

**Senior Seminars and Advanced Lectures  
Spring 2017**

Preregistration for advanced lecture courses (numbered 401-449) and seminars (numbered 450-489) will take place using the same online “preference selection” system that was used in the Fall. The system will be restricted to senior majors in economics or EP&E, and eligible seniors will use the system to express rank-ordered preferences for up to five courses/seminars. Students will be able to enter and revise their preferences from 9:00am Monday, December 12, 2016 to 5:00pm Thursday, January 5, 2017.

After preregistration closes, all students who preregistered will be assigned to one advanced lecture course or seminar. Every attempt will be made to meet students’ preferences, and in cases where caps on enrollment bind, students will be chosen by random lottery. The system can be accessed by clicking at this link: “[Seminar Preregistration](#)”. Seniors will receive instructions on how to access the system before it opens.

Senior majors in economics and EP&E who do not preregister, as well as underclassmen and students who are not majors in economics or EP&E, will be able to shop advanced lecture courses or seminars that have not filled up during preregistration. Seniors who did preregister are also welcome to shop additional advanced lectures and seminars at this time. All students must have completed at least two of three core courses in intermediate microeconomics, intermediate macroeconomics, and econometrics before enrolling in an advanced lecture course or seminar.

There will not be waiting lists for classes that fill up during preregistration. The caps will be set high (22 for seminars), and once they are reached, those classes are full.

The advanced lecture courses and seminars being offered in spring 2017 are listed below, along with brief descriptions.

## Advanced Lecture Courses with Limited Enrollment

### **Econ 408a/GLBL 238a    INTERNATIONAL TRADE POLICY**

Giovanni Maggi

Tuesdays & Thursdays 2:30 to 3:45

This is an advanced course focusing on the theory and empirics of trade policy. There are two strict prerequisites: (i) Econ 184 (international economics); (ii) intermediate microeconomics. The course focuses mainly on three topics: (1) Welfare and distributional implications of trade policy: Who gains and who loses from international trade? Is it possible for gainers to compensate losers, so that everyone gains from trade? (2) The political economy of trade policy: Why are seemingly inefficient trade barriers so widespread? Do governments have incentives to pursue beggar-thy-neighbor policies at the expense of trading partners, generating international Prisoners' Dilemma situations? How are trade policies influenced by special interest groups and individual voters' preferences? (3) The role of international trade cooperation: Why do countries sign trade agreements? How are they negotiated? How should trade agreements be designed? What are the tensions between national sovereignty and international trade courts? What can we learn from the experience of the WTO, NAFTA and other trade agreements?

*Prerequisites: (1) Econ 184 (International Economics); (2) Intermediate microeconomics. NOTE: both prerequisites are strict and will be enforced.*

### **Econ 410b    THE ECONOMICS OF INNOVATION**

Mitsuru Igami

Tuesdays & Thursdays, 1:00-2:15

This course introduces the major topics of economics of innovation. It intends to provide students with a solid understanding of theoretical models of the effects of market power on the intensity of innovative activity as well as the alternative incentive mechanisms such as prizes, patents, copyrights and trade secrecy. Topics include economics of the intellectual property (IP) protection system; IP licensing and research joint ventures; enforcement and litigation; strategic choices in innovation & competition; the value of innovation & patent races; process and product innovation; the diffusion of knowledge; venture capital; interaction between public and private sector innovation; network effects; current policy issues regarding the conflicts between IP rights and antitrust regulation.

This course will often motivate the analysis of economic concepts using case studies, empirical facts and consider simple economic models to explain individuals behavior. The primary tool for understanding firm, consumer or government choices is the maximization paradigm which assumes individuals behave as if they maximize an objective function; such function may represent the level of profits, happiness or social welfare. Thus, much of the course will be devoted to applying that paradigm to various settings. The academic objective of this course is to elaborate students' skills to use theoretical tools to formulate and solve economic problems. The goal is for the students to interpret the economic aspects of innovative activity and IP protection system.

*Prerequisites: intermediate microeconomics or equivalent*

**Econ 413b/ OPTIMIZATION TECHNIQUES**

Sekhar Tatikonda

Tuesdays and Thursdays 1:00 - 2:15

Fundamental theory and algorithms of optimization, emphasizing convex optimization. The geometry of convex sets, basic convex analysis, the principle of optimality, duality. Numerical algorithms: steepest descent, Newton's method, interior point methods, dynamic programming, unimodal search. Applications from engineering and the sciences.

*Prerequisites: MATH 120 and 222, or equivalents. May not be taken after AMTH 237.*

**Econ 416b LABOR ECONOMICS: EMPLOYMENT, SKILLS AND WAGES**

Ilse Lindenlaub

Tuesdays & Thursdays, 9:00-10:15

In this course we will study many of the most up-to date topics in labor economics and beyond, both from a theoretical and empirical point of view.

This is a one semester course in labor economics for undergraduate students. We will start with the basic model of how workers determine their labor supply and firms their labor demand in a competitive market economy. Within the competitive environment, we will then move to models where workers differ in their characteristics (and firms as well). We will study how various changes in labor supply (such as immigration or the observed increase in workers' education) and changes in demand (such technological change) have impacted the allocation of workers to jobs, the wage distribution and wage inequality. Last, the course will discuss reasons why the labor market may not be perfectly competitive, like search frictions or the specific nature of human capital. This will naturally lead us to the discussion of what determines unemployment and the reallocation of workers after job loss. Overall, much emphasis will be placed on understanding theoretical concepts and several workhorse models in labor economics to study important economic questions and interpret the evidence.

*Prerequisites: Intermediate Micro (Econ 121) and Econometrics (Econ 131 or 135).*

**Econ 417b/ COMPUTATIONAL METHODS IN ECONOMICS**  
**Econ 561b** Anthony Smith Mondays and Wednesdays 4:00 - 5:15

Many of the models used in modern quantitative research in economics do not have analytical (or closed-form) solutions. For this reason, the computer has become an indispensable tool for conducting research in economics. The purpose of this course is twofold: first, to introduce students to numerical methods for analyzing economic models; second, to illustrate how economists use these methods to study models in a variety of subdisciplines, with special emphasis on macroeconomics, labor economics, industrial organization, public finance, financial economics, and environmental economics. The course will also teach the basics of scientific programming so students need not have any prior experience with programming languages.

***Prerequisites:***

*Undergraduate:* *Intermediate microeconomics, intermediate macroeconomics, and econometrics.*

*Graduate:* *First-year graduate courses in microeconomics, macroeconomics, and econometrics*

**Econ 424b CENTRAL BANKING**  
William English Tuesdays & Thursdays, 1:00-2:15

This class will provide an introduction to the different roles and responsibilities of central banks in advanced economies. We will start by discussing the historical origins of central banking and the development of central banks in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. We will then focus on the responsibilities of the Federal Reserve System, but will also discuss the operations of other major central banks, including the Bank of England and the European Central Bank. We will take up each of the specific responsibilities of central banks – fiscal agent, operator of payments systems, liquidity provision, monetary policy, supervision and regulation, and financial stability. We will spend time on the key issues that central banks must address in each of these areas and the tradeoffs involved.

We will consider the appropriate structure of central banks in managing their various responsibilities, taking the structure of different advanced-economy central banks as examples. We will also discuss the resiliency of different arrangements both in normal times and in times of stress. These structural issues have taken on more importance as the responsibilities of central banks have expanded since the 2007-09 financial crisis.

*Prerequisites: Intermediate Microeconomics, Intermediate Macroeconomics, and Introductory Econometrics.*



technological options will be examined with particular emphasis on their environmental, social, and economic tradeoffs. Specific areas of focus will include: the availability of secure, economically attractive, yet environmentally unsustainable fossil fuel options; the promises and perils of nuclear power; the technical and economic challenges facing the renewable energy systems and the type of policies that will be needed to facilitate the transition to a low-carbon economy; and the new energy revolution fueled by significant shale oil and gas reserves around the globe.

**Econ 461b/HPA590 ADDICTION, ECONOMICS AND PUBLIC POLICY**  
Jody Sindelar Mondays, 1:00-2:50  
**[YSPH Room 115 School of Public Health, 60 College St]**

Smoking, alcoholism, and use of illicit drugs are addictions that are increasingly studied by economists. The health habit of overeating resulting in obesity will also be viewed as similar to an addiction in this class. This class will study economic and policy issues relating to these four addictions or health habits. We will focus on establishing the causes of and solutions to problems. Specifically, the class will cover: 1) models of substance use including supply and demand, rational addiction and behavioral economics models, 2) perspectives on whether, why and how the government should intervene in these health decisions, 3) facts and findings from the literature on each addiction, and 4) evaluation of public policies related to each substance. We will draw from and examine a number of different methods of determining causes of problems e.g. econometrics as applied to population-based data as well as quasi-experimental and experimental methods. Public policy issues to discuss include: how to address alcohol misuse at colleges; optimal taxes on alcohol, cigarettes and soda; legalization or decriminalization of currently illicit drugs; smoking bans as a precommitment device; the cause of and solution to rising international obesity rates; paying people for good habits; and globalization and the international drug problem. This course will be a seminar restricted to about 20 students. Students in the Public Health Masters program and seniors majoring in Economics will comprise most of the class.

The course is aimed at being challenging and thought-provoking and applied to policy. A focus will be on discussion and debates. Often there is not a single right answer but different sides of the issue need to be understood.

There will be short bi-weekly assignments and a longer paper accompanied by a short in-class presentation. Class discussion is integral to the learning process and will be part of student evaluations. You must come to class prepared!

The required paper offers an opportunity to think analytically and creatively and to pursue a research topic of your choice. Each student will select a topic to investigate in more depth and will write a paper and make a brief presentation on the paper. A list of potential paper topics will be provided. One assignment requires you to propose different potential topics and to get feedback prior to writing the full paper. This helps you to make a good topic choice.

Prerequisite: Microeconomics.

**Econ 467b/ ECONOMIC EVOLUTION OF THE LATIN AMERICAN AND  
GLBL 307b CARIBBEAN COUNTRIES**

Ernesto Zedillo

Mondays, 1:30 - 3:20

The study and discussion of the economic evolution and challenges of the Latin American and Caribbean (LAC) countries will be organized around the following topics: from independence to the 1930's; import substitution and industrialization up to the early 1980's; the debt crisis and the lost decade; reform and disappointment in the late 1980's and the 1990's; explorations of some episodes of particular countries; and speculations about the future.

In light of the significant deterioration that some of the previously dynamic economies of the region have suffered recently in their growth performance, special attention will be paid to the question of whether and why the so-called middle income trap continues to look very much like a Latin American malaise.

*Prerequisite: intermediate microeconomics and macroeconomics.*

**Econ 470b/ STRATEGIES FOR ECONOMIC DEVELOPMENT  
GLBL 233 Rakesh Mohan**

Thursdays, 3:30-5:20

How strategies for economic development have changed over time and how dominant strands in development theory and practice have evolved. Students trace the influence of the evolution in thinking on actual changes that have taken place in successful development strategies, as practiced in fast growing developing countries, and as illustrated in case studies of fast growth periods in Japan, South Korea, Brazil, China, and India.

*Prerequisites: introductory microeconomics and macroeconomics.*

**Econ 471b TOPICS IN COOPERATIVE GAME THEORY  
Pradeep Dubey**

Fridays, 9:25-11:15

The course will explore various topics in Cooperative Game Theory with applications to fair division, cost allocation and matching. Topics include : one-sided matching (e.g., the market for kidney exchange), and two-sided matching (e.g, the National Resident Intern Matching Program), with emphasis on incentive compatibility of the underlying mechanisms; core and Shapley value of side-payment games (special focus on market games, cost allocation, and measuring power in voting systems) ; convex games and the centrality of the Shapley value in the core (canonical example being games on networks); the convergence of core and value to competitive equilibria in large markets. It will also cover the extension of core and value to games without side-payments, starting with the Nash Bargaining solution with fixed, and variable, threats; and, time permitting, the convergence phenomenon in perfectly competitive markets.

There is no text book. Lecture notes + articles will be posted on classes v2. There will be four lengthy problem sets, with questions ranging from routine to challenging, which will help students probe the material presented in class, and also prod them to think of extensions. An in-class closed-book midterm exam will be held, around the eighth week. At the end of the course, each student will be required to

write a term-paper, choosing from a list of topics discussed in class. This will entail a survey of the literature, teaching them to access and acknowledge sources, and present their own critiques.

*Prerequisite: Intermediate Microeconomics*

**Econ 473b/**                      **EQUALITY**  
**EPE 227b**                      John Roemer                      Tuesday, 1:30-3:20

The course evaluates philosophical arguments for (and against) equality, using tools of economic theory. We begin with the theory of John Rawls, the central contemporary philosophical attempt to argue for the desirability of equality. We examine critiques of Rawls from the political right, left, and center (Nozick, G.A. Cohen, Sen). We proceed to a second major philosophical proposal for equality, of Ronald Dworkin, who introduced the concept of personal responsibility into egalitarian theory. We develop a formal model of the original position/ veil of ignorance, and evaluate the proposals of Rawls and Dworkin. We argue that the veil of ignorance thought experiment implies considerably less equality than these authors thought it would. A theory of equality of opportunity is then proposed, which can be viewed as a reaction to the criticisms made of Rawls and Dworkin.

We discuss the classical Marxist critique of capitalism, based upon the view that exploitation is central to it, and the ideas of market socialism and property-owning democracy. We conclude the course with a discussion of the degree and nature of inequality in the US in the 20<sup>th</sup> century and today, and the relationship between inequality and the financial crisis of 2008.

*Prerequisite: Intermediate Microeconomics Theory*

**Econ 474b/**                      **ECONOMIC POLICY LESSONS FROM JAPAN**  
**GLBL312B/**                      Stephen Roach                      Tuesdays, 3:30-5:20  
**EAST454**

An evaluation of modern Japan's protracted economic problems and of their potential implications for other economies, including the United States, Europe, and China. Policy blunders, structural growth impediments, bubbles, the global economic crisis of 2008, and Abenomics; risks of secular stagnation and related dangers to the global economy from subpar post-crisis recoveries. Focus on policy remedies to avert similar problems in other countries.

*Prerequisite: A basic undergraduate course in macroeconomics.*

**Econ 475b**                      **DISCRIMINATION IN LAW: THEORY AND PRACTICE**  
Gerald Jaynes                      Tuesdays, 2:30-4:30

This seminar seeks to sharpen students' research, writing, and oral presentation skills through examination of several related questions:

- How do law and economic theory define and conceptualize economic discrimination.
- How adequately does the behavior of discriminators implied by economic models describe behaviors documented in court cases and government hearings?

- To what extent do economic theory and econometric techniques aid our understanding of marketplace discrimination in actual practice?

**Topics include:** Racial, ethnic, and gender discrimination in labor markets, housing markets, education, and financial services such as mortgage lending and insurance redlining. Demographic groups covered in the case material include Asian-, African-, Hispanic-, and Native Americans. Reading materials are drawn from written court opinions, congressional hearings, and academic literatures including economics, law, history, African American Studies, Ethnic Studies, and Gender Studies.

*Prerequisites: 1. Economics 115 or equivalent; 2. any 200 level course or higher in any of following: Economics, African American studies, Ethnicity, Race, & Migration, Women's, Gender & Sexuality Studies.*

**Econ 480b/  
GLBL311b/  
GLBL781b**

**BANKING CRISES AND FINANCIAL STABILITY**

Sigridur Benediktsdottir

Thursdays, 1:30 - 3:20

This course focuses on systemic risk, banking crises, financial stability and macroprudential policies. An emphasis will be on systemic risk and prudential policies in peripheral economies. Peripheral economies is defined here as peripheral European economies and emerging economies.

The course will start with an overview of the concepts of systemic risks and financial stability. Underlying reasons for banking crises which are (1) liquidity (fractional banking), (2) structural weakness and (3) leverage cycles. First is liquidity and bank runs and the role of the Central Bank as a liquidity provider and a lender of last resort. Before the last Global Financial Crises the underlying causes of financial crises in emerging economies was frequently structural weakness. Second we will look at the history of financial crises in emerging economies to gain an understanding of banking crises arising from structural weakness. Last we will look at the theory of credit and leverage cycles and some case studies of banking crises that seem to be caused by excessive growth in credit and leverage.

The next stage of the course will focus on most pressing threat to financial stability for peripheral economies. Capital surges and sudden stops. Excessive pro-cyclical capital flows may increase financial instability and this is a potential risk that emerging economies and peripheral economies face as they open up capital markets to the world. We will look at the risks associated with excessive capital flows, empirical evidence and innovating efforts to manage excessive pro-cyclical capital flows.

In the third face of the course we will look at the Global Financial Crises of 2007-2008. Underlying causes and how they unfolded. The Sovereign debt crises that followed, including the crises in Greece. How regulation and supervision may have failed and how it is being overhauled now, including both new microprudential policy and the new macroprudential policies.

We will end the class with capital flow management which is one of the more pressing issues for peripheral and emerging economies that are opening up their capital account. Many countries have used prudential policies in an attempt to manage excessive pro-cyclical capital flows, such as Korea, Brazil and Chile. We will study the motivation for these policies, empirical evidence and the most recent research in this area.

*Prerequisite: Introductory microeconomics and macroeconomics.*