

Economics 653
Economics of the Labor Market
Syllabus (Online)
Professor Sanjay Chugh
Spring 2017

Meetings: Mondays online at midday 12:00pm (EST)
Email address: schugh1@jhu.edu
Course website: JHU Blackboard

Course Objectives: This course develops the theory and empirics of labor markets by focusing on several leading institutional structures of both labor supply and labor demand. This theory is then applied to issues such as wage determination, wage rigidity, training and retraining programs, and the skills and wage distribution, as well as government policies that correct inefficiencies in labor markets. Throughout, the emphasis will be on theoretical and logical rigor. Prerequisites 440.601 Microeconomic Theory and 440.602 Macroeconomic Theory. Corequisite: 440.606 Econometrics.

Grading: The final grade will be based on a midterm exam (worth 30% of your final course grade), a cumulative final exam (worth 35% of your final course grade), periodic assignments that will be assigned during the course (worth a cumulative 25% of your course grade), and active “Discussion” (worth 10% of your final course grade) throughout the course. The exams are scheduled for:

Midterm Exam: Friday, February 24, 2017 (exam will be released at 8:00am EST)
Final Exam: Friday, April 21, 2017 (exam will be released at 8:00am EST)

All students are expected to complete both exams. A fixed number of 100 hours will be provided to ensure that all students can post each exam to Blackboard; details will follow.

NO CLASS, WEEK OF MONDAY, JANUARY 16, 2017 (MLK HOLIDAY)

NO CLASS, WEEK OF MONDAY, MARCH 20, 2017 (SPRING BREAK)

Textbook: The required textbook for the course is:

Chugh, Sanjay K. *Modern Macroeconomics*, MIT Press, 2015.

A few topics will be developed through parts of the textbook *Labor Economics*, 2nd Edition, MIT Press, 2014 (Pierre Cahuc, Stéphane Carcillo, and André Zylberberg). Several other topics will be developed through additional notes, additional readings, and seminal economics journal articles. These readings will be provided to you by either the JHU Library E-Reserves and/or by me.

University Policies

General

This course adheres to all University policies described in the academic catalog. Please pay close attention to the following policies.

Disability Services

Johns Hopkins University is committed to providing reasonable and appropriate accommodations to students with disabilities. Students with documented disabilities should contact the coordinator listed on the [Disability Accommodations](#) page. Further information and a link to the Student Request for Accommodation form can also be found on the [Disability Accommodations](#) page.

Ethics & Plagiarism

JHU Ethics Statement: The strength of the university depends on academic and personal integrity. In this course, you must be honest and truthful. Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the Internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery and falsification, lying, facilitating academic dishonesty, and unfair competition. Report any violations you witness to the instructor.

Read and adhere to JHU's [Notice on Plagiarism](#).

Dropping the Course

You are responsible for understanding the university's policies and procedures regarding withdrawing from courses found in the current catalog. You should be aware of the current deadlines according to the [Academic Calendar](#).

Getting Help

You have a variety of methods to get help on Blackboard. Please consult the help listed in the "Blackboard Help" link for important information. **If you encounter technical difficulty in completing or submitting any online assessment, please immediately contact the designated help desk listed on the [AAP online support page](#).** Also, contact your instructor at the email address listed atop this syllabus.

Copyright Policy

All course material are the property of JHU and are to be used for the student's individual academic purpose only. Any dissemination, copying, reproducing, modification, displaying, or transmitting of any course material content for any other purpose is prohibited, will be considered misconduct under the JHU Copyright Compliance Policy https://www.jhu.edu/assets/uploads/2016/11/compliance_policy.pdf, and may be cause for disciplinary action. In addition, encouraging academic dishonesty or cheating by distributing information about course materials or assignments which would give an unfair advantage to others may violate AAP's Code of Conduct http://advanced.jhu.edu/wp-content/uploads/2013/01/AAP1101_CodeofConduct.pdf and the University's Student Conduct Code <http://studentaffairs.jhu.edu/policies/student-code/>. Specifically, recordings, course materials, and lecture notes may not be exchanged or distributed for commercial purposes, for compensation, or for any purpose other than use by students enrolled in the class. Other distributions of such materials by students may be deemed to violate the above University policies and be subject to disciplinary action.

Discussion Grading Policy

The grade for active participation will be very heuristic and will only be assessed cumulatively at the end of semester (i.e., there won't be a "weekly" discussion score you receive because it's impossible to judge at such a fine level).

I will casually monitor the Discussion Forums at least once or twice a week. I may or may not offer my own thoughts in the Discussion Forums, and questions that arise in the Discussion Forums should not necessarily be expected to be answered by me. I may chip in responses once in a while, but, as I think often will be the case, I simply won't know the "answer." This does not mean, however, that you may not engage in answering others' queries or developing further others' thoughts and ideas that are broadly germane to the topics being studied.

It is not necessary that everybody participates in active discussion each and every week. However, I do expect that by the end of the semester everyone should have meaningfully engaged in the discussion forums. If you ask "how many times" should you participate or "how intensively" should you participate, the question is too fluid to provide a precise answer. My sense is that you yourself will know if you're actively participating or not.

As but one example of a post that would **NOT** count as "active discussion" is "Can you clarify the explanation for part xyz in topic abc?" A question such as this should be simply directed to me in an email, to which I'll respond.

As an example of a post that **WOULD** count as "active discussion" is providing the class a news item regarding data pertaining to our class discussion in countries besides the U.S. Another example is opinion pieces or news articles you come across that may provide a thoughtful slant on topics being developed in our class. Your Discussion Forum thoughts

may arise from the reading materials, the class presentation, the "In the News" items that I provide the class, or many other sources.

In some weeks, I will initialize the Discussion Forum with my own thoughts or questions; in other weeks, I will leave it to the members of the group to bring up broad thoughts or questions.

Group Work Policy

Regarding Assignments: if you need or prefer, you are welcome to ping other class members for how to proceed on Assignments throughout the semester.

However, each and every member of the class should submit his or her own independently-written Assignment solutions.

If I detect that large parts of multiple students' solutions are blatantly copied-and-pasted verbatim, each person is subject to receiving a **“zero” with no questions asked** even if the solutions are correct.

Collaboration, up to a point, is indeed a helpful way of learning; independent thinking is also a helpful way of learning.

Outline of topics: The following is a sketch of topics we will cover this semester – it may be modified as the course progresses.

Microeconomics of Consumer Theory (Monday, January 9, 2017)

- Utility Theory
- Budget Constraints
- Optimal Choice
- Lagrangian Analysis
- Point Elasticities

Reading: *Modern Macroeconomics*, Introduction
Modern Macroeconomics, Chapter 1
Additional Notes/Readings (as needed)

Consumption-Labor Model (Monday, January 9, 2017)

- The Two “Goods:” Consumption and Leisure
- Real Wages
- “Classical” Aggregate Labor Supply Function
- Aggregate Consumption Demand Function
- Lagrangian Analysis

Reading: *Modern Macroeconomics*, Chapter 2

(NO CLASS WEEK OF JANUARY 16, 2017 – MLK HOLIDAY)

Firms: Labor Demand and Investment Demand (Monday, January 23, 2017)

- Aggregate Production Function
- Multi-Period Model of Firms
- Dynamic Firm Profit Function
- Investment Demand
- Labor Demand
- Constant-Elasticity-of-Substitution (CES) Production Technology
- Capital-Labor Substitutability

Reading: *Modern Macroeconomics*, Chapter 6
Arrow, K. J., H. B. Chenery, B. S. Minhas, and R. M. Solow. 1961. “Capital-Labor Substitution and Economic Efficiency.” *The Review of Economic and Statistics*, Vol. 43, pp. 225-250.
Antras, Pol. 2004. “Is the U.S. Aggregate Production Function Cobb-Douglas? New Estimates of the Elasticity of Substitution.” *Contributions to Macroeconomics*, Vol. 4, pp. 1-36.

Labor Search and Matching (Monday, January 30, 2017)

- Labor-Force Participation
- Costs of Recruiting Employees
- Probability of Successfully Finding a Job
- Probability of Successfully Hiring an Employee
- Cobb-Douglas Matching Technology
- Matching-Market Equilibrium
- Labor Market Tightness
- Congestion Externalities

Reading: *Modern Macroeconomics*, Chapter 27
 Modern Macroeconomics, Chapter 28
 Modern Macroeconomics, Chapter 29
 Additional Notes/Readings (as needed)

Wage Determination (Monday, February 6, 2017)

- Surplus Sharing Conditions
- Nash Bargaining
- Competitive Search Equilibrium (CSE)
- Congestion Externalities
- Rigid Wages

Reading: *Labor Economics*, Chapter 9, p. 583-596
 Additional Notes/Readings (as needed)

Efficient Matching and Optimal Policy (Monday, February 13, 2017)

- Resource Frontier
- Transformation Function
- Marginal Rate of Transformation (MRT)
- Efficient Allocations
- Characterization of Matching-Market “Wedges”
- Congestion Externalities
- Tax Analysis

Reading: *Modern Macroeconomics*, Chapter 18
 Additional Notes/Readings (as needed)

Selective Hiring (Monday, February 20, 2017)

- “Skills” Distribution
- Costs of Training Employees
- Labor-Force Participation
- Probability of Successfully Finding a Job
- “Skills”-Based Hiring Thresholds
- Selection Technology
- Distribution of Wages

Reading: Additional Notes/Readings (as needed)

MIDTERM EXAM

Available: 8:00am (EST) on Friday, February 24, 2017

Deadline: 12:00noon (EST) on Tuesday, February 28, 2017

Extensive and Intensive Margins of Labor (Monday, March 6, 2017)

- Modification of Utility Function
- Modification of Production Function
- Externalities
- Private vs. Public Efficiency

Reading: Additional Notes/Readings (as needed)

Matching Markets and Selection Markets (Monday, March 13, 2017)

- Timing of Labor Demand
- Matching Demand
- Selective-Hiring Demand
- “No-Arbitrage” Condition

Reading: Additional Notes/Readings (as needed)

(NO CLASS WEEK OF MARCH 20, 2017 – JHU SPRING BREAK)

Monopolistic Competition, Sticky Prices, and Labor Wedges
(Monday, March 27, 2017 and Monday, April 3, 2017)

- Market Structure
- Goods Aggregation and Employment Aggregation
- Resource Frontier
- Transformation Function
- Marginal Rate of Transformation (MRT)
- Characterization of Classical-Market “Wedges”
- Optimal Policy Analysis

Reading: *Modern Macroeconomics*, Chapter 13
Modern Macroeconomics, Chapter 18
Modern Macroeconomics, Chapter 22
Modern Macroeconomics, Chapter 23
Additional Notes/Readings (as needed)

Monopolistically-Competitive Matching Markets (Monday, April 10, 2017)

- Market Structure
- Recruiting Industry
- Distorted Surplus-Sharing Condition
- Online Job-Matching Sites
- Costs of Entering Recruiting Industry
- Matching Market Wedge

Reading: Additional Notes/Readings (as needed)

Beveridge Curve (Monday, April 17, 2017)

- Secular Shifts
- Business-Cycle Movements
- CES Matching Function
- Organizational Innovation
- Changes in Elasticity of Substitution between v and s in Matching

VIDEO: <http://www.mediatheque.lindau-nobel.org/videos/33976/peter-diamond>

Reading: Diamond, Peter A. and Aysegul Sahin. 2014. “Shifts in the Beveridge Curve.” *Federal Reserve Bank of New York Staff Reports*, no. 687.
Elsby, Michael, Ryan Michaels, and David Ratner. 2015. “The Beveridge Curve: A Survey.” *Journal of Economic Literature*, Vol. 53, pp. 571-630.
Labor Economics, Chapter 9, p. 574-578
Labor Economics, Chapter 9, p. 583-596
Additional Notes/Readings (as needed)

FINAL EXAM

Available: 8:00am (EST) on Friday, April 21, 2017

Deadline: 12:00noon (EST) on Tuesday, April 25, 2017
