Note: This syllabus is designed for a 16 week (semester-length) graduate course that meets twice per week.

1 Course Objectives

1.1 Background

This is sort of an unusual labor course. To understand that, it’s helpful to know a few things: a brief history of labor, the pervasive challenge in labor, and the stereotype of labor economists. Those things will frame my concerns about labor economics.

The history. Two bits of history are relevant. First, Gary Becker was a labor economist who (perhaps unrelatedly) happened to revolutionize economics forever by dramatically expanding the set of “acceptable” research topics. Because he came from labor, labor economists have been even more tolerant of broad and non-traditional questions than other fields. There’s a huge range of work that people call labor. Second, lots of the pioneering applied microeconometric advances that have recently revolutionized economics came from labor economists. Thus, the standards for identification and demands for strong causal evidence have risen faster in labor than elsewhere. I’ll come back to these two historical events in a moment.

The challenge. But first, I make the following strong and controversial claim: It is harder to “do” causal inference in labor than other applied microeconomics fields. I say that because causal inference/identification comes from sharp changes and contrasts, but a defining feature of markets (including labor markets) is that no arbitrage conditions imply things move slowly and gradually. Thus, by construction, it’s harder to get identification when the outcomes of interest are prices (wages) and quantities (employment) in markets.

The stereotype. So I claim labor is more tolerant of research question diversity, has higher causal inference standards, and that it’s necessarily more difficult to answer the traditional labor questions (i.e., employment-related questions). I think these have led to the stereotype of a labor economist as someone who’s willing to answer any question very rigorously, provided that the context allows for tight compelling causal inference and that the theoretical model (if any) behind the research question is less than two pages. That image worries me.

My concern. My concern is that the labor market is extraordinarily important. It’s hard to overstate the importance of jobs. We need people to study this, and I’m scared that all the labor economists’ focus is occupied by other (also important) areas. Simultaneously, I worry that labor economists are isolating themselves and ignoring insights from other fields because they’re “not identified” or “too dependent on untestable model assumptions” or “purely theoretical.” Lots of fields are doing things that are essential for understanding the labor market, and I seem to see lots of labor economists unaware of these results from neighboring fields. With that in mind, let me tell you what I plan to do.
1.2 Goals

This course endeavors to do three things.

1. Summarize important recent labor economics work.
2. Summarize things non-labor things that labor economists should know.
3. Illustrate what makes successful research.

Recent labor research. Traditional labor classes have often been organized by “labor supply” and “labor demand.” I don’t like that. For instance, I think these classes often put too little emphasis on wages and unemployment. I think that’s partly because prices and quantities are determined by where supply meets demand, so splitting labor into supply and demand often leaves out things that are necessarily at the intersection. I’m going to focus on the “worker perspective” and the “firm perspective” instead. That’s a bit artificial and contrived, as well, but it’s helpful. In a way, I’m also going to prioritize breadth over depth, as we’ll spend much less time on certain issues than is normal, but that’s in the service of getting to some research that I think can be helpful to your own work and that will be important to the future of labor. I’ll put special emphasis on what I perceive to be current themes and trends, what has been successful on the market, and how I think people are approaching labor.

Recent non-labor research. The line between labor and other fields should be blurry. We’ll cover work in trade and macro, in particular, that should be on the border between them and labor.

Illustrate what makes successful research. Papers are successful for many reasons: they use a creative empirical strategy, they propose a novel question, they have a novel insight, they give a very convincing answer, they have a really important question (often important from a policy perspective). Most successful papers have two of these. The more your work has the more successful it will be. Part of my job is to tell you what we’ve learned from good papers in the past, but part of my job is to tell you why past papers are good so that you can produce good research yourself. For the papers we read, I will identify which boxes are checked, but you should push yourself to do the same with other papers.

Summary. For reasons described above, this class will endeavor to train labor economists by departing from common labor classes in two ways: 1) dropping a bunch of well-identified research that’s called labor but really has little to do with jobs, and 2) adding a bunch of less-well-identified research that’s not called labor but has a lot to do with jobs. So in a way, our focus will be more narrow; in a way it will be more broad.

2 Paper Reports

Each week, you will choose one of the two required readings and write a two paragraph summary, which you will email to me at least one hour before class. The first paragraph should summarize the paper and cover the research question, the motivation for why it’s important, an overview of the methods used to answer the question and a bare-bones justification for any key assumptions, and the result. The second paragraph should be your assessment of the paper. Is the question as important as the author claims? Is the research design reasonable and are necessary assumptions believable? Overall, what do you think of the paper? What objections do you have? Do you see any extensions? How (if at all) might this paper help you in your research?

You shouldn’t spend more than a half hour on these paragraphs, so they don’t need to be fancy or “professionally” written. They should be well thought out, clear, and insightful, but all of that work should be happening every time you read a paper (and you should still be reading and thinking about both papers each
week, even the one you don’t write about). From time to time, if one of the non-required readings is especially interesting to you, you can substitute.

3 Assignments

In addition to the paper reports, there will be four assignments:

1. **Write a proposal for restricted use data.** By week 4, you will write a proposal that could be submitted to the SSA, the BEA, the Census Bureau, a Research Data Center, a foreign country government, etc., applying for restricted access data. You will have to put some research question and design for the project in the proposal, but you don’t need to worry about being super creative, insightful, or perfectly identified. Instead, I want you to focus on making the proposal technically satisfactory. Lots of modern labor research uses restricted data, and there are practical barriers to getting that data (filling out forms, writing in a way that will resonate with you application reviewers, etc.). Too many graduate students never do this because of those technical barriers. This assignment is to get those out of the way. You shouldn’t feel obligated to come up with your job market paper by week 4; you don’t need to actually submit. Even if you do then while you’re using the data the project might morph and evolve into something else. I just want to make sure you’re ready with the structure of a proposal in a reasonable enough time frame that you could submit, get approved, and get stuff done in time to go on the market.

2. **Present a new empirical fact.** By week 8, you will take an existing or (preferably) new dataset and show a finding that you consider novel, interesting, and surprising. This could (for instance) be a correlation between two things, a change in something over time, a difference in something between two groups or two countries, or lots of other things, but you shouldn’t feel pressure to make a causal claim. Make a basic effort to ensure that this isn’t widely known, but you don’t need to scour the literature to ensure that it’s totally new (I just don’t want you to present something that dozens of papers have been written about). The bar for interesting and surprising is also up to you to argue and convince the rest of us. We will go to lunch together (my treat) and go around with each of you saying your fact, why you think it’s interesting, and we’ll chat about what could be done next. This whole process (“Here’s a thing that’s true in the data that I find fascinating because X and that I don’t think people know about.”) is often how real-life conversations go, and it has been the birth of many actual projects. In the best case scenario, this exercise produces something that becomes Figure 1 in the introduction to a paper devoted to explaining this awesome, interesting fact. Note that the more creative you are in choosing the data, the easier it will be to find something that is novel and interesting. That’s general insight.

3. **Empirical project.** By week 12, you will write a short (3-10 page) empirical paper around an actual finding. There are actually a lot of skills involved in communicating and framing an empirical result, and I want you to have some practice with that. In other words, this is purely a skill-based exercise. You should write up a clean explanation of the question, the method, the assumptions, the data, the results, and some basic robustness (anything that’s reasonable to expect given the data you use for the main result; there’s no pressure to collect and combine new data for “better” robustness). You should include conclusions and a clear explanation of what you want the reader to learn from the exercise. It does not need to be causal, but you should include some discussion of the assumptions under which it is causal. There is absolutely no pressure to have a creative idea. I want a good, clean, well-executed, well-explained analysis, and I
do not care about the question. Rather, I want you to practice getting data and doing econometrics. To make this easier for you, I will have a list of questions which you’re welcome to choose from.

4. **Paper proposal.** By the final exam, you’ll write a paper proposal. This is where I care about your creativity and the question you’re asking. It should include motivation and framing, but doesn’t need an exhaustive literature review. It is more important to be very specific and clear about the question and why it’s important or interesting; what assumptions you’ll need to rely on and how those could be tested; what data you’ll need, where it is, and how you might get it; what you hope to find and what you expect to find (hopefully those are the same); and as exhaustive as possible a summary of criticisms (alternative interpretations of your finding, identification criticisms, and objections to your motivation and question) and how you’ll respond to those. I want you to be thinking hard about what you’re doing and how you’ll justify it. Sometimes it will be possible for you to test some of your assumptions and even get some preliminary results, and if it is then I encourage you to do that for a proposal. The quicker you can produce a paper the better.

The purpose of this class is to help you learn to do research. Research is about asking and answering questions, and both of those components are critically important for success. These four assignments collectively get at those two skills. Assignment 1 practices a skill that’s an increasingly important building block for answering questions: getting restricted data. Assignment 2 practices a skill that’s a common approach to asking a question: documenting a surprising fact. Assignment 3 practices the skills required to actually answer questions. Assignment 4, on the other hand, gives you a chance to practice asking a question and think and plan the process for answering it (without actually having to implement anything).

You can do all of these on different things if it’s easier for you. You can do them all on one project (write a proposal, execute a thorough analysis of a simple pseudo-version of that project, document the motivating fact, and apply for access to do the more rigorous complete version of the project), but then you’d have to come up with the question by week 4 and I don’t want you to feel pressured to do that. The only one of these assignments where you should feel pressured to come up with a really interesting idea is the paper proposal. The rest are exercises to build your research skills.

4 **Final Exam**

The purpose of this course is to help you learn to do research. Thus, for the final, you will have two hours to answer these 3 questions:

1. I will give you a research question, and you will come up with a research design to answer it. I want your answer to be as realistic as possible. Obviously, you’ll have to say “Assume the data exists to...” but try to make the most reasonable and realistic assumptions possible about that data. Likewise, you can say “Assume we can use Z to instrument for X” and I’m happy to play along as long as you’re clear about what assumptions you’ll need (and which ones you would be able to test if you had real data) and why it would be reasonable to expect Z to predict X.

2. I will give you an empirical finding from a real paper that’s not on the reading list. You will do both of the following. First, how do you interpret this empirical fact, what does it imply about existing models, research findings, or policy? What would be the pitch of the paper you would write about this finding? Second, come up with some robustness checks or identification tests that you would want to see to be
convinced that the finding is real. Again, these will be from a real paper (strategically chosen so that you probably haven’t read it), so if you come up with something brilliant I’ll encourage you to reach out and suggest it to the author.

3. I will give you a policy proposal or question, and you will tell this fictional policymaker whether this is a good idea or not. I will not choose an existing policy, so you can’t draw on a direct evaluation. Rather, I want you to synthesize insights and results from existing research, highlight the key theoretical tensions in the policy (e.g., “X should increase because of Y, but A should decrease because of B, and the ultimate outcome depends on which is bigger.”), what information would help you give better advice (about the policy or empirical evidence about the labor market), what sorts of implementation features would help you evaluate the policy, and what the policymaker should know about the policy’s potential effects and the way the labor market works. I do this because I want you to recognize 1) we can’t always evaluate everything, sometimes we have to be predictive or policy would never innovate, 2) when you sit down to make actual decisions, there’s a huge range of evidence and approaches that become useful in ways you might not appreciate if you’re only thinking about how to publish in a top journal, and 3) it helps identify gaps in the literature.

These are real research skills. It might seem silly that you’re expected to do them in 2 hours, but these are things that come up in seminars, conversations, and meetings, and if you’re able to come up with something quickly, it might be the difference between job and no job, or promising co-authored project and no project.

5 Assessment

Your grade will be based on 20% the 10 paper reports (and class participation in general), 5% for the data proposal, 10% for the empirical fact, 15% for the empirical analysis, 30% for the paper proposal, and 20% for the final exam.

6 Class Schedule

*Denotes this was a job market paper.

I. BASICS

Week 1, Lecture 1. **Theory.** What are the steps and pieces of the employment relationship?

*Required reading:* Lecture notes.

*Comments:* This is a simplified but general model that shows how all the pieces we’ll study fit together.

Week 1, Lecture 2. **Empirics.** What about the real world?

*Background:* Autor, Katz, and Kearney (2008); Song, Price, Guvenen, Bloom, and Von Wachter (2015); Mas and Pallais (2016)

II. WORKER PERSPECTIVE

Week 2. **Skills.** What allows workers to produce things/sell their labor? And where do they get these skills?
**Required reading 1**: Castex and Dechter (2014)

**Required reading 2**: Pop-Eleches and Urquiola (2013)

**Extra readings, multi-dimensional skills**: Guvenen, Kuruscu, Tanaka, and Wiczer (2015); Lazear (2009)

**Extra readings, exogenous skill sources**: Chetty, Friedman, and Rockoff (2014); Jackson, Johnson, and Persico (2016); Sarvimäki and Hämäläinen (2016)

**Extra readings, endogenous skill choice**: Card (2001); Hoxby and Turner (2013); Kirkeboen, Leuven, and Mogstad (2016); Oreopoulos (2007); Pallais (2015)

**Comments**: CD14 will illustrate some useful and important facts about skills in the labor market, but we'll discuss some more detailed stuff that's going to refine that a bit. Then we'll focus on where skills come from. This literature has two very different strands: environmental factors and the study of choice. We'll talk extensively about PEU13, which frames and combines both, and then contextualize it within a much broader and rapidly growing literature.

**Week 3. Finding a job.** A few key issues facing potential workers looking for a job.

**Required reading 1**: Bertrand and Mullainathan (2004)

**Required reading 2**: Pallais (2014)*

**Additional readings**: Altonji and Pierret (2001); Clark and Martorell (2014); Forsythe (2016); Heckman (1998); Neal and Johnson (1996)

**Comments**: Any labor class should talk about discrimination at some point so we’ll do so here. Methodologically, BM04 give an early and influential example of the modern wave of experiments in applied micro; P14 shows you how that’s evolved over just one decade.

**Week 4. Productivity.** Once workers obtain a job, what do they do? In general, the answer depends on more than simply their own skills.

**Required reading 1**: Nix (2016)*

**Required reading 2**: Mas (2008)

**Additional readings**: Krueger and Mas (2004); Mas and Moretti (2009)

**Comments**: Two very different styles of doing modern labor research. N16: Get very detailed worker-firm data; propose a simple model with a novel, important implication; derive nice tests of your mechanism that use reasonable instruments. M08: Get novel data no one’s ever thought of using; propose a creative way people might think and behave that we don’t usually think about; find a neat natural experiment to test it.

**Week 5. Wages I: Traditional.** How does a worker’s product translate into the pay that worker receives?

**Required reading 1**: Jäger (2015)*

**Required reading 2**: Beaudry, Green, and Sand (2012)

**Additional readings**: Kline (2008)*; Naidu and Yuchtman (2016)

**Comments**: Econ 101 says wage equals marginal product, but no one really believes that. Here, we'll discuss more nuanced models of wage determination, the empirical challenges posed, and the very clever solutions people have come up with. Methodologically, both main papers build stylized models and focus on deriving a comparative static to separate two theories, but they then take very different approaches to estimation, which nicely illustrate various distinctions in modern labor.
Week 6. **Wages II: Behavioral/Psychological.** One set of reasons wages can deviate from marginal product has to do with the way labor markets work (discussed above). Another set has to do with how people think and behave.

*Required reading 1:* Card, Mas, Moretti, and Saez (2012)

*Required reading 2:* Gneezy and List (2006)


*Comments:* A fairly large recent literature blending behavioral and labor has focused on how people react to their pay, which in equilibrium will affect how pay is determined. I’m not an expert on it, but I want you to be aware it exists, and I want to expose you to the very different research styles used to get at these questions.

Week 7. **Employment dynamics.** Everything we’ve talked about is static, at a single point in time. What new considerations do we need to talk about how stuff changes throughout a career?

*Required reading 1:* Kahn and Lange (2014)

*Required reading 2:* Molloy, Smith, Trezzi, and Wozniak (2016)

*Additional readings:* Altonji, Smith, and Vidangos (2013); Davis and Haltiwanger (1992, 2014); Gayle, Golan, and Miller (2015); Shin and Solon (2011)

*Comments:* When we think about the labor market, lots of stuff has to do with careers, rather than point-in-time employment characteristics. We’ll start by seeing how dynamics can teach us about important static questions, then see how time trends in labor markets look when we talk about dynamic characteristics instead of static ones.

Week 8. **Interlude: The composition of the workforce.** Two things we haven’t touched on but are standard and important: Lots more women work today than they used to, and there are more immigrants.

*Women’s LFP required reading:* Cook-Stuntz (2016)*

*Immigration required reading:* Dustmann, Schönberg, and Stuhler (2016)


*More immigration readings:* Foged and Peri (2016); Lewis (2011); Monras (2015)

*Comments:* These are classic topics. With respect to women’s LFP, people usually either talk about the causes or effects. We’ll talk about the traditional effects (AAL04) as well as a more recent broader perspective (HHJK13). We’ll also mention the traditional causes (conveniently summarized by ALS08), but I want to spend extra time on the role of culture (CS16 and B16). Regarding immigration, DSS16 is a great summary of everywhere this literature has been and perhaps the best example of causal inference yet.

**III. FIRM PERSPECTIVE**

Week 9. **The product market.** We know things like market competition affect firms, but since workers work at firms, they must be affected to.

*Required reading 1:* Black and Strahan (2001)

*Required reading 2:* Khandelwal, Schott, and Wei (2013)

Comments: It may sound basic to say that a market characteristic that is firm-relevant must be worker-relevant. However, there’s been little attention to it in labor. We’ll start with a great example from BS01 who do focus on this to creatively test models of discrimination, then we’ll turn towards IO/trade/macro to see how they think about these issues and how those insights might extend to workers. I especially like KSW13 because it talks about the dual forces of competition (incentives and selection), and I worry that lots of what’s out there only thinks about incentives.

Week 10. Finding workers. Firms need workers.

Required reading 1: Dustmann, Glitz, Schönberg, and Brücker (2016)

Required reading 2: Bloom (2009)*

Additional readings: Burks, Cowgill, Hoffman, and Housman (2015); Downey and Shrader (2016); Hardy and McCasland (2015); Pallais and Glassberg Sands (2016)

Comments: This is a bit of an unusual setup. First we’ll talk about networks, one of the most important ways firms find workers. But then we’ll switch over, assume that it’s hard for firms to find workers (for any reason), and think about the implications of that.

Week 11. Managing workers. Firms have multiple workers. How do they organize them to produce output?

Required reading 1: Bloom, Eifert, Mahajan, McKenzie, and Roberts (2013)

Required reading 2: Lemieux, MacLeod, and Parent (2009)

Additional readings: Adhvaryu, Kala, and Nyshadham (2016); Bloom, Brynjolfsson, Foster, Jarmin, Patnaik, Saporta-Eksten, and Van Reenen (2016); Bloom, Propper, Seiler, and Van Reenen (2015); Bloom and Van Reenen (2007); Glover, Pallais, and Pariente (2015); Lucas (1978)

Comments: Management has gotten a lot of attention recently. I want to show you basically the single most important paper for that attention (BEMMR13), but then I want to talk about a much much older literature on performance monitoring and contract type. I want to use the fact that we’ve talked about aspects of good management for decades to frame the literature’s current management focus.

Week 12. Regulation. Regulations are intended to do things (e.g., protect workers). In general, anything that affects something that’s decision-relevant for firms/workers will affect the labor market.

Reading 1: Choose between Hopenhayn and Rogerson (1993) (structural macro) and Autor, Donohue, and Schwab (2006) (reduced form applied micro)

Required reading 2: Garicanoy, MacLargez, and Van Reenen (2016)


Comments: Regulations matter. Most labor classes focus on the minimum wage, which I’ll talk about but don’t want to go into in detail. I’ll discuss a broad range of regulations, but focus on worker protections. Methodologically, I think it’ll be an interesting week. We’ll start by pairing HR93, which is purely theoretical structural macro, with the ADS06 purely empirical reduced form labor work on the exact same question. That defines the extremes of this literature, so we’ll look at GLvR16, an excellent recent example integrating theory and empirics.

Week 13. Technology. This is an important topic that’s played a big role in many fields of economics.


Additional readings: Autor and Dorn (2013); Berman, Bound, and Griliches (1994); Beaudry, Doms, and Lewis (2010); Beaudry, Green, and Sand (2016); Downey (2016); Gaggl and Wright (2016); Michaels, Natraj, and Van Reenen (2014)

Comments: This is an extremely important and exciting literature. It’s also a good opportunity to talk about wage inequality, which all labor courses should do. We’ll see an important paper that combines powerful trends with nuanced explanations (ALM03), then follow it up with some corroborating careful causal inference (AGM15). That one-two punch is a good combination for advancing science.

IV. MISCELLANEOUS

Note: In the last few weeks I want to talk about topics that labor economists traditionally viewed as out of their area of expertise. I want to emphasize that you cannot understand labor markets without stepping outside of that comfort zone. You can protest that imports are trade, recessions are macro, geography is urban/regional, credit is finance, and none of these are labor, but you cannot treat the labor market as separate from these interconnected markets.


Required reading 1: Autor, Dorn, and Hanson (2013)

Required reading 2: Bloom, Draca, and Van Reenen (2016)

Additional readings: Autor, Dorn, Hanson, and Song (2014); Caliendo, Dvorkin, and Parro (2015); Eslava, Haltiwanger, Kugler, and Kugler (2013); Hummels, Jørgensen, Munch, and Xiang (2014); Pierce and Schott (2016); Treffler (2004)

Comments: For decades economists and politicians have worried about import competition and US jobs. We’ll read ADH13, one of a new wave of papers that seems to settle that dispute once and for all, and then turn to BDvR16 to consider nuanced questions with wide-ranging implications for other fields of labor. Though we’ll mostly focus on imports, Treffler gives us a nice balance that includes exports.

Week 15. Recessions.

Required reading 1: Kroft, Lange, and Notowidigdo (2013)

Required reading 2: Mian and Sufi (2014)

Additional readings: Hagedorn, Manovskii, and Mitman (2016); Schmieder, von Wachter, and Bender (2012, 2016); Schmieder and von Wachter (2016)

Comments: I like KLN13 because it touches on so many themes we’ve already covered and shows that combining those with macroeconomics generates even more insights. Then we’ll talk directly about the most recent recession and about policy, especially unemployment insurance, which has received a lot of recent attention.

Week 16. Odds and Ends. Two final thoughts that appear all over and are important, but don’t fit in with other topics: Geography and Credit.

Geography required reading: Dix-Carneiro and Kovak (2016)

Credit required reading: Chodorow-Reich (2014)*

More geography readings: Amior and Manning (2015); Kline and Moretti (2014); Molloy, Smith, and Wozniak (2011)
More credit readings: David, Hopenhayn, and Venkateswaran (2016); Davis, Haltiwanger, Handley, Jarmin, Lerner, and Miranda (2014); Hurst and Lusardi (2004); Lochner and Monge-Naranjo (2011); Sun and Yannelis (2016)

Comments: A few final thoughts. First, everything happens in the context of place, and it turns out there are some powerful and interesting stylized facts and themes in this literature that are relevant for labor more broadly. Second, there's a huge complex literature on credit, and it's important for labor economists to at least know of it.
References


