman selection model. Exclusion restrictions. Life-cycle model of labor supply. Behavioral vs. neoclassical models of labor supply. Dynamic labor supply models and GMM.

4. Policies and Labor Supply

Difference-in-difference method in evaluating the effect of the Earned Income Tax Credit on labor supply. The quantile treatment effect method for assessing distributional effects of welfare reform experiments. Regression discontinuity in evaluating social policies. Non-parametric method of bunching and its application to the impact of tax reforms on earnings and labor supply. The minimum wage debate.

5. Human Capital

Theory of human capital. Signaling hypothesis. Causal effects of education on earnings. Threats to internal validity in estimating the Mincerian earnings function. Ability bias. Instrumental variable estimates of the return to schooling. The problem of weak instruments. Using supply-side shifters as instruments. Issues with cohort-level instruments. The Roy model. Endogenous switching regression model. The marginal treatment effect method. Applications to school construction policies, college expansion, and changes in tuition.

6. Propensity score matching in evaluating schooling/training programs

Econometric vs. experimental studies. Background on propensity score matching. Balancing test. Common support assumption. The curse of dimensionality. Different methods of matching. Application to training programs.

7. Wage inequality

Trends in income inequality in the US and globally. Main theoretical explanations behind these trends. Skill-biased technological change. The role of labor market institutions (de-unionization, minimum wage) in rising income inequality. Wage decompositions. Oaxaca-Blinder, Juhn-Murphy-Pierce, DiNardo-Fortin-Lemieux, Machado-Mata, RIF-influence function.

8. Migration

Modelling individual migration decisions. Immigration and the wage structure. Wage convergence/divergence between immigrants and natives. Evaluating migration policies.

9. Informal labor markets

Definitions of informality. Why do informal labor markets exist? The formal-informal wage gap. The role of labor regulation and enforcement. Modelling informality.

VII. UNC STUDENT SERVICES

Counseling and Psychological Services (CAPS): CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to their website: <u>https://caps.unc.edu</u> or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.

Accessibility Resources and Services (ARS): UNC-Chapel Hill facilitates the implementation of reasonable accommodations for students with learning disabilities, physical disabilities, mental health struggles, chronic medical conditions, temporary disability, or pregnancy complications, all of which can impair student success. See the ARS website for contact and registration information: <u>https://ars.unc.edu/about-ars/contact-us</u>.