MIT's Economics Department ranks #1. 
(according to “Best Graduate Schools”, U.S. News and World Report)

The economics major opens doors to rewarding careers in academia, consulting, finance, global business, government, and law.

Undergraduate students are able to take advantage of numerous research opportunities (UROPs) and to work closely with faculty members and graduate students.

Course 14 undergraduates do their own research, working one-on-one with faculty mentors.

MIT Economics excels at developing the big data skills so much in demand today.
For over a century, the Department of Economics at MIT has played a leading role in economics education, research, and public service. Francis Amasa Walker, MIT’s third president, introduced undergraduate studies in economics more than one hundred years ago. In 1937, the Department added graduate courses leading to a master’s degree. Four years later, in 1941, it inaugurated the PhD program that is renowned worldwide. MIT’s approach to training in economics has been widely emulated at other leading institutions. MIT established its School of Humanities, Arts, and Social Sciences (SHASS) in 1950, with the Economics Department playing a central role within the School. The Economics Department expanded significantly in the years following World War II. By the 1950s, it had established itself as one of the world’s leading centers for economic research. Graduates of the MIT Economics Department’s undergraduate and doctoral program are now well-represented on the faculties of virtually all leading economics departments.

The MIT Economics Department today is a vibrant collection of faculty and students. The Department’s current faculty have received numerous awards, including four Nobel Prizes (the late Paul Samuelson, Robert Solow, the late Franco Modigliani, and Peter Diamond). Many faculty members are Fellows of the National Academy of Sciences, the American Academy of Arts and Sciences, and the Econometric Society. Numerous faculty members have served in various elected offices of the American Economic Association and the Econometric Society.

The Department offers the most rigorous undergraduate economics education of any U.S. college or university and is consistently ranked as a top graduate training institution. Many undergraduate majors, as well as students from other departments at MIT, participate in research projects supervised by the economics faculty.
Undergraduate Economics

Undergraduate Research

The Economics Department at MIT has a long tradition of outstanding training of undergraduates. The unique analytical skills of the MIT undergraduate student body allow the faculty to offer a rigorous and comprehensive program unlike that of any other U.S. college or university. The undergraduate major in economics begins with a two-semester introductory sequence that explores theoretical and applied topics in both microeconomics and macroeconomics. Additional training in microeconomics, macroeconomics, statistics, and econometrics follows. Majors have a choice of additional applied and advanced courses to draw upon from a menu that includes economic development, economic theory, health economics, industrial organization, international economics, labor economics, monetary economics, public economics, and other courses. The level of mathematics mastery among undergraduates allows economics courses to be taught at a high level.

Undergraduate students take advantage of numerous opportunities to hone their research skills. One such opportunity is MIT’s Undergraduate Research Opportunities Program (UROP), which fosters close ties between undergraduates and faculty members. Students in the UROP program work closely with faculty members and graduate students to bring the technical skills of modern economics to bear on questions of economic importance. UROP supplements coursework, and its projects allow undergraduates to participate in ongoing research in the Department and to meet with faculty members outside of class. They perform tasks such as gathering and analyzing economic data, writing computer programs, checking mathematical calculations, and gathering research materials. In addition to UROP opportunities, undergraduates develop research and writing skills through coursework that includes producing original papers.

HE ECONOMICS FACULTY is committed to outstanding undergraduate education. Senior professors teach introductory undergraduate courses, and faculty at all levels incorporate the latest economic methods and findings into their electives. The Department’s success in attracting exceptional undergraduates and preparing them for advanced study demonstrates the soundness of this philosophy and the excellence of the program.

Many of our faculty members have written undergraduate and graduate textbooks that are used in colleges and universities around the world. Paul Samuelson first developed his pioneering economics text in an introductory economics course for MIT undergraduates. Rudiger Dornbusch and Stanley Fischer’s intermediate macroeconomics textbook, Macroeconomics, introduced modern macroeconomic analysis to undergraduates. Current generations of students are taught from Olivier Blanchard’s textbook in macroeconomics, Jonathan Gruber’s text in Public Finance and Public Policy, and Michael Whinston’s microeconomics textbook at both the undergraduate and graduate levels. Joshua Angrist’s Mastering ‘Metrics: The Path from Cause to Effect has been widely praised for its integration of theory and practice.

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Katherine Allsop graduated from MIT in June, 2014, earning a degree in Economics with a minor in Mathematics. As an undergraduate, Katie participated in a UROP at The Abdul Latif Jameel Poverty Action Lab during her junior year. In the summer of 2013 she interned with the White House Council of Economic Advisers, where she primarily worked on projects related to energy policy. Katie’s main project involved the CEA’s collaboration with the EPA and other governmental departments to revise the Renewable Fuel Standards, legislation that determines national minimum requirements for renewable fuel usage. The team she was involved with at the CEA constructed a model to help forecast the economic impacts of different potential renewable fuel requirements to help the involved parties determine the optimal choice of renewable fuel requirements for future years. In particular, she had the opportunity to work closely with CEA member Professor James Stock of Harvard on this Renewable Fuel Standards project.

Katie’s most memorable experiences were her interactions with the faculty and her advisors over her four years at the Institute. In particular, she recalled that Professor Sara Fisher Ellison was a very supportive and involved advisor who always gave great advice about finding UROPs, picking classes, and anything else that she needed help with.

Katie is currently working at Cornerstone Research, an economic consulting firm, as an analyst. She works in Copley Square at the Boston office, and her responsibilities include conducting quantitative and qualitative analyses to assist Cornerstone’s clients in answering the many complex economic questions that arise in business litigation.

Undergraduate Majors in Economics

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Aims of the Undergraduate Program for Majors

The undergraduate curriculum in economics is designed to:
- provide a firm grounding in modern economic theory
- instill the capacity for independent thought about economic policies and problems
- develop the capacity to conduct original, quantitative research
- provide basic descriptive knowledge about the US and the world economy

Undergraduate study of economics is not professional training in the sense that undergraduate training in engineering typically is. Rather, it is an introductory study of a particular discipline, much more comparable to undergraduate study of biology or physics.

Undergraduate economics majors often go on to graduate work and to distinguished careers in academia, global businesses, government, finance, consulting, and law. About 20 percent of MIT economics undergraduates enter a graduate program in economics or finance. This is among the highest yield of PhD candidates from any undergraduate economics program. Approximately half of the Department’s graduates choose to gain experience in business, government, consulting, and non-profit organizations before seeking out business and public policy schools for post-graduate study. The number of post-graduates choosing to study law remains fairly constant, and the growing use of formal economics in the practice of law has strengthened this connection. Whatever their destinations, undergraduate economics majors acquire essential skills for a wide variety of jobs, an excellent foundation in economics, and an opportunity to meet faculty and fellow students in a challenging intellectual environment.

Preparation for Graduate Studies in Economics

The Department of Economics has prepared many undergraduates for advanced study in the best graduate economics departments in the United States and abroad. Former undergraduates find that they are exceptionally well prepared for graduate school by virtue of their Course 14 training, since juniors and seniors often take subjects comparable to those in many graduate programs. Undergraduates can also receive advice here about subjects in mathematics and statistics which will help prepare them for subsequent graduate study in economics. Many former Course 14 undergraduates have earned doctorates and are now engaged in teaching and research at the college and university levels. Others are currently employed in industry and government.

A Few Prominent Graduates

Course 14 undergraduates go on to pursue a wide range of different careers, both in economics and in other fields. We have had a number of graduates gain significant prominence in their chosen fields, a few of whom are listed below:

Karen Arenson
New York Times Higher Education Reporter

Lawrence Summers
Former Secretary of the Treasury and former president of Harvard University

Athanasios Orphanides
Former Governor of the Central Bank of Cyprus

Hal Varian
Chief Economist at Google

Gregory Hawkins
Chief Risk Officer for Global Real Estate and Mortgages at Citigroup

Farhan Zaidi
General Manager of the Los Angeles Dodgers

Don Layton
CEO of Freddie Mac and former CEO of E*Trade

Direct Employment Opportunities

An undergraduate major in economics opens up many possibilities for employment. Managerial training programs in many firms, including banks, other financial institutions, and large manufacturing companies, accept economists in substantial numbers. There are also many opportunities for employment in government at the state, federal, or international levels. In addition, a growing number of research and consulting firms employ large numbers of economists in such areas as forecasting, industry analysis, and litigation support.

Preparation for Business or Legal Education

Undergraduate economics training provides excellent preparation for either business school or the study of law. Since managers are always confronted with decisions about the allocation of scarce resources, it is not surprising that economics provides a useful background. Most business schools require their students to take several economics courses and look favorably on undergraduate training in this field. Several electives in the Course 14 curriculum focus on the analyses of firms and industries and on government regulation of the corporate sector. In addition, as legal cases increasingly turn on points of economic analysis, many law schools are requiring their students to obtain a basic knowledge of economic principles. Some law schools offer specializations in Law and Economics, and virtually all regard an undergraduate major in economics as excellent preparation for study and practice of law. Electives which consider the economic effects of taxes and other public policies are especially relevant for students interested in analyzing legal institutions.
The Undergraduate Curriculum

The Course 14 Program leads to the degree of Bachelor of Science in Economics. In addition to fulfilling the 17 General Institute Requirements¹, an economics major must complete the following subjects²:

- 14.01 Principles of Microeconomics
- 14.02 Principles of Macroeconomics
- 14.04 Intermediate Microeconomic Theory
- 14.05 Intermediate Applied Macroeconomics
- 14.30 Introduction to Statistical Methods in Economics (or 6.041/6.431, or 1.010, or 18.440)
- 14.32 Econometrics
- 14.33 Econ. Research & Communication
- Thesis (14.33 is a prerequisite.)³
- 60 units of Economics Electives (or five full subjects)

Courses 14.01 and 14.04 provide a strong background in microeconomic analysis, and 14.02 and 14.05 do the same for macroeconomics. These are the two broad and fundamental areas of modern economics. 14.30 and 14.32 give a firm grounding in techniques for analyzing data and testing economic models. 14.33 requires a term paper that analyzes a body of data on an economic question.

The 60 units (or five full subjects) of electives may be satisfied from the following list of undergraduate subjects designed generally to enrich the background of the student in economic institutions and the analysis of policy problems⁴:

- 14.06 Advanced Macroeconomics
- 14.11 Topics in Economics
- 14.12 Economic Applications of Game Theory
- 14.13 Psychology and Economics
- 14.15J Networks
- 14.16 Strategy and Information
- 14.19 Market Design
- 14.20 Industrial Organization and Competitive Strategy
- 14.21J Health Economics
- 14.26 Economics of Incentives
- 14.27 Economics and E-Commerce
- 14.36 Advanced Econometrics
- 14.41 Public Economics
- 14.42 Environmental Policy and Economics
- 14.43J Energy Decisions, Markets, and Policies
- 14.44 Energy Economics
- 14.54 International Trade
- 14.64 Labor Economics and Public Policy
- 14.70J The Development of Medieval Economies
- 14.73 The Challenge of World Poverty
- 14.74 Foundations of Development Economics
- 14.75 Political Economy and Development

¹ Note that up to three Economics elective subjects may be used in partial satisfaction of the HASS requirement, that 14.30 (Statistics) may be counted toward the REST requirement, and that 14.33 (Economics Research and Communication) may be used to satisfy the Institute laboratory requirement.

² Students must earn grades of C or better in 14.01, 14.02, 14.04, 14.05, 14.30, and 14.32 in order to fulfill departmental requirements.

³ May be replaced by an elective subject in economics

⁴ Please note that not all of these courses are offered each year. Please check the course listings on the registrar’s web page for the classes that are offered each semester.
Double Majoring in Course 14

Students may combine a course 14 major with a major in any other department. In order to receive two majors, students must complete the 17 GIRs and the departmental requirements for both majors. Some double-major combinations are more popular than others. Course 14 double majors with 6, 15, and 18 are especially popular.

Single majors may count three of their economics subjects toward the eight-subject HASS requirement.

Double majors may count up to six of their economics subjects toward the eight-subject HASS requirement.

*Please refer to the Department’s website for the guidelines and administrative procedures for obtaining a second major: http://economics.mit.edu/under/double

Undergraduate Majors in Economics

Noam Angrist, one of the 32 American students who has been named a Rhodes Scholar for 2015, graduated from MIT in 2013, earning a BS in Economics and Mathematics.

During his college years, Noam co-founded an after-school enrichment program called Amphibious Achievement, which introduced innovative techniques to make the sport of rowing accessible to over 200 low-income urban youth. He was also a co-founder and principal investigator of TechLit, a reading-enrichment program in Boston, which used Kindle e-readers to boost reading access for underprivileged youth. During his undergraduate summers, Noam interned at the World Bank, the White House, and at the MIT Economics Department, where he sometimes encountered his father, Professor Joshua Angrist.

Noam said that his most memorable Course 14 experience was “leveraging his friends’ MIT computers web-scrapping skills to get Yelp data for his 14.33 class” (taught by Sara Fisher Ellison). He was determined to study the effect of the tipped minimum wage on quality of service in restaurants around the country. The higher the percentage of the waiter’s wage made up of tips (which varied by state and minimum-wage laws), the higher or lower the incentive to perform, captured by Yelp quality-of-service data. Inspired by the Big Mac index, in an attempt to control for food quality, he considered only fast-food chains with tipped waiting jobs. The results of the study were reported in Noam’s paper (“Does Merit Pay Pay?”) and presented to the class. He shares that “the whole experience taught me the nuances, challenges and thrills of research, and was a true Course 14 (economics) moment.”

After receiving a Fulbright Scholarship, Noam founded Young 1ove, a non-governmental organization in Botswana dedicated to informing children of the risks of HIV/AIDS and how to lead healthy lives by teaching classes in high-risk public schools. He was successful in raising over $250,000 USD, was featured on national TV & radio, secured a mandate from the Ministry of Education to reach every child in Botswana, and delivered classes in 340 schools to 35,000+ youth.
The Economics Department firmly believes that some experience with actual economic research is a vital component of MIT Economics training. In addition to the thesis, there are three primary channels through which undergraduate majors acquire research experience. The first is through the Project Lab which is required as part of 14.33 (Economics Research and Communication). Each student in 14.33 prepares a study of an applied economics question. Topics vary widely, from the measurement of how price changes affect the demand for particular products to studies of how monetary or fiscal policies have affected interest rates, unemployment, or output in various countries. The Project Lab in 14.33 provides an excellent opportunity for undergraduate majors to combine their knowledge of economic principles from intermediate subjects with careful data analysis to study a topic of their own choosing.

The second method by which undergraduate majors become involved in research is through the MIT Undergraduate Research Opportunities Program (UROP). Many faculty members in the Economics Department direct UROP projects. The research projects and researchers involved change from year to year; brief descriptions of current projects can be found in the UROP booklet issued by the UROP office. Past projects have included studies of competition in the telecommunications market, the effects of taxes on corporate decisions, the impact of interest rates on individual savings decisions, and the impact of direct foreign investment on developing economies. Most UROP projects provide an opportunity for one-on-one contact between a student and a faculty member, and they are designed to teach undergraduate majors how economic research is carried out in practice and to prepare them for subsequent research projects of their own. For further information about the UROP program, contact the department's UROP advisor.

Other opportunities for undergraduates to become involved in research are provided through summer employment on research projects being directed by faculty members in the department, or through summer internships in government, industry, or research organizations. Each summer a few students who have made contact with faculty members through classes or UROP projects are employed as part of research teams consisting of faculty members, graduate students, and undergraduates. There is no sure-fire way of obtaining these jobs, but UROP involvement is often a first step. Alternatively, interested students should contact faculty members whose research appeals to them to investigate the possibility of summer employment.

During his time as an undergraduate, Saad Shaheen, who graduated in 2014, earning a bachelor’s degree in Economics and Management Science, served as the President of the MIT Fighting World Hunger Club. He says that this provided him “the opportunity to give back to the community and work with some very talented people.” He also worked as an associate advisor during 2013-2014 for the Class of 2015 Economics Majors, guiding them through their MIT experience. He shared that his most memorable Course 14 experience had been chairing the Course 14 (Economics) panel. It involved mostly meeting and interacting with Economics freshmen with tremendous enthusiasm, vigor and zeal.

Another important part of Saad’s undergraduate experience was his participation in UROPs with Professors Dave Donaldson, Andrew Lo and Pierre Azoulay. He stated that the best part about his UROP experiences was that it was “a roller-coaster ride from working on investment strategies to researching remote sensing initiative and satellite imagery in order to estimate economic variables.” The wide array of skills he acquired has been invaluable in his practical life.

Saad is currently working as the assistant to a portfolio manager at Numeric Investors in Boston, a quantitative investment company that manages $15.1 billion in assets. He assists portfolio managers in implementing Numeric’s Investment Strategies, researching alpha signals, and developing financial models to supplement and enhance Numeric’s strategies.
Minoring in Economics at MIT

The Economics minor consists of six subjects arranged into three levels of study and chosen as follows:

**TIER I**
Three subjects, including:
- 14.01 - Principles of Microeconomics;
- 14.02 - Principles of Macroeconomics;
- 14.30 - Introduction to Statistical Methods in Economics*; or
- 18.05 - Introduction to Probability and Statistics*; or
- 1.010 - Uncertainty in Engineering*.

**TIER II**
One of the following subjects:
- 14.03 - Micro Theory and Public Policy; or
- 14.04 - Intermediate Microeconomic Theory; or
- 14.05 - Intermediate Applied Macroeconomics.

**TIER III**
Two of the following subjects:
- 14.06 Advanced Macroeconomics
- 14.11 Topics in Economics
- 14.12 Economic Applications of Game Theory
- 14.13 Psychology and Economics
- 14.15J Networks
- 14.16 Strategy and Information (Prerequisite: 14.03/14.04)
- 14.19 Market Strategy (Prerequisite: 14.04)
- 14.20 Industrial Organization and Competitive Strategy
- 14.21J Health Economics
- 14.26 Economics of Incentives (Prerequisite: 14.04)
- 14.27 Economics and E-commerce (Prerequisite: 14.30 or 6.041)
- 14.41 Public Economics
- 14.42 Environmental Policy and Economics
- 14.43J Energy Decisions, Markets, and Policies
- 14.44 Energy Economics
- 14.54 International Trade
- 14.64 Labor Economics and Public Policy
- 14.70J The Development of Medieval Economies
- 14.73 The Challenge of World Poverty
- 14.74 Foundations of Development Economics
- 14.75 Political Economy and Development
- 15.411 Finance Theory I AND 15.412 Finance Theory II**

Students may not exercise the junior/senior pass/fail option for any subjects used to fulfill a HASS minor.

Selecting two subjects from Tier II and one from Tier III is not permitted.

Under no circumstances may a student complete a minor with fewer than six subjects. Any student who receives permission from the Economics Department to skip 14.01 and/or 14.02 and take a higher-level subject must take replacement subject(s) for 14.01/14.02.

A maximum of two subjects counting for the minor may overlap with the subjects that are required for any major or a second minor. If a student’s major(s) requires more than two of the same subjects that are required for the economics minor, as is the case with the management major, the student must take additional subjects so that at least four subjects are counting only for the economics minor.

*The only acceptable substitutes are the following: 6.041 or 18.440 AND one of these four: 14.32, 15.075, 18.441, or 18.443. For example, 6.041 and 15.075 is an acceptable pair. ANY of these courses ALONE is not a substitute for 14.30 or 18.05 or 1.010.

**BOTH subjects may be taken to satisfy ONE Tier III elective. Neither subject alone or with another subject will count toward the minor.
The concentration requirement for Economics consists of three subjects: 14.01 Principles of Microeconomics and/or 14.02 Principles of Macroeconomics, and one or two additional subjects chosen from the following:

- 14.03-Micro Theory and Public Policy
- 14.05-Intermediate Applied Macroeconomics
- 14.11-Topics in Economics
- 14.12-Economic Applications of Game Theory
- 14.13-Psychology and Economics
- 14.15J-Networks
- 14.16-Strategy and Information (Prerequisite: 14.03/14.04)
- 14.19-Market Design (Prerequisite: 14.04)
- 14.20-Industrial Organization & Competitive Strategy
- 14.21J-Health Economics
- 14.27-Economics and E-Commerce (Prerequisite: 14.30 or 6.041)
- 14.41-Public Economics
- 14.42-Environmental Policy and Economics
- 14.43J-Energy Decisions, Markets, and Policies
- 14.44-Energy Economics
- 14.54-International Trade
- 14.64-Labor Economics and Public Policy
- 14.73-The Challenge of World Poverty
- 14.74-Foundations of Development Policy
- 14.75-Political Economy and Development

The following subjects are not acceptable: 14.30, 14.32, and 14.70J.

The concentration in development economics is well suited for students who are interested in studying the challenge posed by massive and persistent world poverty and in learning how the tools of economics can be used to shape policies designed to remedy this serious social problem.

The Development Economics concentration requires three subjects:

- 14.01 Principles of Microeconomics,
- 14.73 The Challenge of World Poverty,

and a more advanced subject in development economics. Usually the third subject will be either:

- 14.74 Foundations of Development Policy*; or
- 14.75 Political Economy and Economic Development*.

An acceptable alternative set of courses would be 14.01, 14.74, and 14.75.

*It should be noted that both 14.74 and 14.75 have a prerequisite of 14.30 or an equivalent class in probability and statistics.
14.01 Principles of Microeconomics

Why has a gallon of gasoline become so inexpensive? Why do you have to pay more for a same-day plane reservation? Is there an economic theory of marriage? What exactly is a zero-sum game? What is the sunk-cost fallacy? What is a network effect? Why is long-run supply in perfect competition just like quantum mechanics? What’s the right time to sell your rare baseball card? Is there an economic explanation why we don’t yet have an HIV vaccine? This is a small subset of the questions that we will answer in 14.01, Principles of Microeconomics.

This course is an introduction to the basic principles of economics. Economics is fundamentally about the tradeoffs inherent in making decisions with scarce resources. Individuals, firms and governments need to figure out how to allocate their resources such as time, money, and effort across a wide variety of options. What economics offers is a simple yet powerful framework for explaining how these decisions are made. The tools of this course can offer insights into an enormous range of activities which, when aggregated together, account for the U.S. economy.

At its most basic level, microeconomics is a constrained-optimization exercise in the spirit of what is done in most of the engineering courses at MIT. It is for this reason that important advances in modern modern microeconomics occurred at MIT, with some of the most important economists of the 20th century working at MIT to develop the tools that form the core of the field. It is also for this reason that MIT undergraduates will find 14.01 so appealing: it is like an engineering problem, but instead of designing a circuit or a building, we are designing lives and the U.S. economy!

In 14.01 we endeavor to both build models and to apply them to the most important issues of the day. The first part of the course focuses on the overall mix of supply and demand in the market and addresses questions such as why a minimum wage might cause unemployment. We then turn to modeling how consumers make decisions, allowing us to think about how individuals decide how much to consume of one good versus another or how many hours per day to work. The third part of the course focuses on the production decisions of firms, ranging from discussions of the proper scale at which to operate a plant to how firms compete in markets with only a few competitors. The final part of the course presents applications of the material we have learned, focusing on questions such as how individuals deal with the uncertainty in their lives to how the government should think about redistributing wealth from rich to poor.

At the end of 14.01 you will have one of the most valuable skills sets possible for understanding a wide variety of phenomena you encounter in everyday life: thinking like an economist.

Meet the Instructors

Jonathan Gruber

Professor Jonathan Gruber is the Ford Professor of Economics and has taught at MIT since 1992. He received his Bachelor of Science degree in Economics from MIT. He is the Director of the Health Care Program at the National Bureau of Economic Research, where he is a Research Associate, and President Elect of the American Society of Health Economists. He is a member of the Institute of Medicine, the American Academy of Arts and Sciences, and the National Academy of Social Insurance.

During the 1997-1998 academic year, Professor Gruber was on leave as Deputy Assistant Secretary for Economic Policy at the Treasury Department. From 2003-2006 he was a key architect of Massachusetts’ ambitious healthcare reform effort, and in 2006 became an inaugural member of the Health Connector Board, the main implementing body for that effort. During 2009-2010 he served as a technical consultant to the Obama Administration and worked with both the Administration and Congress to help craft the Patient Protection and Affordable Care Act.

Jeffrey Harris

Professor Jeff Harris conducts two successful careers simultaneously: he is a medical doctor and a professor of Economics at MIT. He has served as coauthor and scientific editor of various reports of the U.S. Surgeon General. He has participated in the Committee for a National Strategy toward AIDS, the Committee on Reducing Tobacco Use, and other committees of the U.S. National Academy of Sciences. He has given invited testimony before the U.S. Congress concerning healthcare reform and the Master Settlement Agreement between tobacco manufacturers and the U.S. attorneys general. His recent research includes an evaluation of the impact of Uruguay’s tobacco control campaign, as well as a study of the determinants of medical specialty choice in Spain. When Professor Harris has time, he takes advantage of his medical training to work as a primary care internist in a community health center. Jeff’s Spanish is pretty good now, but he’s still working on his medical Khmer vocabulary.
14.02 Principles of Macroeconomics

14.02 is an overview of macroeconomics: the study of aggregate economic fluctuations, unemployment and inflation, the operation of financial markets, international trade and capital flows, and long-term economic growth. The course introduces the key concepts and vocabulary of macroeconomics, for example, how the inflation rate is measured, how economic growth can be compared across countries and time periods and how markets for stocks and bonds operate. It also develops the framework for macroeconomic analysis that is used by economic researchers to study fluctuations in economic growth and in the level of economic activity. The course is designed to provide both essential background for students who hope to pursue future study in economics and finance and “economic literacy” for those who do not plan to take many courses in this area.

Because macroeconomics is often a subject of policy debate and popular news accounts, the concepts taught in 14.02 can often be connected to current economic events. The course may discuss the latest employment report, which provides a perspective on the strength or weakness of the U.S. economy, as well as news about inflation, stock market fluctuations and capital flows between countries. The course also compares fiscal policy and government debt across countries and discusses how government tax and spending policies affect economic activity.

Macroeconomics combines the analysis of current data with the application of simple mathematical models that describe the relationships between key economic aggregates. Because global macroeconomic conditions are always changing, and policy challenges vary with them, 14.02 is a dynamic and evolving course. The topics that receive emphasis in a particular year may be influenced by the most pressing policy debates of the moment. Understanding the increase in unemployment during and after the Great Recession of 2008-2009, for example, has been a recent topic of emphasis.

Meet the Instructors

James Poterba

Jim Poterba, the Mitsui Professor of Economics, has been an MIT faculty member since 1983. His past service includes more than a dozen years as either Department Head or Associate Department Head. His research focuses on taxation, saving, and fiscal policy. Jim is also the President of the National Bureau of Economic Research, a research organization with more than 1400 affiliated economists that is best known for its role as the official arbiter of the starting and ending dates for recessions in the United States. He has served as a Vice President of the American Economic Association and is a member of the National Academy of Sciences.

Jim’s research focuses on how taxation affects the economic decisions of households and firms, particularly those involving saving and portfolio behavior. His recent research has analyzed the determinants of retirement saving, the drawdown of assets after households reach retirement, and the role of tax-deferred retirement saving programs such as 401(k) plans in contributing to retirement security.

Jim is interested more broadly in applied economics, and he tries to integrate current policy discussions into his teaching.

Ricardo J. Caballero

Ricardo J. Caballero is the Ford International Professor of Economics and Director of the World Economic Laboratory at the Massachusetts Institute of Technology, an NBER Research Associate, and an advisor of QFR Capital Management LP. Professor Caballero was the Chairman of MIT’s Economics Department (2008-2011) and has been a visiting scholar and consultant at most major central banks and international financial institutions.

His teaching and research fields are macroeconomics, international economics, and finance. His current research looks at global capital markets, speculative episodes and financial bubbles, systemic crises prevention mechanisms, and dynamic restructuring. His policy work focuses on aggregate risk management and insurance arrangements for both emerging markets and developed economies. He has also written about aggregate consumption and investment, exchange rates, externalities, growth, price rigidity, dynamic aggregation, networks and complexity.

Professor Caballero has served on the editorial board of several academic journals and has a very extensive list of publications in all major academic journals. Among his major awards, he was the winner of the 2002 Frisch Medal of the Econometric Society.
MIT graduate Jonathan Tebes’ broad economics skills prepared him to work with Professor Jonathan Gruber on a variety of research projects last year. One example was data collection for a study that Gruber was undertaking on the impact of decision-support tools on health insurance plan choice. Choosing the right health insurance plan can be a daunting challenge, and Gruber’s recent research suggests that, as a result, individuals often do not choose the plan that appears to be best for them. To address this concern, the state of Oregon is introducing a decision-support tool that will help employees understand the full cost implications of alternative health insurance choices. Studying this tool requires information on the details of all of the insurance choices facing these employees, including the premiums that they will pay and the costs they will face for different medical services. John Tebes contributed to the project by collecting these data and developing a “cost calculator” that incorporated all of the information into a computer simulation program to estimate the costs to employees of alternative health insurance plans. This was an integral step in a project which sheds light on how employers and governments can assist consumers in choosing plans in the new world of health-insurance exchanges. John is currently working at the National Bureau of Economic Research for health economist MIT Professor Amy Finkelstein.

Jean Tirole visited MIT in November 2014, several weeks after he was awarded the Nobel Prize, and delivered the Undergraduate Economics Association Lecture on “Intellectual Property and Public Policy.” The lecture, delivered to an overflow crowd in Bartos Theater, explored various strategies for encouraging innovative activities, and described the importance of industry-specific circumstances in crafting optimal regulatory policy.

The Undergraduate Economics Association (UEA) provides an informal forum for students to meet and explore various topics with faculty. Sponsored by the faculty, the UEA is organized by and for economics majors to address such issues as career planning and current topics in economic policy. Students and faculty also enjoy the relaxed interaction that the UEA provides.