# University of North Carolina at Chapel Hill ECON 480 LABOR ECONOMICS

#### Fall 2025

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Lecture Time: SEE SECTIONS
Lecture Place: Gardner 307

Course Description: ECON 480 is an introduction to the theory of labor markets and labor market issues. In this course students will learn how the interaction of firms and workers in the labor market leads to outcomes like wages, employment, unemployment, wage differentials between different workers.

**Prerequisites:** As indicated in the course catalog, ECON 101, ECON 400, and ECON 410 are the required pre-reqs for this course. Much of our material will build upon the concepts of optimization covered in ECON 410. You are expected to be comfortable with applying these techniques to problems, including utility maximization subject to a constraint, profit maximization, and computing elasticities.

Course Objectives: In this course, students will learn to apply the tools of economic analysis to the labor market. In order to do so, our first objective will be to develop a simple theoretical model of labor supply and labor demand, which we will then consider together to see how the labor market reaches equilibrium. In the second half of the course, we will then extend, alter, and break this model in order to understand particular features that characterize the labor market. Students will analyze human capital development and education, alternative pay schemes, wage differentials, hedonic wage theory, discrimination in the labor market, government involvement in labor markets, and unemployment.

Course Webpage: Canvas will be the primary way to get course information and updates. I will communicate developments and reminders using Canvas announcements. Our page will have a detailed outline of course modules, complete with lecture slides (as they become available), supplemental materials, and assignment details. You will be able to access homeworks and your course grades on Canvas. It is your responsibility to check Canvas regularly, and to ensure that you are receiving announcements promptly.

### Canvas link

Sections: Students in this course have enrolled either in Section 001 or in Section 002. Lecture will be held on Tuesdays and Thursdays in Gardner 307 from 11:00-12:15 (Section 001) or from 12:30 to 1:45 (Section 002). We will have one course Canvas site shared by both sections, which will appear as ECON480.001.FA25 for both sections. Both sections will operate on the same course schedule. You should plan to attend the lecture for the section in which you have enrolled. You are welcome to attempt to sit in on the other section's lectures, but only if there are extra seats after everyone enrolled in that section is seated.

### You must sit for exams in the section in which you are enrolled.

**Instructor Availability:** I am available for help with assignments, to answer your questions, or to just chat

- on Monday at 1:00-2:00PM in EconAid
- on Wednesday at 2:00-3:00PM in EconAid
- on Wednesday from 5:30-6:30PM at The Gathering Place (157 E Rosemary St 2nd Floor, Chapel Hill)

Course Email/Questions Policy: Please message me through Canvas. If you have general questions about the course material or procedures, check the course syllabus, Canvas page, and Canvas announcements. Most general concerns can be addressed this way. You may also ask me these questions during class or office hours, or ask a classmate. Please use proper formatting when sending messages (Ex: Example 1, Example 2). If you have not received a response from me in 48 hours, please resend the email if the following are true: (1) you sent the message using Canvas (2) your question does not fit into these underlined categories:

I will not respond to messages asking about something addressed in the syllabus or answered on Canvas, nor will I respond to emails asking for changes to your final course grade.

# Required Course Materials:

**Textbook:** The required text is *Economics* 9<sup>th</sup> edition by George Borjas. Older editions as far back as the 6<sup>th</sup> edition are also acceptable, as are digital editions. As a supplement to the required text, consider consulting a recent edition of either *Modern Labor Economics: Theory and Public Policy* by Ronald G. Ehrenberg and Robert S. Smith or *Contemporary Labor Economics* by McConnell, Brue and Macpherson.

Gradescope: You will turn in problem sets and recitation exercises using Gradescope. You can register for Gradescope for this course on our Canvas page, by clicking on the link on the menu on the left hand side. It is your responsibility to make sure your assignments are legible. This also means that you should complete assignments in such a way that they are scanned properly and readable (e.g. use pen or pencil in a dark color, do not write so hard that the color bleeds through to the other side of the page, etc.). Gradescope will let you use a scanner (free scanners can be found in the libraries) or your phone to upload assignments. When uploading an assignment, make sure the pages are properly oriented and clearly indicate where each problem appears.

# Course Components:

**Lecture:** Lectures for this course are meant to be an active learning process. In addition to me talking to you, lectures will be composed of a mix of classroom activities and demonstrations, example problems we solve together, and opportunities for you to ask questions and guage your understanding. Lecture will be held in person.

Lecture attendance is not mandatory, but you are encouraged to attend lectures if you are feeling healthy.

Weekly Quizzes: There will be one online quiz for each chapter of the textbook, due during the week when we cover that chapter. These quizzes are designed to be a small incentive to keep up with course readings, and are intended to be relatively easy if you have been keeping up with the readings. Quizzes will be completed via Canvas, and will be available to complete for two full days (Thursday and Friday). The quiz will open at midnight Wednesday night and be available until midnight Friday night. You will have one attempt for each quiz. Once you start the quiz, you have 60 minutes to finish and submit it. Students are not allowed to communicate with each other about quizzes or assist each other in completing a quiz under any circumstances. Doing so will constitute academic dishonesty and will result in a grade of 0 on that quiz. Each student's two lowest quiz grades will be dropped at the end of the term. The two dropped quizzes policy is designed to deal with tech mishaps, a forgotten quiz, or any other snafus. As such, late quizzes will not be accepted and no make-up quizzes will be offered.

**Problem Sets:** There will be 5 problem sets due throughout the term. Problem sets will be submitted through Gradescope. These problem sets will provide you with opportunities to work through more in-depth problems, practice your math and graphing skills on paper, and develop an ability to communicate economic thinking and analysis. You should think of these assignments as practice for the short-answer portion of your exams. You must submit your own problem sets, but collaboration with other students is allowed. Word-for-word copying of answers from others, or from online sources, is not allowed. The rough schedule of

problem set due dates is included in the tentative schedule at the end of this syllabus. Exact due dates for each problem set will be listed on canvas and included on the problem set PDFs themselves. Late problem sets will not be accepted after the due date, and no make-up problem sets will be offered. Each student's lowest problem set grade will be dropped at the end of the term.

Valuing Your UNC Degree: In this project you will map out a hypothetical career path to evaluate the returns to your college degree. You will use salary data from recent university graduates to estimate the rate of return to your UNC degree, and present your findings in a short report. More detailed guidelines and a rubric will be posted on Canvas and discussed in class. You may discuss the excel portion of the assignment with your classmates, but every student must do their own research, make their own spreadsheet, and write their own assignment.

Midterms & Final: The two midterms and final for this course will be administered in person. Miderms for each section will be administered in that section's classroom during that section's scheduled class time. The final will be administered at the time and place indicated by the Registrar's office, and will be comprehensive. You must sit for exams in the section in which you are enrolled. Dates for the midterms and final are given below.

All exams will be closed note and closed book. You may have a pen or pencil, a ruler or straightedge, and a non-programmable 4-function calculator at your desk while taking an exam. Any other forms of assistance or sources of information are prohibited. Any violations of academic integrity involving an exam will result in a failing grade for the course. All cell phones must be turned off during examination periods. No student will be given an exam 30 minutes following the commencement of that exam.

Absences on exam days are the only absences that require notification and documentation. Approved reasons for missing a midterm include severe illness, disability, pregnancy, significant health condition, personal/family emergency, participation in an authorized university event, or a religious observance. Please send me an email before the start of the exam letting me know you will be absent and provide official documentation either to me or the University Approved Absence Office within 5 business days of the missed exam. If appropriate documentation is received, you will be permitted to shift the weight of the midterm to the final exam.

If you are unable to attend the final exam, then you will need to provide me with an official "Exam Excuse" from the Dean's Office, Campus Health, or Academic Advising no later than the last day of classes (or by the start time of the final exam in the case of sickness during the final exam). The make-up for the final exam will be held on the reading day following the exam during the economics common make-up exam time.

## Course Policies:

**Grading Policy:** Your grade in this course will depend on 5 problem sets, roughly 14 reading quizzes, one small project, two midterms, and a final. The traditional grade scale (90-100%  $\rightarrow$  an A of some kind, 80-89%  $\rightarrow$  a B of some kind, et cetera, modified by + and - where applicable) will be used as a baseline for course grades. Letter grades will never be worse than this scale would imply, but a favorable curve may be applied at my discretion. In other words, a 90% will never be worse than an A of some kind, but I may decide that the boundary between an A and a B falls somewhere below a 90%. Your final percent grade will be calculated under the following scheme. Canvas will display your current course grade based on this scheme.

**Grade Appeals:** For assignments submitted on Gradescope, regrade requests can be submitted online via the Gradescope website for one week after the assignment grades have been returned. Please make sure you understand how to interpret the Gradescope rubric before submitting a regrade request (e.g. on your

Assessment	Scheme
Reading Quizzes	5%
Problem Sets	20%
Valuing Your Degree	10%
Midterm 1	20%
Midterm 2	20%
Final	25%

returned work, you will see the entire rubric for the assignment. Entries in grey do NOT apply to your exam, and entries highlighted in blue with a check by them DO apply to your exam). If we receive a regrade request that stems from you not taking the time to understand the rubric, we will deduct points from your assignment, and these penalties will grow as the semester progresses. Please ask a TA or the instructor in office hours if you have any questions. If you feel that your work has been graded unfairly or incorrectly (this includes errors with grade entry or addition of points), you must justify why you believe your response deserves more points. For assignments not submitted on Gradescope, please come talk to me in my help sessions.

All regrade requests should include an argument for why you feel your answer was correct. If a re-grade is warranted in the grader's or my opinion, we will re-grade the entire question when a request is made. All regrades are final.

Academic Integrity: All students are expected to follow the guidelines of the UNC Honor Code. In particular, students are expected to refrain from "lying, cheating, or stealing" in the academic context. If you are unsure about which actions violate the Honor Code, please see me or consult studentconduct.unc.edu. In any course, including mine, what constitutes cheating can change from one activity to another. Please see my guidelines for each activity. If you have any uncertainties about any of your work, please approach me before an assignment's due date. In order to ensure that each student is evaluated fairly, I will be very strict in the enforcement of academic integrity. Any violation of the Honor Code will result in, at a minimum, a zero on the assignment in question and usually an F in the course, in addition to the possibility of further university sanctions.

I do not consent to having notes from this class uploaded to the internet, including commercial note-selling websites. My course design is copyrighted by me and I do not consent to mass distribution of these materials. My lectures, including slide content, are my intellectual property and your creation of a derivative work (student notes from lecture) falls under this copyright protection. The distribution of course material (including your answers to homework and exams) to a commercial website falls under the UNC's definition of plagiarism (see Honor Code).

You must receive my permission in writing to record any of our course lectures. This includes those who have received an accommodation to use GLEAN or similar recording applications through the EOC/UCO.

Syllabus Changes: In accordance with University Policy, I reserve the right to make changes to the syllabus, including project due dates and test dates. These changes will be announced as early as possible.

College of Arts and Sciences AI Use Policy: Carolina students are expected to follow these AI guidelines:

- 1. AI should help you think, not think for you. You may be able to use these tools to brainstorm ideas, research topics, and analyze problems, but you must decide what's appropriate and accurate.
- 2. Engage responsibly with AI. You must evaluate AI-generated outputs for potential biases, limitations,

inaccuracies, false output, and ethical implications. Do not put personal or confidential data into these tools.

- 3. The use of AI must be open and documented. You should declare, explain, and cite any use of AI in the creation of your work using applicable standards (e.g., APA, MLA, course guidelines). Understand that you are ultimately 100% responsible for your final product.
- 4. Follow specific AI guidelines in this syllabus. If you are unsure, check with me. Guidance offered in this syllabus would be referenced should an issue be referred to Student Conduct for alleged academic misconduct.

Course AI Use Policy: You are permitted to use AI for assistive purposes only. For writing assignments, most notably for the valuing your degree project, this means that I expect you to write your own work and do your own research, You may use AI tools for ideation, organizing ideas, editing, grammar checking, and formatting. You may not use AI tools to write your paper for you, or to complete any literature review or searching for sources. If you have an AI agent write your work for you, or if I find AI-invented sources in your works cited, you will be marked down heavily. Depending on the severity, this may constitute plagiarism and require me to report you to the Office of Student Conduct.

For problem sets, recognize that I have assigned these problems to develop your economic reasoning skills and prepare you for exams. I expect you to work through the problems yourself in order to improve your ability to reason through difficult problems, and I strongly encourage you not to use AI tools for these assignments. In my experience from prior semesters, the points a student may gain from using AI tools on problem sets are more than offset by lower exam scores because the student does not understand the course material as well. To incentivize you to use these problem sets for their intended purpose, any blatant use of AI to eliminate your need to work through problems yourself will be penalized. You are permitted to use AI tools to help with ungraded components like practice problems, content review, etc., and you are permitted to use AI to help you study and review materials, but be aware that the best models still produce some incorrect answers, and make sure that these tools are complementing your thinking instead of substituting for it.

**Device Policy:** Cell phones and laptops should be silenced during lectures and recitations. You may use a computer during class if you feel this is the most effective way to take notes. However, I request that you sit on either side section of the classroom to avoid distracting your peers who choose not to use their laptops. If you are being disruptive with technology during lecture or recitation, the TAs and I reserve the right to have you leave class.

Attendance Policy: This is an in-person class. Attendance is not mandatory. You should be able to complete the necessary course requirements without attending the in-person components, if you so choose. Please do not come to class if you have any symptoms of COVID or any other communicable illness. If you think you might be sick, but feel well enough to attend class, please wear a mask. If you are feeling well, I strongly encourage you to attend class. All course assignments and materials will be posted online so that you can complete your work from home. Regardless of whether or not you attend class, this is a 4 credit hour class which means you are expected to spend about 12 hours per week on the course or 8 hours outside of class.

Accessibility Resources and Service: Accessibility Resources and Service(ARS – ars@unc.edu) receives requests for accommodations, and through the Student and Applicant Accommodations Policy determines eligibility and identifies reasonable accommodations for students with disabilities and/or chronic medical conditions to mitigate or remove the barriers experienced in accessing University courses, programs and activities. ARS also offers its Testing Center resources to students and instructors to facilitate the implementation of testing accommodations.

EconAid Center: The EconAid Center offers free peer tutoring in person in Gardner Hall 009 (basement

level). The EconAid Center is closed on days that the University is closed. You can find the schedule for course-specific help on our Canvas site or the full EconAid schedule is available online.

Undergraduate Testing Center: The College of Arts and Sciences provides a secure, proctored environment in which exams can be taken. The center works with instructors to proctor exams for their undergraduate students who are not registered with ARS and who do not need testing accommodations as provided by ARS. In other words, the Center provides a proctored testing environment for students who are unable to take an exam at the normally scheduled time (with pre-arrangement by your instructor). For more information, visit http://testingcenter.web.unc.edu/.

**Learning Center:** Want to get the most out of this course or others this semester? Visit UNC's Learning Center at http://learningcenter.unc.edu to make an appointment or register for an event. Their free, popular programs will help you optimize your academic performance. Try academic coaching, peer tutoring, STEM support, ADHD/LD services, workshops and study camps, or review tips and tools available on the website.

Writing Center: For free feedback on any course writing projects, check out UNC's Writing Center. Writing Center coaches can assist with any writing project, including multimedia projects and application essays, at any stage of the writing process. You don't even need a draft to come visit. To schedule a 45-minute appointment, review quick tips, or request written feedback online, visit <a href="http://writingcenter.unc.edu">http://writingcenter.unc.edu</a>.

Counseling and Psychological Service: UNC-Chapel Hill is strongly committed to addressing the mental health needs of a diverse student body. The Heels Care Network website is a place to access the many mental health resources at Carolina. CAPS is the primary mental health provider for students, offering timely access to consultation and connection to clinically appropriate services. Go to their website https://caps.unc.edu/ or visit their facilities on the third floor of the Campus Health building for an initial evaluation to learn more. Students can also call CAPS 24/7 at 919-966-3658 for immediate assistance.

Policy on Non-Discrimination: The University is committed to providing an inclusive and welcoming environment for all members of our community and to ensuring that educational and employment decisions are based on individuals' abilities and qualifications. Consistent with this principle and applicable laws, the University's Policy Statement on Non-Discrimination offers access to its educational programs and activities as well as employment terms and conditions without respect to race, color, gender, national origin, age, religion, genetic information, disability, veteran's status, sexual orientation, gender identity or gender expression. Such a policy ensures that only relevant factors are considered, and that equitable and consistent standards of conduct and performance are applied. If you are experiencing harassment or discrimination, you can seek assistance and file a report through the Report and Response Coordinators (email reportandresponse@unc.edu or see additional contact info at safe.unc.edu) or the Equal Opportunity and Compliance Office at https://eoc.unc.edu/report-an-incident/.

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. Reports can be made online to the EOC at <a href="https://eoc.unc.edu/report-an-incident/">https://eoc.unc.edu/report-an-incident/</a> or by contacting the University's Title IX Coordinator (Elizabeth Hall, titleixcoordinator@unc.edu) or the Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu). Confidential resources include Counseling and Psychological Services and the Gender Violence Services Coordinators (gvsc@unc.edu). Additional resources are available at safe.unc.edu.

**Student Athletes:** If you are a student athlete and will need special accommodations, it is your responsibility to notify me in a timely and appropriate manner, and to support your request for special accommodations by providing appropriate documentation.

Acceptable Use Policy: By attending the University of North Carolina at Chapel Hill, you agree to abide by the University of North Carolina at Chapel Hill policies related to the acceptable use of IT systems and

services. The Acceptable Use Policy (AUP) sets the expectation that you will use the University's technology resources responsibly, consistent with the University's mission. In the context of a class, it's quite likely you will participate in online activities that could include personal information about you or your peers, and the AUP addresses your obligations to protect the privacy of class participants. In addition, the AUP addresses matters of others' intellectual property, including copyright. These are only a couple of typical examples, so you should consult the full Information Technology Acceptable Use Policy, which covers topics related to using digital resources, such as privacy, confidentiality, and intellectual property. Additionally, consult the Safe Computing at UNC website for information about data security policies, updates, and tips on keeping your identity, information, and devices safe.

## Tentative Schedule:

Week	Major Topics	Important Dates	Chapters	Major Assignment
1	Syllabus, Labor Market	First day of class	Borjas Ch. 1	Sign up for Grade-
	Fundamentals	(08/19) <b>Add class</b>		scope on Canvas
		deadline $(08/22)$		
2	Labor Supply	Drop deadline	Borjas Ch. 2	
		<b>Friday</b> (08/29)		
3	Labor Demand		Borjas Ch. 3	Problem Set 1
4	Labor Market Equilibrium		Borjas Ch. 4	
5	Compensating Differen-		Borjas Ch. 5	Problem Set 2
	tials & Hedonic Wage			
	Theory			
6	Wrap up, Midterm Review	Midterm 1		STUDY
		<b>Thursday</b> (09/25)		
7	Education		Borjas Ch. 6	
8	Education	No class Tues-	Borjas Ch. 7	
		day (10/07)		
9	The Wage Structure	No class Thurs-	Borjas Ch. 7	Problem Set 3
		day (10/16)		
10	Principal Agent Problems,		Borjas Ch. 11	
	Alternate Pay Schemes			
11	Unemployment and Search		Borjas Ch. 12	Valuing Your Degree
				Project
12	Unions		Borjas Ch. 10	Problem Set 4
13	Wrap up, Midterm Review	Midterm 2		STUDY
		<b>Thursday</b> (11/13)		
14	Labor Market Discrimina-		Borjas Ch. 9	
	tion			
15	Wrap up	No class Thurs-		
		day $(11/27)$		
16	Wrap up & Review	Final class Tues-		Problem Set 5
		day (12/02)		
Finals				