

Ronald G. Ehrenberg

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## ILR 240 (Lecture 1) SPRING 2007

## **ECONOMICS OF WAGES AND EMPLOYMENT**

(MW 2:55-4:10, Ives 115, 3 credits)

## **Course Description**

This course applies microeconomic models to the characteristics and problems of the labor market. It develops the modern theory of labor market behavior, summarizes the empirical evidence that supports or contradicts each hypothesis and illustrates in detail the usefulness of the theory for public policy analysis. It also illustrates how labor market models can be used to help explain the presence of various institutions that exist in the labor market and to help understand various forms of non market activity. Finally, it provides an opportunity for students to engage in econometric research projects early in their college careers.

# **Course Readings**

The text for the course is Ronald G. Ehrenberg and Robert S. Smith, *Modern Labor Economics* 9<sup>th</sup> edition (Addison-Wesley, 2006). Students would be wise to read this book very carefully and to make sure that they understand the material in it by answering the review questions at the back of each chapter. A number of the questions on each midterm exam and the final exam will be (at least) similar to these questions. Answers to the odd numbered questions appear in the back of the book.

Leonie L. Stone, *Study Guide to Accompany Modern Labor Economics* (Addison Wesley, 2006) is a useful supplement to the text. It summarizes many of the main points in each chapter and provides both multiple choice review questions and problem sets. Answers to all of the questions are found in the back of this guide. Several copies of it have been placed on reserve in the ILR Library and its purchase is not required, although I recommend that you do. Some of the questions on the midterms and the final will also come directly from this guide.

In addition to the text, other readings that discuss points not covered in the text or present interesting examples of materials covered in the text will be found on the reading list –a number of these are written by me. Each of these is available electronically (**EJ** indicates an e-journal)

#### **Course Requirements**

Two examinations during the semester and a final examination during finals week will be given. The exams during the semester will be in-class exams and will each be worth 25% in the computation of your course grade. The final exam will be worth 30% in the computation of your course grade.

All students will also be expected to work in groups of up to 4, on research papers. These papers, which will be worth 20% of your final grade, should summarize a policy issue, discuss research that has been previously done (if any) on a topic, and present original econometric analyses.

A list of suggested paper topics is attached. You will be asked to Email me with any additional topics that interest you by Wednesday January 31. I will email you a revised list of topics by Monday February 5. You then will be asked to Email me your preference for topic and for the members of the class with whom you would like to work by Wednesday February 7. You will be notified of your group assignments no later than Monday February 12. Groups <u>must</u> meet with me during the fourth or fifth (preferably fourth) week of the term and then regularly thereafter to make sure that their research is on target.

#### **Office Hours**

My office is 385A Ives Hall East. Office hours for the course will be Mondays and Wednesdays from 1:15pm to 2:45pm and by appointment at other times. Students should always feel free to contact me by telephone (5-3026) or by email (rge2@cornell.edu). My assistant is Darrlyn O'Connell, (5-4424 or dss7@cornell.edu). Ms. O'Connell "controls" my calendar and she can make appointments for you to see me. The TA for the class is Travis Lee (jtl29@cornell.edu); his office hours are Tuesdays and Thursdays from 1:15pm to 2:45pm in Uris 474

#### **Course Outline and Readings**

A. **Introduction**: The Nature of Labor Market Data and Models. Positive and Normative Economics. Pareto Optimality. Efficiency and Equity. Rationales for Government Intervention in the Labor Market. Labor Market Shortages and the Volunteer Army. Introduction/Review of Multiple Regression Analysis (2 days)

Ehrenberg and Smith, *Modern Labor Economics*,  $9^{th}$  ed. (henceforth ES), chapters 1 and 2 and the appendix to chapter 1.

Walter Y. Oi, "The Economic Cost of the Draft", *American Economic Review* 57 (May 1967): 39-62 **EJ** 

B. Labor Demand: Why Demand is Downward Sloping? Demand in the Long- and the Short-Runs. Wage Elasticities of Demand. Substitutes and Complements in Production and Gross Substitutes and Complements. Monopsony in the Labor

Market. Labor Demand in the Nonprofit and Public Sectors. Who Bears the Burden of the Payroll Tax? Analyses of the Minimum Wage. Wage Subsidies and Employment Tax Credits. (3 days)

ES chapters 3 and 4. chapter 5 (127-144) and the appendices to chapters 3 and 4.

Ronald G. Ehrenberg, "The Demand for State and Local Government Employees", *American Economic Review* 63 (June 1973): 366-377 **EJ** 

David Neumark "Living Wages: Protection For or From Low-Wage Workers?" *Industrial and Labor Relations Review* 58 (October 2004): 27-51**EJ** 

C. **Quasi –Fixed Labor Costs**: Employee Benefit Costs. The Hours/Employment Decision. The Wisdom of Raising the Overtime Pay Premium. Part-time Employment. Investments in Human Capital. Specific and General Training. Age Earning Salary Profiles. (2 days)

ES chapter 5, 145-164

Dora L. Costa, "Hours of Work and the Fair Labor Standards Act: A Study of Retail and Wholesale Trade, 1938-50", *Industrial and Labor Relations Review* 53 (July 2000): 48-66 **EJ** 

D. Labor Supply and the Household Allocation of Time: Labor force participation. Hours of work. Income and substitution effects in labor supply. Backward bending labor supply curve. Creating work incentives in social programs. Welfare reform. Earned income tax credit. Child care programs. Family labor supply decisions. Life cycle labor supply decisions. The retirement decision. Social security and labor supply. Household allocation of time to church activity. (3 days)

ES chapters 6 and 7, appendix to chapter 7

Naada Eissa and Hilary W. Hoynes, "Behavioral Responses to Taxes: Lessons Learned from the EITC and Labor Supply", *Tax Policy and the Economy* 20 (2006): 73-110 **EJ** 

Ronald Ehrenberg, Randy Ehrenberg, Daniel Rees and Eric Ehrenberg, "School District Leave Policies, Teachers Absenteeism and Student Achievement", *Journal of Human Resources* 26 (Winter 1991): 72-105 **EJ** 

Corry Azzi and Ronald G. Ehrenberg, Household Allocation of Time and Church Attendance", *Journal of Political Economy* 83 (February 1975): 57-86 **EJ** 

E. Compensating Wage Differentials and Occupational Choice: Theory of job matching. Compensating wage differentials for favorable and unfavorable job characteristics, Hedonic wage theory and the risk of injury. Occupational safety and

health policy. The trade offs between wages and pensions and wages and layoffs. The economics of criminal behavior (2 days)

ES chapter 8 and the appendix to chapter 8

W. Kip Viscusi, "The Value of Risks to Life and Health", *Journal of Economic Literature* 31 (December 1993): 1912-1946 **EJ** 

Ronald G. Ehrenberg, Paul J. Pieper and Rachel A. Willis, "Do Economics Departments with Lower Tenure Probabilities Pay Higher Faculty Salaries", *Review of Economics and Statistics* 80 (November 1998): 503-512 **EJ** 

F. **Education and Investment in Human Capital**: Theory of investment in human capital. Social vs. private benefits and costs of investments. Post schooling investments in human capital and the shape of age-earnings profiles. Gender differences in earnings profiles. The signaling role of education. (2 days)

ES chapter 9 and the two appendices to chapter 9

Dominic Brewer, Eric Eide and Ronald Ehrenberg, "Does it Pay to Attend An Elite Private College: Cross-Cohort Evidence on the Effects of College Quality on Earnings", *Journal of Human Resources* 34 (Winter 1998): 104-123 **EJ** 

Stacy Dale and Alan Krueger, "Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables", *Quarterly Journal of Economics* 117 (November 2002): 104-123 **EJ** 

G. Worker Mobility: Migration, Immigration and Turnover: Mobility as a form of investment in human capital. Empirical predictions of the model. Importance of immigration to the United States economy. Immigration policies. Who wins and who loses from immigration. Job turnover and job matching. (1 day)

ES chapter 10

George Borjas, "The Economics of Immigration", *Journal of Economic Literature* 32 (December 1994): 1667-1717 **EJ** 

Ronald Ehrenberg, Hirschel Kasper and Daniel Rees, "Faculty Turnover at American Colleges and Universities: Analysis of AAUP Data", *Economics of Education Review* 10 (Number 2): 99-110 **EJ** 

H. The Economics of the Employment Relationship-Pay and Productivity within the Firm: The employment contract. Asymmetric information. Motivating workers. Pay for performance. Individual vs. group incentives. Efficiency wages. The sequencing of pay over the life cycle. Mandatory retirement. Tournament models and the winner-take-all phenomenon. (2 days)

ES chapter 11

Ronald G. Ehrenberg and Michael L. Bognanno, "Do Tournaments Have Incentive Effects", *Journal of Political Economy* 98 (December 1990): 1307-1324 **EJ** 

**I. Gender, Race and Ethnicity in the Labor Market:** Earnings differences by gender, race and ethnicity. Theories of discrimination. Measuring discrimination. Federal programs to end discrimination. Comparable worth. (2 days)

ES chapter 12 and the appendix to chapter 12

John H. Donahue and James Heckman, "Continuous vs. Episodic Change: The Impact of Civil Rights Policies on the Economic Status of Blacks", *Journal of Economic Literature* 24 (December 1991): 1603-1643 **EJ** 

David Neumark and Wendy A. Stock, "The Effects of Race and Sex Discrimination Laws", *National Bureau of Economic Research Working Paper* No. 8215, April 2001 **EJ** 

J. Unions and the Labor Market: Models of union behavior-monopoly union and efficient contracts. Models of union growth. Bargaining theories and strike activity. Arbitration and public sector bargaining. Theory and estimates of union effects. (2 days)

ES chapter 13 and the appendix to chapter 13

Orley Ashenfelter and George Johnson, "Bargaining Theory, Trade Unions and Industrial Strike Activity", *American Economic Review* 59 (March 1969): 35-49 **EJ** 

**K.** Inequality in Earnings: Measuring inequality. Lorenz curves and Gini coefficients. Changes in inequality over time. Causes of change in earnings inequality. International comparisons. (2 days)

ES chapter 14 and the appendix to chapter 14

Richard J. Murnane and Frank Levy, "U.S. Earnings Levels and Earnings Inequality: A Review of Recent Trends and Proposed Explanations", *Journal of Economic Literature* 30 (September 1992); 1333-1381 **EJ** 

**L. Unemployment:** Stocks and flows in labor markets. Frictional, structural and demand-deficient unemployment. Models of job search and the unemployment insurance system. The natural rate of unemployment. (2 days)

ES chapter 15

David Card and Phillip B. Levine, "Extended Benefits and the Duration of UI Spells:

Evidence from the New Jersey Extended Benefit Program", *Journal of Public Economics* 78 (October 2000): 107-135. **EJ** 

# **Tentative Class Schedule**

<u>Date</u>	Course Section/Event
Mon. January 22	A: Introduction
Wed. January 24	A: Introduction
Mon. January 29	B: Labor Demand
Wed. January 31	B: Labor Demand
Mon. February 5	B: Labor Demand
Wed. February 7	C: Quasi-Fixed Labor Cost
Mon. February 12	C: Quasi-Fixed Labor Costs
Wed. February 14	D: Labor Supply
Mon. February 19	D. Labor Supply (instructor teaches from DC)
Wed. February 21	In Class Exam (Sections A – C)
Mon. February 26	D: Labor Supply
Wed. February 28	E: Occupational Choice
Mon. March 5	E: Occupational Choice
Wed. March 7	F: Human Capital Investment
Mon. March 12	F: Human Capital Investment
Wed. March 14	F: Human Capital Investment
Mon. March 19	NO CLASS- CORNELL BREAK
Wed. March 21	NO CLASS-CORNELL BREAK
Mon. March 26	G. Worker Mobility
Wed. March 28	IN-CLASS EXAM (Sections D-F)
Mon. April 2	H: Pay and Productivity
Wed. April 4	H: Pay and Productivity
Mon April 9	I: Gender Race and Ethnicity
Wed. April 11	I: Gender Race and Ethnicity
Mon. April 16	J: Unions
Wed. April 18	J: Unions
Mon. April 23	K. Earnings Inequality
Mon. April 23 (7:30pm)K: Earnings Inequality Please note there are two class on this date.	
Wed. April 25	No Class Instructor Away
Mon. April 30	L: Unemployment
Wed. May 2	L: Unemployment
Fri. May 4	Papers Due

Note: Check the final exam schedule for the time and place of the final

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#### SUGGESTED PAPER TOPICS

A major component of this course is a group research project that will lead to the submission of a research paper. These papers must include statistical analyses of data. You are free (and encouraged) to work in groups of up to 4 students on this project.

I have listed below a set of "suggested' topics, all of which derive from my current teaching and research interests, the economics of higher education. At the end of each topic I indicate the section of the course to which the topic relates. These topics are "suggested" in the sense that I know that each is feasible to undertake. However, you are neither restricted, nor even encouraged, to work on these topics. They are meant primarily to be illustrative of the types of projects that I have in mind. You are encouraged to suggest other topics that interest you that relate to the course. I will add those that I deem feasible to the list, and then circulate a revised topic list. You will then be asked to indicate your first two choices of topics and the members of the group in which you would like to work.

Once groups are formed, each group should meet with me sometime during the 4<sup>th</sup> or 5<sup>th</sup> week of the semester (preferably 4<sup>th</sup>) so I can help to get you started and we can establish what my expectations are for the paper. You should meet with me regularly during the semester to discuss your progress and any snags that you are encountering. The papers will be due the last day of the semester (Friday May 4). If you submit a draft of the paper to me by April 16, I will provide comments to you by April 23, which will give you time to make some revisions.

To adequately address each topic, you will need to have a familiarity with multivariate regression analysis and access to a statistical software package. Some of you have copies of *DataDesk* from your statistics course. *Minitab* is available in the ILR Computer Lab and instructions on how to use it are found on the *Minitab* web page. Finally, if you are very good at using *Excel* you may able to do the whole project using it.

- 1. Each year average salary data is published in the AAUP magazine *Academe* for female and male faculty at each rank, by institution. The ratio of female to male salaries varies widely across academic institutions, as does the share of faculty that is female? Do these differences reflect discrimination against females? What are the factors that you might expect will lead to gender ratios in salaries and faculty numbers varying across institutions? Present econometric evidence that provide tests of your hypotheses (Section I Gender, Race and Ethnicity in the Labor Market)
- **2.** There are many ways to measure the research productivity of faculty- two are the number of citations to an individual's published work and the number of his or

her publications. Human capital models predict that the productivity of an individual should vary over the life cycle. What do life cycle productivity profiles actually look like for Cornell economist, sociologists, or psychologists? What are the reasons that at a point in time research productivity might vary across Cornell faculty members in a field? Present econometric evidence that confirms or does not confirm your hypotheses (Section F – Investment in Human Capital)

- 3. In its *Yeshiva* decision, the Supreme Court effectively barred collective bargaining for faculty in private institutions of higher education. However, state laws governing public employees permit faculty bargaining in public institutions in a number of states. What determines whether faculty members in a public higher education institution are covered by collective bargaining? Do unionized faculty members earn more than comparable nonunion faculty? Provide econometric evidence to document your claims. (Section J Unions and the Labor Market)
- 4. Faculty/Student Ratios vary widely across colleges and universities in the United States. Faculty members are an input into the production of research and teaching in academia and the theory of the demand for labor suggests that higher the faculty salary level is, the lower faculty employment should be at an institution. However, if one looks at the data, one observes that higher priced faculty tend to be located at institutions with the highest faculty/student ratios. How can one reconcile this with the theory of demand for labor? Using institutional level data estimate demand curves for faculty to see if, when properly specified, the demand for faculty is a downward sloping function of their salary levels? (Section B-Labor Demand)
- 5. The distribution of American college and university student, by choice of major, has changed widely over time. For example, the share of students majoring in the arts and sciences has declined over time and the share of students majoring in economics has increased in some years and decreased in other years. What are the factors that you think influence the shares of students choosing different majors, either at Cornell, or nationwide? Using time-series data provide statistical evidence on whether the factors that you postulate are important prove to be important. (Section E Occupational Choice)
- 6. Over the last 30 years earnings inequality has increased substantially in the United States. This has taken place not only for the workforce as a large, but also for workers with a given level of education. Have earnings of faculty in colleges and universities similarly increased in inequality? If they have, what are the factors that may have caused this growing inequality in earnings? Provide statistical evidence as to whether your hypotheses are correct (Section K Earnings Inequality)

7. Every decade the National Research Council conducts a study that "rates" the quality of PhD programs and their faculty at major American universities. As part of the last study, they also collected average research productivity data, by graduate field, for faculty members in a number of Arts and Sciences and Engineering fields. Given knowledge of productivity differentials across institutions, would you expect to observe faculty salary differentials across the institutions? What theories of the labor market lead you to expect such differentials? Provide econometric evidence about whether, other factors held constant, higher paying institutions have more productive faculty? (Section H – Pay and Productivity, Section G Mobility)