



**HARVARD PH.D. PROGRAM IN HEALTH POLICY
ECONOMICS CONCENTRATION
2007-2008**

The concentration in economics focuses on the economic behavior of individuals; providers; insurers; and international, federal, state, and local governments and actors as their actions affect health and medical care. In addition to examining the literature on health economics, the training emphasizes microeconomic theory, econometrics, and interactions with other disciplines, including clinical medicine. The concentration prepares students for research and teaching careers as health economists.

Courses for students in the Ph.D. in Health Policy economics concentration:

- REQUIRED COURSES
- ELECTIVE COURSES
- FACULTY MEMBERS
- COURSE DESCRIPTIONS

REQUIRED COURSES

- (1) One year of graduate-level microeconomic theory – This requirement is fulfilled by taking Economics 2020a and 2020b (also listed at the Kennedy School and Harvard Business School).
- (2) Statistics and Econometrics – Economics track students are required to take Introductory Probability and Statistics for Economists (Economics 2110) offered in the Fall and Introduction to Applied Econometrics (Economics 2120) offered in the Spring. Please note that the completion of this sequence also fulfills the two-semester statistics distribution requirement required of all health policy Ph.D. students.
- (3) Field Courses – Students must take four one-semester courses in applied fields. These courses could be the public economics sequence (Economics 2450a and 2450b), labor economics (Economics 2810a and Economics 2811 or Economics 2810b), industrial organization (Economics 2610 and 2611), or development economics (Economics 2390b and 2390c, intermediate macroeconomics recommended as a prerequisite). The four courses can come from any of the courses listed above. Other graduate level economics courses may be substituted for these courses with permission of the chair of the committee. Such permission, however, will not be routinely granted, and students asking to substitute should have a strong reason for wishing to substitute.
- (4) Health Economics Reading Course (Economics 3460chf) – Second year students must take a full-year health economics reading course for which they receive one semester of credit. This course prepares students for the qualifying exam in the economics track.
- (5) Research seminar – The program requires the completion of Economics 2460, the Harvard/BU/MIT joint Health Economics Workshop in the second year. Attendance is recommended for third year and higher. This is in addition to the weekly research seminar led by Professor Katherine Swartz required of all third year and higher Health Policy students.

POSSIBLE ELECTIVES

ECONOMETRICS/STATISTICS

Fall

- Econometric Methods (Economics 2140) taught by Guido Imbens.
- Time Series Analysis (Economics 2142) taught by Rustam Ibragimov.

Spring

- Applied Econometrics (Economics 2130) taught by Dale Jorgenson.
- Advanced Topics in Microeconometrics (Economics 2141) taught by Marcelo Moreira. *Note: Expected to be given in 2008-2009.*

- Advanced Applied Econometrics (Economics 2144) taught by Ariel Pakes and Guido W. Imbens.
- Advanced Quantitative Research Methodology (Government 2001) taught by Gary King.
- Causal Inference in Statistics and the Social and Biomedical Sciences (Statistics 214) taught by Guido Imbens and Donald Rubin. *Note: Expected to be given in 2008–09.*
- Biostatistics courses taught at the School of Public Health, such as BIO 210–Analysis of Rates and Proportions and BIO 223–Applied Survival Analysis and Discrete Data Analysis.

ECONOMICS

- One or both semesters of the applied field sequence (Industrial Organization, Labor Economics, Public Economics or Development Economics) that the student did not take in fulfilling the requirement above.

Fall

- Analytic Frameworks for Policy (API-302) taught at KSG by Richard Zeckhauser.
- Contract Theory (Economics 2060) taught by Philippe Aghion.
- Dynamic Games and Contracts (Economics 2061) taught by Susan Athey.
- Psychology and Economics (Economics 2030) taught by Sendhil Mullainathan. *Note: Expected to be given in 2008-09.*
- Experimental Economics (Economics 2040) taught by Alvin Roth. *Note: Expected to be given in 2008-09.*
- Topics in Information Economics (Economics 2070) taught by Jerry Green. *Note: Expected to be given in 2008-09.*
- Economic Development: Theory, Policy, and Evidence (Economics 2327) taught by Dani Rodrik.

Spring

- Game Theory (Economics 2052) taught by Adam Szeidl (University of California, Berkeley).
- Theory of Optimal Policy (Economics 2415) taught by Michael Golosov (MIT).
- Organizational Economics (Economics 2670) taught by Oliver S. Hart and Robert Gibbons.
- Behavioral Approaches to Decision Making and Negotiation (Psychology 2650/HBS 4420) taught by Max Bazerman.
- Market Design (Economics 2056) taught by Alvin E. Roth and Peter A. Coles.
- Topics in Development Economics (Economics 2390e) taught by Sendhil Mullainathan. *Note: Expected to be given in 2008-09.*
- Law and Economics (Economics 2470) taught by Andrei Shleifer and Louis E. Kaplow.
- Economics of Science (Economics 2880) taught by Richard B. Freeman.

FACULTY ASSOCIATED WITH THE ECONOMICS TRACK

Joseph P. Newhouse, Chair, John D. MacArthur Professor of Health Policy and Management, Faculty of Arts and Sciences, Harvard School of Public Health, Harvard Medical School, and John F. Kennedy School of Government
Katherine Baicker, Professor of Health Economics, Department of Health Policy and Management, Harvard School of Public Health

David Bloom, Clarence James Gamble Professor of Economics and Demography, Department of Population and International Health, Harvard School of Public Health

David Canning, Professor of Economics and International Health, Department of Population and International Health, Harvard School of Public Health

Amitabh Chandra, Assistant Professor of Public Policy, John F. Kennedy School of Government

Michael Chernew, Professor of Health Care Policy, Department of Health Care Policy, Harvard Medical School

David Cutler, Otto Eckstein Professor of Applied Economics, Department of Economics, and Dean for the Social Sciences, Faculty of Arts and Sciences

Erica Field, Assistant Professor of Economics, Department of Economics, Faculty of Arts and Sciences

Richard Frank, Margaret T. Morris Professor of Health Economics, Department of Health Care Policy, Harvard Medical School

David Grabowski, Associate Professor of Health Economics, Department of Health Care Policy, Harvard Medical School

Jerry Green, John Leverett Professor and David A. Wells Professor of Political Economy, Faculty of Arts and Sciences and Harvard Graduate School of Business Administration

William Hsiao, K.T. Li Professor Economic Development and Health, Harvard School of Public Health

Robert S. Huckman, MBA Class of 1958 Associate Professor of Business Administration, Harvard Graduate School of Business Administration

Haiden Huskamp, Associate Professor of Health Economics, Department of Health Care Policy, Harvard Medical School

Michael Kremer, Gates Professor of Developing Societies, Department of Economics, Faculty of Arts and Sciences

Thomas McGuire, Professor of Health Economics, Department of Health Care Policy, Harvard Medical School

Ellen Meara, Assistant Professor of Health Economics, Department of Health Care Policy, Harvard Medical School

Nolan Miller, Associate Professor of Public Policy, John F. Kennedy School of Government

Meredith Rosenthal, Associate Professor of Health Economics and Policy, Department of Health Policy and Management, Harvard School of Public Health

Katherine Swartz, Professor of Health Policy and Economics, Department of Health Policy and Management, Harvard School of Public Health

Richard Zeckhauser, Frank Plumpton Ramsey Professor of Political Economy, John F. Kennedy School of Government

COURSE DESCRIPTIONS

REQUIRED ECONOMICS AND ECONOMETRICS COURSES

Economics 2020a. Microeconomic Theory I

Catalog Number: 0339 Enrollment: Limited to 102.

Christopher N. Avery (Kennedy School) and Nolan H. Miller (Kennedy School)

Half course (fall term). M., W., 8:30–10; and a one-hour weekly section to be arranged. EXAM GROUP: 1, 2

A comprehensive course in economic theory designed for doctoral students in all parts of the University. Consumption, production, uncertainty, markets, general equilibrium. Applications to policy analysis and business decisions. Emphasizes the use of economic theory in practical research.

Note: Offered jointly with the Kennedy School as API-111 and with the Business School as 4010.

Prerequisite: Two years of calculus and one course in probability theory. Thorough background in microeconomic theory at the intermediate level. Undergraduates with the appropriate background are welcome.

Economics 2020b. Microeconomic Theory II

Catalog Number: 4058

Christopher N. Avery (Kennedy School) and Nolan H. Miller (Kennedy School)

Half course (spring term). M., W., 8:30–10; and a one-hour weekly section to be arranged. EXAM GROUP: 1, 2

A continuation of Economics 2020a. Topics include game theory, economics of information, incentive theory, and welfare economics.

Note: Offered jointly with the Kennedy School as API-112 and with the Business School as 4011.

Prerequisite: Economics 2010a or 2020a.

Economics 2110. Introductory Probability and Statistics for Economists

Catalog Number: 7213

Marcelo J. Moreira

Half course (fall term). M., W., 10–11:30. EXAM GROUP: 3, 4

Introduction to probability and statistics. Emphasis on general methods applicable to both econometrics and economic theory. Topics include probability spaces, random variables, limit laws, estimation, hypothesis testing, and Bayesian methods.

Prerequisite: Statistics (Stat 100), Linear Algebra and Calculus (Math 21a and 21b), and Real Analysis (Math 112).

Economics 2120. Introduction to Applied Econometrics

Catalog Number: 2352

Dale W. Jorgenson (fall term) and Gary Chamberlain (spring term)

Half course (fall term; repeated spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17

Introduction to methods employed in applied econometrics, including linear regression, instrumental variables, panel data techniques, generalized method of moments, and maximum likelihood. Includes detailed discussion of papers in applied econometrics and computer exercises using standard econometric packages.

Note: Enrollment limited to PhD candidates in economics, business economics, health policy, public policy, and political economy and government (PEG).

Prerequisite: Economics 2110 or equivalent.

Economics 2460. Health Economics Workshop

Catalog Number: 7617

David M. Cutler and Joseph P. Newhouse (Kennedy School, Medical School, Public Health)

Half course (spring term). Tu., 6–8 pm. EXAM GROUP: 18

Focuses on theory, econometric models, and public policy of health care. Frontier work in health economics presented and discussed by instructors and outside speakers.

Note: May be taken for credit only by dissertation students writing a research paper. Offered jointly with the Kennedy School as HCP-581.

Economics 3460chf. Research in Health Economics

Catalog Number: 5309

Joseph P. Newhouse (Kennedy School, Medical School, Public Health) 2425

Half course (throughout the year). Hours to be arranged.

Participants discuss recent research in health economics. Course may also include presentation of original research by participants. Open to doctoral students only.

REQUIRED FIELD COURSES

[Two of the following four sequences in the Economics department are required (4 half courses in total). Additional courses may be taken as electives.]

Economics 2390b. Development Economics I: Microeconomic Issues

Catalog Number: 2990

Sendhil Mullainathan

Half course (fall term). Tu., Th., 10–11:30. EXAM GROUP: 12, 13

Topics include agricultural issues such as peasant behavior, land tenancy, interlinked markets; credit and insurance market problems and institutions; health, nutrition, and productivity; gender bias; education; and technology adoption.

Economics 2390c. Development Economics II: Growth

Catalog Number: 0388

Michael R. Kremer

Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17

Topics include aggregative and non-aggregative growth models, growth and development accounting, models of technology diffusion and choice, the role of finance and foreign aid in the growth process, the role of trade, immigration, and population growth.

Economics 2450a. Public Economics and Fiscal Policy I

Catalog Number: 1339

Jeffrey B. Liebman (Kennedy School) and David M. Cutler

Half course (fall term). M., W., (F.), 11:30–1. EXAM GROUP: 4, 5

Surveys theoretical and empirical analyses of taxation and government expenditures. Topics include tax incidence, optimal tax theory, public goods and externalities, and empirical analysis of responses to taxation.

Economics 2450b. Public Economics and Fiscal Policy II

Catalog Number: 6478

David M. Cutler and Martin Feldstein

Half course (spring term). M., W., (F.), 11:30–1. EXAM GROUP: 4, 5

Surveys theoretical and empirical analyses of taxation and government expenditures. Special topics include taxes and corporate finance, social insurance and fiscal policy, including social security and health care.

Economics 2610. Industrial Organization I

Catalog Number: 3766

Ariel Pakes

Half course (fall term). M., W., 1–2:30. EXAM GROUP: 6, 7

Applied work in industrial organization. Static analysis (theory, estimation): demand systems, cost functions, and game theoretic concepts of equilibrium and their application. Dynamic analysis (theory, computation, estimation): single agent problems, dynamic games and their application.

Economics 2611. Industrial Organization II

Catalog Number: 2302

Julie H. Mortimer and Gregory M. Lewis

Half course (spring term). M., W., 1–2:30. EXAM GROUP: 6, 7

Application of industrial organization to problems of public policy. Applied analysis of antitrust policy, network industries, vertical relationships, auctions, and other topics depending on interest.

Note: Students are urged to take Economics 2610 before Economics 2611.

Economics 2810a. Labor Market Analysis

Catalog Number: 4862

Lawrence F. Katz

Half course (fall term). M., W., 10–11:30. EXAM GROUP: 3, 4

Theoretical and empirical research on labor markets. Wage determination covers equalizing differences, human capital, job mobility, and incentive models. Labor supply covers life-cycle models. Labor demand includes minimum wage and union models.

Economics 2810b. Labor Economics and Labor Market Institutions (not offered 2007-2008)

Catalog Number: 3206

Lawrence F. Katz

Half course (spring term). Hours to be arranged.

Examines the operation of the labor market and evaluation of labor market policies. Topics: labor econometrics, theories of wage determination, changes in the wage structure, unemployment, labor market institutions, and globalization and the labor market.

Note: Expected to be given in 2008–09.

Economics 2811. Social Economics

Catalog Number: 5188

Roland G. Fryer

Half course (spring term). Th., 4–7 p.m. EXAM GROUP: 18

Applies the tools of economics to explore social issues including crime, discrimination, racial and gender differences, poverty, family structure, urban problems, social interactions and peer effects, and intergenerational mobility.

ELECTIVE COURSES

ECONOMETRICS/STATISTICS

Economics 2130. Applied Econometrics

Catalog Number: 2211

Dale W. Jorgenson

Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17

Advanced methods in applied econometrics, including nonlinear regression, discrete and limited dependent variables, models of selection, and stationary and non-stationary time series. Includes detailed discussion of empirical applications.

Note: Students complete a short research project in applied econometrics.

Prerequisite: Economics 2120 or equivalent.

Economics 2140. Econometric Methods

Catalog Number: 7210

Guido W. Imbens

Half course (fall term). Tu., Th., 11:30–1. EXAM GROUP: 13, 14

Econometric methods for cross-section and panel data. Topics include generalized method of moments, empirical likelihood, instrumental variables, bootstrapping, clustering, treatment effects, selection bias, difference-in-differences, qualitative choice, quantile regression, nonparametric methods, and semiparametric methods.

Prerequisite: Economics 2120 or equivalent.

Economics 2141. Advanced Topics in Microeconometrics (not offered 2007-2008)

Catalog Number: 9305

Marcelo J. Moreira

Half course (spring term). Hours to be arranged.

Topics include first-order asymptotics and GMM, second-order asymptotics, bias correction, bootstrap, censoring, panel data models with fixed effects, simultaneous equations model, weak instruments, and average treatment effects.

Note: Expected to be given in 2008–09.

Economics 2142. Time Series Analysis

Catalog Number: 4414

Rustam Ibragimov

Half course (fall term). Tu., Th., 8:30–10. EXAM GROUP: 10, 11

A survey of modern time series econometrics. Topics include univariate models, vector autoregressions, linear and nonlinear filtering, frequency domain methods, unit roots, structural breaks, empirical process theory asymptotics, forecasting, and applications to macroeconomics and finance.

Economics 2144. Advanced Applied Econometrics

Catalog Number: 7686

*Ariel Pakes and Guido W. Imbens**Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17*

An introduction to the theory and application of recently developed econometric techniques used in advanced applied work. Simulation techniques, estimation subject to inequality restrictions, as well as semiparametric and nonparametric tools will be studied in a variety of empirical contexts.

Government 2001. Advanced Quantitative Research Methodology

Catalog Number: 8941

*Gary King**Half course (spring term). M., 2–4. EXAM GROUP: 7, 8*

Graduate-level version of Gov. 1002. Meets with Gov. 1002, introduces theories of inference underlying most statistical methods and how new approaches are developed. Examples include discrete choice, event counts, durations, missing data, ecological inference, time-series cross sectional analysis, compositional data, causal inference, and others. Will require extra homework and examination problems in addition to those for Gov. 1002.

Prerequisite: Government 2000 or the equivalent.

Statistics 214. Causal Inference in Statistics and the Social and Biomedical Sciences (not offered 2007-2008)

Catalog Number: 4042

*Guido W. Imbens and Donald B. Rubin**Half course (spring term). Hours to be arranged.*

Approaches to causal inference. Covers randomized experiments with and without noncompliance, observational studies with and without ignorable treatment assignment, instrumental variables and sensitivity analysis. A number of applications from economics, medicine, education, etc. are discussed.

Note: Expected to be given in 2008–09.

(School of Public Health) BIO210. The Analysis of Rates and Proportions*Spring**Dr. G. DiRienzo*

5 credits

Lectures, laboratories. Two 1.5-hour sessions each week. One 1.5-hour lab each week.

Emphasizes concepts and methods for analysis of data which are categorical, rate-of-occurrence (e.g., incidence rate), and time-to-event (survival duration). Stresses applications in epidemiology, clinical trials, and other public health research. Topics include measures of association, 2x2 tables, stratification, matched pairs, logistic regression, model building, analysis of rates, and survival data analysis using proportional hazards models.

Course Note: BIO 200, or BIO 201, or BIO 202 and BIO 203, or BIO 206 and one of BIO 207, BIO 208, or BIO 209, or signature of instructor required; lab or section times to be announced at first meeting.

(School of Public Health) BIO223. Applied Survival Analysis and Discrete Data Analysis*Spring**E. Goetghebeur, E. Weller Toolan*

5 credits

Lectures. Two 2-hour sessions each week. One 1-hour optional lab each week.

This course will cover topics in both discrete data analysis (25% of class) and applied survival analysis (75% of class). The course will begin with a review of sampling plans and contingency table for discrete data. Further topics in discrete data analysis will include logistic regression, exact inference, and conditional logistic regression. This short survey of discrete data topics will provide a natural transition to analysis of survival data. Survival topics include: hazard, survivor, and cumulative hazard functions, Kaplan-Meier and actuarial estimation of the survival distribution, comparison of survival using log rank and other tests, regression models including the Cox proportional hazards model and accelerated failure time model, adjustment for time-varying covariates, and use of parametric distributions (exponential, Weibull) in survival analysis. Class material will include presentation of statistical methods for estimation and testing, along with current software (SAS, Stata, Splus) for implementing analyses of discrete data and survival data. Applications to real data will be emphasized.

Course Note: BIO 210, BIO 213, or BIO 230 required, or signature of instructor. (5.06)

ECONOMICS COURSES

Economics 2030. Psychology and Economics (*not offered 2007-2008*)

Catalog Number: 3828

Sendhil Mullainathan

Half course (fall term). Hours to be arranged.

Explores economic and psychological models of human behavior. Theoretical topics include bounded rationality, intertemporal choice, decision making under uncertainty, inference, choice heuristics, and social preferences. Economic applications include asset pricing, corporate finance, macroeconomics, labor, development, and industrial organization.

Note: Expected to be given in 2008–09. Primarily for graduate students but open to undergraduates.

Prerequisite: Knowledge of multivariable calculus and econometrics.

Economics 2040. Experimental Economics (*not offered 2007-2008*)

Catalog Number: 8485 Enrollment: Limited to 48.

Alvin E. Roth (FAS, Business School)

Half course (fall term). Hours to be arranged.

An introduction to experimental economics, and some of the major subject areas that have been addressed by laboratory experiments. We concentrate on series of experiments, to see how experiments build on one another.

Note: Expected to be given in 2008–09. Open to undergraduates with permission of the instructor. Offered jointly with the Business School as 4160.

Economics 2052. Game Theory I: Equilibrium Theory

Catalog Number: 3690

Adam Szeidl (University of California, Berkeley)

Half course (spring term). M., 4–7 pm. EXAM GROUP: 9

Equilibrium analysis and its applications. Topics vary, but typically include equilibrium refinements (sequential equilibrium), the equilibria of various classes of games (repeated games, auctions, signaling games) and the definition and application of common knowledge.

Prerequisite: Economics 2010a or permission of the instructor.

Economics 2056. Market Design

Catalog Number: 3634

Alvin E. Roth (FAS, Business School) and Peter A. Coles (Business School)

Half course (spring term). F., 9–12. EXAM GROUP: 2, 3, 4

Deals with the theory and practice of market design, with prominent examples drawn from auctions, labor markets, school choice, and kidney exchange.

Note: Open to undergraduates with permission of the instructors. Offered jointly with the Business School as 4150.

Prerequisite: Game theory.

Economics 2059. Decision Theory (*not offered 2007-2008*)

Catalog Number: 3825

Half course (spring term). Hours to be arranged.

First half focuses on classical models of choice theory, formalizing the notion of rationality and exploring its behavioral implications. The second half focuses on recent research, incorporating insights from psychology and allowing for boundedly-rational agents.

Note: Expected to be given in 2008–09.

Economics 2060. Contract Theory

Catalog Number: 1404

Philippe Aghion

Half course (fall term). M., W., 4–5:30. EXAM GROUP: 9

Recent developments in contract theory. Includes hidden action and hidden information models, dynamic agency issues, incomplete contracts, and applications of contract theory to theories of the firm and corporate financial structure.

Economics 2061. Dynamic Games and Contracts (*New Course*)

Catalog Number: 4138

Susan Athey

Half course (fall term). F., 1–4. EXAM GROUP: 6, 7, 8

This course develops methods for analyzing repeated and dynamic games and contracts in environments with hidden

information and moral hazard problems. Applications include collusion, bilateral trade, and mutual insurance. This course complements Economics 2415.

Economics 2070. Topics in Information Economics (not offered 2007-2008)

Catalog Number: 5647

Jerry R. Green

Half course (fall term). Tu., 6–9 pm. EXAM GROUP: 18

A research seminar for students considering work in economic theory. Topics include: voting theory; cooperative game theory (complete and incomplete information); models of quasi-rational behavior (reason-based choice, random choice models, complexity); general equilibrium with adverse selection.

Note: Expected to be given in 2008–09. Offered jointly with the Business School as 4165.

Economics 2327. Economic Development: Theory, Policy, and Evidence

Catalog Number: 8092

Dani Rodrik (Kennedy School)

Half course (spring term). M., W., 11:40–1, and a review section F. EXAM GROUP: 4, 5

Provides a graduate-level overview of the theory of and evidence on economic development from a policy-oriented perspective. Aim is to allow students to analyze policy debates surrounding development from a broad and rigorous analytical base.

Note: Offered jointly with the Kennedy School as PED-101.

Economics 2390e. Topics in Development Economics (not offered 2007-2008)

Catalog Number: 8744

Sendhil Mullainathan

Half course (spring term). Tu., 6–8 pm. EXAM GROUP: 18

An introduction to aspects of performing field work in development economics. This course prepares students for field work through background readings, help in choice of field site, and teaching of empirical tools.

Note: Expected to be given in 2008–09. Students are expected to spend the summer doing field work and writing a major research paper.

Economics 2415. Theory of Optimal Policy

Catalog Number: 2855

Michael Golosov (MIT)

Half course (spring term). Tu., Th., 1–2:30. EXAM GROUP: 15, 16

Theory of optimal taxation: static and dynamic models; taxation; Ramsey and Mirrlees approaches; theory of social insurance. Macroeconomic approach to optimal policy includes fiscal and monetary policy over time and business cycles, time-consistency problems.

Economics 2470. Law and Economics

Catalog Number: 5995

Andrei Shleifer and Louis E. Kaplow (Law School)

Half course (spring term). W., 3–5. EXAM GROUP: 8, 9

Emphasizes themes relating different subjects in the field and analyzes topics that illustrate those themes. Besides issues such as torts, property, litigation, and law enforcement, will also focus on judicial decision-making and cross-country comparisons of the effects of laws and legal systems.

Note: Offered jointly with the Law School as 96203-31.

Economics 2670. Organizational Economics

Catalog Number: 6913

Oliver S. Hart and Robert Gibbons (Massachusetts Institute of Technology)

Half course (spring term). M., W., 10–11:30. EXAM GROUP: 3, 4

Theoretical and empirical work on organizations. Topics include agency problems inside organizations, boundaries of the firm, relational contracting, authority, hierarchies, delegation, decentralization, and nonstandard organizational arrangements (including joint ventures, venture capital, and public ownership).

Note: Offered jointly with the Business School as 4180.

Prerequisite: Economics 2020.

Economics 2880. Economics of Science (New Course)

Catalog Number: 7488

Richard B. Freeman

Half course (spring term). Tu., Th., 2:30–4. EXAM GROUP: 16, 17

Analyzes economic issues regarding the role of science and RD in the economy and in the deployment and productivity of scientists, engineers, and highly skilled technical workers. Topics include: wage levels/employment prospects; stipend policy, education/recruitment, student unionization/post-doc organization, career choices/trajectories, with reference to women; scientific competition/collaboration.

Psychology 2650. Behavioral Approaches to Decision Making and Negotiation

Catalog Number: 7147

Max H. Bazerman (Business School)

Half course (spring term). M., 3–6. EXAM GROUP: 8, 9

Research overview of behavioral decision making and decision analytic perspectives to negotiation. Explores bounded rationality, decision biases, human decision making. Develops a behavioral decision perspective to negotiation, and examines how the field is currently evolving.

Note: Offered jointly with the Business School as 4420. Open to juniors and seniors in psychology and economics who are writing, or plan to write, a senior thesis.

(Kennedy School) API-302 Analytic Frameworks for Policy

Richard Zeckhauser

Fall. Tu., Th., 10:10 -11:30.

Develops abilities in using analytic frameworks in the formulation and assessment of public policy. It considers a variety of analytic techniques, particularly those directed toward uncertainty and interactive decision problems. It emphasizes the application of techniques to policy analysis, not formal derivations. Students encounter case studies, methodological readings, the computer, a final exam, and challenging problem sets.

Prerequisites: An understanding of intermediate-level microeconomic theory and introductory techniques of optimization and decision analysis; API-101, API-102, or equivalent.

RESEARCH SEMINARS

(These seminars have been found to be useful by students enrolled in related field work. Attendance is recommended but does not count for credit towards program or concentration requirements.)

Economics 2390d. The Economic Growth and Development Workshop

Catalog Number: 1926

Michael R. Kremer and members of the Department

Full course. Fall: Tu., 2:30–4; Spring: W., 2:30–4. EXAM GROUP: Fall: 16, 17; Spring: 7, 8

Fall speakers cover issues in growth and development. Spring speakers alternate between “growth and institutions,” focusing on the macro aspects of growth and development, and “labor and development,” focusing on the micro aspects.

Economics 2480. The Public Economics and Fiscal Policy Workshop

Catalog Number: 6834

David M. Cutler and Martin Feldstein

Full course. M., 4–6. EXAM GROUP: 9

Focuses on current issues in the theory and practice of public finance, including both tax and expenditure policies.

Economics 2640hf. The Industrial Organization Workshop

Catalog Number: 5981

Julie H. Mortimer and Ariel Pakes (fall term); Susan Athey (spring term)

Half course (throughout the year). M., 2:30–4. EXAM GROUP: 7, 8

Economics 2812. The Labor Economics Workshop

Catalog Number: 0230

Lawrence F. Katz, George J. Borjas (Kennedy School), Richard B. Freeman, and Roland G. Fryer

Full course. W., 4–5:30. EXAM GROUP: 9

Focuses on research concerning the operation of labor markets.