Learning Goals for Economics Majors
Department of Economics

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Economics is the study of how people make choices under conditions of scarcity of resources, including time, and the implications of these choices for individual and social welfare. Its methods allow for a deeper, more analytic, understanding of the connections between individual choices and social outcomes.

At Brandeis, majors in economics receive training in the core subjects of the discipline: general principles, micro- and macroeconomic theory, statistics, and econometrics. They learn to use the cumulative skills developed in the core courses to analyze a variety of economic problems, social issues, and economic institutions. Exposure to a wide selection of economic fields is obtained through the requirement of four course electives which are taken from a list that includes most of the major sub-fields in economics. Included in our electives are courses that allow students to focus on international economic relationships (International Trade, International Finance), on economies from other parts of the world (China, Latin America, the Middle East), on the behavior of firms and individuals (Industrial Organization, Economics of Innovation, Behavioral Economics, Corporate Finance), or on a range of social welfare and public policy issues (Economic Development, Public Sector Economics, The Economics of Race and Gender, and Household, Health and Hunger in Developing Economies).

By the completion of the major, students will be better educated global citizens who can apply economic theory and empirical findings to illuminate a wide range of national and international social and policy issues. They will understand the large and growing economic interdependence of the nations and people of the world. They will be able to distinguish the difference between the kinds of questions that economics can and cannot answer, and they will be able to communicate their knowledge of economics to others.

As part of a university-wide initiative, the Economics Department has developed a set of learning goals and evaluation procedures to help the Department determine the effectiveness of both the core and elective course offerings in providing majors with a broad and rigorous training in the discipline. In particular, the Economics Department wants its majors to have knowledge of economic principles and the skills to apply this knowledge as described below.

Basic Economic Knowledge (Facts, Concepts, and Models)

Our majors should know:
Basic economic facts. Examples include U.S. per capita income, its distribution, current and historical U.S. rates of inflation and unemployment and how these rates compare with those of other major economies.

How the major macroeconomic data series are compiled and their limitations. Examples include GDP, inflation, and unemployment.

The important institutions of the U.S. and global economies and their roles. Examples include markets, firms, money and central banks, the World Trade Organization, the International Monetary Fund, and exchange rate regimes.

Basic microeconomic concepts. Examples include opportunity cost, comparative advantage, the discount rate, substitution and income effects, the importance of incentives, elasticities.

Basic macroeconomic concepts. Examples include the national income identity, the natural rate of unemployment, the money supply, real interest rates, Purchasing Power Parity, and the self-correcting mechanism.

Basic microeconomic models. Examples include the demand-supply model of how a market works, the model of choice based on indifference curves and budget constraints, and game theory.

Basic macroeconomic models. Examples include the IS-LM model of the short run, the Aggregate Demand-Aggregate Supply model, and the Solow model of economic growth.

**Ability to Access Economic Information**

Our majors should be able to:

Use relevant information databases. Examples include EconLit, Lexis-Nexis, and JSTOR.

Use primary data sources. Examples include the Current Population Survey, the UN Human Development Index, and the Statistical Abstract of the United States.

Read and assess general interest articles on economic topics, such as those found in *The Economist* or *The Journal of Economic Perspectives*.

Understand and evaluate key findings in the economic research published in scholarly journals.
Analytical Skills

Our majors should be able to:

Apply the concepts and models of micro- and macroeconomics to current economic issues and to specific policy questions (examples: What concepts and models are relevant for assessing the effects of a carbon tax? What concepts and models are applicable to understanding how the U.S. might facilitate its recovery from the Great Recession?)

Understand the logic of economic models to the point where they can evaluate the effects of a change in an exogenous variable on economic outcomes, both in partial and general equilibrium settings (examples: How does an increase in the savings rate or in the rate of productivity growth affect the growth of living standards over the long-run? Does it matter whether the savings rate or productivity change is exogenous or endogenous?).

Use empirical evidence to evaluate the extent to which an economic model is supported by the data we observe (examples: To what extent does a decrease in taxes promote increased economic activity? To what extent are economic models of the direction of trade consistent with actual trade patterns?).

Compare economic models that reach different conclusions, both on theoretical grounds and in terms of their consistency with the empirical evidence (examples: One economic model—the Neo-Classical Model—predicts that deficit spending by the government raises interest rates, while another model—the Ricardian Model—predicts that such spending leaves interest rates unchanged. What are the differences in assumptions that lead to these differing conclusions, and which model is better supported by the empirical evidence?).

Quantitative Skills

Our majors should be able to:

Access, manipulate and interpret data and have practical knowledge of statistics and econometrics to the point where they can run and interpret a regression.

Understand the differences between the different types of empirical studies (experimental, quasi-experimental and econometric), and evaluate the extent to which a given empirical result is robust.

Communication Skills

Our majors should be able to:
Organize and present economic ideas in a clear and logical form (both orally and in writing), marshal evidence to support their ideas, and use citations correctly.

**The Limitations of Economics and Economic Policy**

Our majors should understand:

The limits of economics, the kinds of questions economics can and cannot answer (example of an answerable question: What factors help shape household behavior, such as rates of fertility and rates of saving? How might certain minimum wage legislation affect efficiency and income distribution?; examples of an unanswerable question: Is a certain minimum wage or the existing income distribution fair or socially just?).

The strengths and limits of economic policies. Examples include the distinction between the economic effects of fiscal and monetary policies in the short-run vs. the long-run, and the sources of market failure that may justify government intervention as well as reasons why such intervention may not work as desired.

**Opportunity for Research and Advanced Work**

As part of their coursework, all of our majors will complete a research paper that makes use of economic data.

In addition to the preceding goals for all majors, qualified majors will have an opportunity to engage in economic research through independent study, graduate coursework, and the senior honors thesis.

Qualified majors who are considering graduate work in economics will have access to and be advised toward appropriate Mathematics courses and the Ph.D.-level IBS courses in Economic Theory.