This course is designed to enable you to understand what analytical labor economics is about and how it can be applied to answer questions of interest about the labor market and public policy related to it. In particular, the course covers labor supply and the household, human capital, labor demand, migration and compensating wage differentials, and the economics of trade unions. Other topics in the field are discussed in the continuation course in Spring. Since labor economics today combines econometric analysis with theory, you must understand multivariate regression to benefit from the discussion of the empirical work on this list. If you do not, or if you are stale, please refresh your memory by going over Kmenta, Elements of Econometrics, or Johnston, Econometric Methods.

There is no textbook for the course. However, if you have not had an undergraduate course in analytical labor economics, you should read the appropriate chapters (in parentheses next to the section headings below) in D. Hamermesh and A. Rees, Economics of Work and Pay. (The chapter numbers are from the 5th edition, 1993.)

There will be a midterm exam, a final exam and one term paper. If you plan to take the second course in Spring 1995, Professor Getttinger and I would be happy to have you write one term paper that covers both courses. This should give you time to do a more extensive and original piece of work. In any case, the most desirable term paper will be a small, but original theoretical or empirical study. An empirical paper could, for example, replicate a study in the literature using a different set of data. (You should note that the new journal, Labour Economics, has a section for replication studies; and other journals too encourage their submission.) Alternatively, but only if you wish the paper to apply to this course alone, the term paper could be an assessment of the current state of our knowledge about a particular area of labor economics, or of labor-market policy, that is covered in this course. The assessment should stress the relation between theory and empirical work; it should be current; the topic should be fairly narrowly defined; and it should be a constructive criticism, not merely a summary. Whichever type of paper you choose to do, if you are doing it for this course alone, it should be turned in by Monday, December 19.

Everything on the reading list is required. Bibliographical material can be found in the articles, especially those from the Handbook of Labor Economics. I have tried to construct a list that is short enough to be read by everyone, but that still covers most of the important material. Some of the readings are at this point at least as much of historical as of current interest. These are marked with an "H." Each student will be assigned one (empirical) reading for presentation to the class.
READING LIST

I. LABOR SUPPLY AND THE HOUSEHOLD (1, 2) -- 4 weeks

A. Background and Static Theory


B. Static Empirical Studies


C. Dynamic Models


D. The Household


II. Human Capital -- Education OJT and Occupational Choice (3) (2 weeks)

A. Background and Theory


B. Estimation and Policy Issues


III. Labor Demand (4, 5) -- 3 weeks

A. Background and Static Theory


Daniel Hamermesh, Labor Demand, Chapter 2.

B. Static Empirical Studies


C. Dynamic Models


Hamermesh, Labor Demand, Chapter 6.


D. Policy Analyses


Ronald Ehrenberg and Paul Schumann, Longer Hours or More Jobs, Chapter 2.


IV. Migration and Compensating Differentials (7, 13) -- 2 weeks

A. Migration


B. Compensating Differentials


V. Unions (10, 11, 12) -- 3 weeks

A. Background

Richard Freeman and James Medoff, What Do Unions Do? 1984, Chapters 1, 2.

B. Growth and Goals

Henry Farber, Handbook.
You have 2-1/2 hours for this exam. Please answer all the questions using your blue book.

I. (30 minutes)

A recent country song, "He Thinks He'll Keep Her," describes a woman who was married at age 21, had her third child at age 29, made sure that everything in her house was "polished 'til it shined," divorced her husband at age 36, then spent 15 years "in the typing pool without a raise in pay." Discuss this scenario in terms of life-cycle models, household production and investment in human capital.

II. (30 minutes)

The new Republican majority in Congress has proposed a flat tax at 17 percent applying to all income, as opposed to the current tax structure that taxes income progressively at rates of 15, 28, 31, 36 and 39 percent.

A. Discuss how you would use currently available data to estimate the likely effects of this change on labor supply. Base your discussion on the appropriate theory and measurement technique.

B. What does current evidence suggest that the effects of this change would be on the labor supply of workers at different hourly wage rates?

III. (20 minutes)

A common finding in equations like:

$$E_t = \lambda E_{t-1} + \alpha X_t$$

where $E$ is employment, $X$ is a vector of variables that shock equilibrium employment, $\alpha$ and $\lambda$ are parameters, $\lambda < 1$, is that $\lambda$ is larger when shocks are positive than when they are negative.

What does the estimated value of $\lambda$ imply about the underlying structure of costs facing the typical firm? What does the difference between values of $\lambda$ in response to positive and negative shocks imply about those costs? What policies might affect the values of $\lambda$ that we observe, and in what directions and why?
IV. (20 minutes)

Endogenous selectivity has been mentioned as a severe problem confounding attempts to estimate a variety of effects in the labor market. Pick one such example and explain how selectivity affects the outcomes. Stress the economics of the selectivity problem, not the econometric issues involved.

V. (40 minutes)

As part of its research into the relationship between a worker's appearance and his/her wage rate, a study published in the December 1994 American Economic Review estimated the following relationships between each of a number of variables and the logarithm of the hourly wage for a sample of male American workers in 1977:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>School: 12 years</td>
<td>.06</td>
</tr>
<tr>
<td>13-15 years</td>
<td>.07</td>
</tr>
<tr>
<td>16+ years</td>
<td>.25</td>
</tr>
<tr>
<td>(&gt;12 years is the excluded category)</td>
<td></td>
</tr>
<tr>
<td>Experience (years)</td>
<td>.0288</td>
</tr>
<tr>
<td>Experience²</td>
<td>-.00052</td>
</tr>
<tr>
<td>Years of tenure: 1-3 years</td>
<td>.135</td>
</tr>
<tr>
<td>3-10 years</td>
<td>.149</td>
</tr>
<tr>
<td>11+ years</td>
<td>.199</td>
</tr>
<tr>
<td>(&gt;1 year is the excluded category)</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>.083</td>
</tr>
<tr>
<td>Firm size: 10-499 workers</td>
<td>.083</td>
</tr>
<tr>
<td>500-999 workers</td>
<td>.115</td>
</tr>
<tr>
<td>1000+ workers</td>
<td>.204</td>
</tr>
<tr>
<td>(&gt;10 workers is the excluded category)</td>
<td></td>
</tr>
<tr>
<td>Union member</td>
<td>.162</td>
</tr>
<tr>
<td>Work in: Large metropolitan area</td>
<td>.231</td>
</tr>
<tr>
<td>Small metropolitan area</td>
<td>.124</td>
</tr>
<tr>
<td>(Nonmetropolitan location is the excluded category)</td>
<td></td>
</tr>
</tbody>
</table>

For each coefficient or group of coefficients: 1) Justify the pattern or sign in terms of some underlying theory; 2) Discuss whether the size of the coefficient (or group of coefficients) is in accord with what the theory would lead you to expect.