

Fall 2021
University of North Carolina – Chapel Hill
Economics 580

Advanced Labor Economics

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.

Target audience: senior undergraduate students in Economics

Email Address: kpeter@unc.edu

Class Schedule: 9:30-10:45 pm TTh

Prerequisite: A grade of C or better in ECON 400 and 410; ECON 480 or 450 or 551, or permission of the instructor.

Office Hours: Tuesdays and Thursdays by appointment via Calendly:

<https://calendly.com/ksp0101/office-hours>

- You will find the zoom ID and passcode for office hours in the above link.
- When you zoom in, you will be in a waiting room. I will let you in as soon as the student before you leaves their session so just be patient.
- If you cannot make it, please cancel your appointment at least 3 hours in advance. Do not sign up just in case. Come when you have questions. Use one 20-min interval per person.
- Please come prepared with questions to get the most out of office hours.

Class mode

- Class mode is in-person. The class meeting will not be recorded.
- Zoom will be used for individual meetings, screen sharing, and work in groups.
- The meeting ID and passcode will be sent individually to enrolled students. During the zoom sessions, please **turn your videos on**.

Course Materials

- Course materials including data sets will be placed in the Dropbox folder “**ECON580_2021DB**”.
- I recommend installing the Dropbox app to allow the Stata do file to access the original data files in the Dropbox folder.
- Check your university email and the Dropbox folder on a regular basis for announcements, handouts, and assignments.

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 COVID-19-related policies. 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.

This course meets the "**Research and Discovery**" objective of the IDEAs in action curriculum.

Students immerse themselves in a research project and experience the reflection and revision involved in producing and disseminating original scholarship or creative works.

II. COURSE COMPONENTS

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

Homework assignments	20%
Participation	5%
Prospectus of research project (2-3 pages)	5%
Research paper (15 pages)	25%
Presentation and peer-review (2 pages)	10%
Final Exam	35%

- *Homework assignment (20%)*

There will be a series of empirical exercises to help students gain experience dealing with data sets and estimation methods. Because the answers will be provided on the due date, homework assignments submitted after the due date will receive no credit.

- *Participation (5%)*

Participation in this class is demonstrated through attendance, attention, making substantive contribution to discussions, and completing in-class assignments. I expect you to be on time, have completed the assigned readings, and actively engage and participate in the classroom activities.

- *Prospectus of research project (5%, due is September 14)*

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 16)*

The final paper is about 15-20 pages long. The paper uses the Current Population Survey, American Community Survey or other reputable micro-level survey of households or administrative labor data, estimates an empirical model that addresses the causality and demonstrates 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 submitted after the due date but before the week of final

examination will be marked down by 50%. Papers turned in during or after the week of final examination will receive no credit.

- *Presentation and peer-review (10%)*

You will present your research for 10 minutes followed by a five to ten-minute Q&A session. 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 the instructor and both discussants 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. I will give separate grades for presentation and for two referee reports.

- *Final exam (35%, December 7 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:

92 and above	A	80 – 81	B-	68 – 69	D+
90 – 91	A-	78 – 79	C+	60 – 67	D
88 – 89	B+	72 – 77	C	59 and below	F
82 – 87	B	70 – 71	C-		

Your grade will be determined by calculating the percentage of the possible points that you earned during the semester. Any fraction greater than or equal to 0.5 rounds up, all others round down. For example, a final weighted average of 81.5 rounds to 82, which is a B; 81.4 rounds to 81, which is a B-.

If you feel that your work has been graded unfairly, you may submit it for a re-grade within one week of your work being handed back. In order for your re-grade request to be considered, you must submit the original work with NO additional markings or changes along with a detailed description of what you believe was graded unfairly and why you think you deserve additional points. Please keep in mind that I reserve the right to re-grade any and all parts of the work which is submitted for re-assessment, and your grade may increase, decrease, or stay the same as a result.

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

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

IV. CLASS POLICIES

Missed Exam Policy

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 at 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.

Make sure your laptop is charged and you have Stata ready to be used prior to each class.

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 ECON580. For example, the subject of your email might read, "[ECON580] question about office hours."

Using Gradescope

All assignments will be submitted online using **Gradescope**. I will register you for Gradescope using your UNC email address.

- You can only submit one pdf file. Thus, separate files (such as a log file, do file, your written answers, etc.) must be combined into one pdf file. Make sure that pages are properly oriented and clearly indicate where each problem appears.
- Written assignments must be typed using font size 10-12, including equations (e.g., by using Equation Editor) and also saved as a pdf file.
- To submit an assignment, please follow instructions here: <https://www.gradescope.com/help#help-center-item-student-submitting>
- To view submissions and interpret the rubric: <https://www.gradescope.com/help#help-center-item-assignments-submissions-show>
- 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: <https://gradescope.com/help#help-center-item-studentgroup-members>
- 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.

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. Articles are available through library electronic access and NBER working paper series.

Stata: The software is available via high-speed Internet from the UNC Virtual Computing Laboratory <http://vlc.unc.edu>. 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/>. Materials for understanding data analysis techniques for Stata: <https://stats.idre.ucla.edu/stata>

VI. COURSE OUTLINE

NOTE: THE COURSE TOPICS WILL INCLUDE THE LABOR MARKET ANALYSIS OF THE CURRENT COVID-19 SITUATION.

- Course and field introduction. Overview of key topics and issues. Research paper in labor economics.
- Introduction to Stata. Writing the DO file. Programming. Drawing graphs.
- Data in Labor Economics. Introduction to IPUMS, Current Population Survey, and American Community Survey. Data preparation. Calculating basic labor statistics.
- Estimating and interpreting the OLS earnings and employment models. Interpreting interaction effects. Marginal effects.
- Causality and internal validity in the linear model. Assumptions on the error term.
- Difference-in-difference method. Using DID in policy evaluation. Application to the effect of minimum wage on employment and income. Application to the effect of the Earned Income Tax Credit on labor supply.

- The quantile treatment effect method for assessing distributional effects of welfare reform experiments.
- Application of the DID method to evaluating the effects of COVID-19 policies on labor market outcomes.
- Static neoclassical model of labor supply. Accounting for the selection bias in estimating the labor supply model. Non-random selection into employment. Heckman selection model. Exclusion restrictions.
- Dynamic labor supply models. Employment transition probabilities. Estimating the employment transitions in the time of COVID-19.
- Joint modeling in labor economics. Hours of work and employment. COVID spread and job mobility. Health insurance and job type.
- Trends in income inequality in the U.S. Main theoretical explanations behind these trends. Skill-biased technological change. The role of labor market institutions (deunionization, minimum wage) in rising income inequality.
- Decomposition of earnings inequality. Oaxaca-Blinder decomposition. RIF regression. Quantile decompositions.
- Theory of human capital. Signaling hypothesis.
- Causal effects of education on earnings. Ability bias. Instrumental variable estimates of the return to schooling. The problem of weak instruments. The Roy model. Applications to school construction policies, college expansion, and changes in tuition.
- The effect of COVID-19 on human capital.
- Propensity score matching. Balancing test. Common support assumption. Application to training programs and college quality.
- Modelling individual migration decisions. Immigration and the wage structure. Is there a wage convergence between immigrants and natives? Immigration and the host country's economy. Evaluating migration policies.

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: <https://caps.unc.edu> 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: <https://ars.unc.edu/about-ars/contact-us>.

Diversity statement: I value the perspectives of individuals from all backgrounds reflecting the diversity of our students. I broadly define diversity to include race, gender identity, national origin, ethnicity, religion, social class, age, sexual orientation, political background, and physical and learning ability. I strive to make this classroom an inclusive space for all students. Please let me know if there is anything I can do to improve, I appreciate suggestions.

Title IX Resources: Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Please contact the Director of Title IX Compliance (Adrienne Allison – Adrienne.allison@unc.edu), Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (gvsc@unc.edu; confidential) to discuss your specific needs. Additional resources are available at safe.unc.edu.