
 Department of
Economics

 Courses of Study:
 Minor
 Major (B.A.)

Objectives

All majors in economics receive broad yet rigorous training in the core subjects of the discipline: general principles, micro and macroeconomic theory, and statistics. Majors learn to use skills developed in the core to analyze a variety of economic problems, social issues, and economic institutions. This goal is accomplished in four elective courses chosen from a list that includes most of the subfields of interest to economists, e.g., international economics, financial markets, industrial organization, labor, law and the regulation of economic activity, the public sector, technology, growth and development.

The department stresses analytic and quantitative approaches to the economy as a system as well as to specific subject areas and economic issues. (As a consequence we expect students to develop analytic and quantitative skills useful not only for studying economics but for studying other subjects as well). Theoretical and applied courses are available. By the completion of the major, students are expected to be familiar with the scholarship associated with a variety of economic subjects; majors learn to read books and articles written for the general economist.

The major in economics provides background for many positions in business or government. A few graduates pursue advanced degrees in economics while others enroll in professional schools of business, law, and other fields. Programs of study can be designed to match the interests of the student (see list of courses on page 130).

Qualified seniors are invited to participate in the department's honors program, which involves research and the writing of a thesis under the supervision of a member of the faculty. Before the senior year, Brandeis undergraduates can apply for admission as "five-year students" to the Lemberg Master's Program in International Economics and Finance (see Brandeis International Business School section of this *Bulletin*). The department offers a general minor in economics and a program in international business (see the Program in International Business section of this *Bulletin*). The latter program is open to economics majors.

How to Become a Major

The major has a single entry point, ECON 2a (Introduction to Economics). (This course is also an option in the quantitative reasoning component of the General University Requirements.) Most majors begin their study in the first or second year with ECON 2a followed by a second principles course, ECON 8b (The Global Economy). Five core courses are required (two principles courses followed by three intermediate theory courses: microeconomic theory, macroeconomic theory, and statistics) plus four electives. It is important to begin the study of economics early because "upper level" electives, a requirement for the major, build on intermediate courses and have from three to six prerequisites. Also, some calculus is used in intermediate theory courses; students who have not had a good high school calculus course should take MATH 10a (Techniques of Calculus), *at a minimum*. Students with limited mathematical training should begin with MATH 5a (Precalculus Mathematics).

Faculty
Chair

TBA

Serkan Bahçeci

Macroeconomic theory. Econometrics.

Chad Bown

International economics. Economic development and industrial organization.

Linda Bui

Environmental economics, public finance; applied micro economics and industrial organization.

Laarni Bulan

Corporate, firm investment, and real option finance.

Anne Carter

Technological change. Input/output.

Stephen Cecchetti

Advanced macroeconomic theory, monetary economics, financial economics.

Shi-fen Chen

International marketing and investment.

H. Michael Coiner

Economics of higher education. Macroeconomics. International economics.

F. Trenerly Dolbear

Macroeconomics. Public sector.

Can Erbil

Economic development. International trade. Public finance.

Benjamin Gomes-Casseres

International business. International political economy.

Jane Hughes

Domestic and international cash management. Third World debt, sovereign risk, and foreign exchange markets.

Adam Jaffe

Technological change. Economics of regulation. Industrial organization.

Gary Jefferson

China. Technical progress. Open economy macroeconomics.

Blake LeBaron

Macroeconomics. International finance. Microeconomics.

Rachel McCulloch

International trade theory. Trade policy. Macroeconomic coordination. Investment and technology transfer.

Nidhiya Menon

Empirical microeconomics. Economic development. Econometrics. Economic demography and labor.

Carol Osler

International finance. Financial markets. Open economy. Macroeconomics.

Peter Petri

International trade. Development. Japan. Korea.

Paroma Sanyal

Industrial organization. Regulation. Microeconomics.

Rashmi Shankar

Macroeconomics. International finance.

Narayanan Subramanian

Corporate finance. Financial economics. Microeconomics.

Requirements for the Major

A. ECON 2a (Introduction to Economics) and ECON 8b (The Global Economy). Normally a grade of C- or higher is required in these courses.

B. ECON 80a, 82b, and 83a.

C. Four elective courses in economics, at least two of which must be "upper level." Upper-level electives are courses that have as prerequisites ECON 80a, ECON 82b, or ECON 83a. Note: Not all 100-level courses meet this criterion. In particular, ECON 165a and ECON 175a are lower-level electives. Lower-level electives can be any course in economics other than the required courses, except that ECON 98 a,b, ECON 99a,b, and BUS 92b do not count as electives for the major. Cross-listed courses are acceptable as lower-level electives. Some other courses offered by IBS, Heller, and other departments in the social sciences may be accepted as lower-level electives, if they have significant economics content. Any student who intends to offer an economics-oriented course in another department toward the economics major should obtain approval of the undergraduate advising head in advance.

D. A passing letter grade must be obtained in each course taken for credit toward the major. (Pass/Fail courses are not allowed.) Students must also achieve a grade point average of at least 2.00 in the major courses; students close to this average should consult the undergraduate advising head before enrolling in economics courses for the senior year.

E. Any exception to the above rules requires department approval.

See the department academic administrator or the undergraduate advising head for a petition; for example, a student must petition to get major credit for an economics course taken at another university.

Requirements for the Undergraduate Minor

A. ECON 2a (Introduction to Economics) and ECON 8b (The Global Economy).

B. Three additional economics courses. Any ECON course, including cross-listed courses (but excluding BUS 75a (formerly ECON 19b), ECON 98, and BUS 92a (formerly IB 92b)) may be counted. IEF courses and courses taken at other institutions may be substituted if their content is primarily economics, but such substitution requires the permission of the undergraduate advising head.

C. Students undertaking the economics minor and the program in international business or business are subject to additional restrictions to minimize the overlap in content. Consult your advisor for approval of such combined programs.

D. A grade point average of 2.00 or higher is required in courses offered for the minor.

Special Notes Relating to Undergraduates

Program in International Business

Students interested in pursuing the formal program in international business should consult the description given in the Program in International Business section of this *Bulletin*.

Program in Business

Students interested in pursuing the formal program in business should consult the description given in the Business section of this *Bulletin*.

Mathematics

The required intermediate theory courses (80a, 82b, 83a) assume a knowledge of calculus at the level taught in MATH 10a (Techniques of Calculus). (Students with weak mathematics background should begin with MATH 5a [Precalculus Mathematics].) For some more advanced courses, additional calculus and linear algebra provide a useful background. Students unsure of the adequacy of their mathematics preparation should consult their advisor.

Academic Advisor and Selection of Courses

Students are strongly advised to choose courses with well-considered educational objectives in mind. Course offerings in economics can be grouped roughly into five categories (see below). Some students will wish to take at least one course from each of the five groups and thereby obtain a broad exposure to the discipline. Others will find a more narrow focus with in-depth study in only a few groups more appropriate. Each major should discuss educational objectives and course selections and sequencing with his/her academic advisor.

ECON Course Offering Groups

1. Core Analytical Courses

2a	Introduction to Economics
8b	The Global Economy
80a	Microeconomic Theory
82b	Macroeconomic Theory
83a	Statistics for Economic Analysis

2. International and Comparative

26a	Latin America's Economy
60b	The Economics of International Trade Disputes
125a	Comparative Institutional Economics
141b	Technology and the Global Economy
160a	International Trade Theory
161a	International Finance
165a	The Economy of China
175a	Introduction to the Economics of Development
176a	The Household, Health, and Hunger in Developing Countries

3. The U.S. Economy: Analysis, Institutions, Policy

56b	Social Priorities and the Market
57a	Environmental Economics
59b	The Economics of Education
71a	Introduction to Finance
74b	Law and Economics
76b	Labor Economics
77a	Introduction to Regulation and Public Policy
129b	Economics for the New Economy
134b	Public Sector Economics
135a	Industrial Organization
139a	Economics of Antitrust
171a	Financial Economics
172b	Money and Banking
174a	Corporate Finance
177b	Economic Regulation and Deregulation

4. Advanced Studies

184b	Econometrics
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Several first-year Brandeis International Business School courses may be appropriate analytical electives for advanced undergraduates. See your advisor or the undergraduate advising head.

Courses of Instruction

(1-99) Primarily for Undergraduate Students

BUS 6a Financial Accounting

(formerly ECON 12a)

[ss]

Prerequisite: ECON 2a. This course may not be repeated for credit by students who have taken IEF 204a or ECON 12a in previous years. Enrollment limited to 40.

Develops basic concepts and accounts and applies them to income measurement, capital values, and costs. Through the use of cases, develops the basis for rational choice and control of business activity. Usually offered every semester. Will be offered in the fall of 2003.

Staff

BUS 10a Functions of Capitalist Enterprise

(formerly ECON 37b)

[ss]

Prerequisite: ECON 2a (may be taken concurrently) or permission of the instructor. This course may not be repeated for credit by students who have taken ECON 37b in previous years. Enrollment limited to 40.

Introduces the internal complexity of modern businesses and the various roles they play in society. First examines the internal workings of firms—marketing, operations, finance, and other functions. Subsequently, the relationships between businesses and their context—the economy, social issues, and government are studied. Usually offered every year. Last offered in the fall of 2002.

Staff

BUS 30a Creating New Ventures

(formerly IEF 135b)

[ss]

Prerequisite: ECON 2a. This course may not be repeated for credit by students who have taken IEF 235b or IEF 135b in previous years. Enrollment limited to 35.

Focuses on the issues, ideas, and approaches of successful “bootstrap” ventures, management buyouts, and early stage operations. Topics include identifying and evaluating potential opportunities, working with investors, hiring, managing cash, and creating a sales and marketing force. Usually offered every year.

Mr. Reed

BUS 40a Business and the Internet

(formerly IEF 148a)

[ss]

Prerequisite: ECON 2a. Enrollment limited to 35. This course may not be repeated for credit by students who have taken IEF 148a in previous years.

The Internet is changing business and reshaping competition. Which rules of business economics will apply to the Net Economy and which new ones will arise? These issues are explored, but as there are

yet few clear answers students are expected to be actively involved in shaping our collective learning. Usually offered every year.

Mr. Gomes-Casseres

BUS 70a Business in the Global Economy

(formerly ECON 33a)

[ss]

Prerequisite: ECON 2a. Enrollment limited to 40. This course may not be repeated for credit by students who have taken ECON 33a previous years.

Modern firms frequently cross national borders to find new markets and resources. Their strategies are then shaped by the international economy and by the policies of national governments. Using case discussion, students explore why and how United States, Japanese, and European firms operate outside their home countries. Usually offered every fourth year. Will be offered in the fall of 2003.

Staff

BUS 75a Issues in Business and Management

(formerly ECON 19b)

[ss]

Seniors will have priority for admission. Enrollment limited to 40. This course may not be repeated for credit by students who have taken ECON 19b in previous years.

Explores issues central to the success of American business. Representative issue: Why have some companies developed strong export markets while others focus almost exclusively on domestic sales? Special attention is given to ethical issues and the role of the corporation and its employees as citizens of their own nation and of the world of nations. Although the topics may vary from year to year, the course may NOT be repeated for credit. Usually offered every year. Will be offered in the fall of 2003.

Ms. Hughes

BUS 92a Work in the Global Business Environment: Internship and Seminar

(formerly IB 92b)

Normally students must arrange an internship placement prior to registration and the internship is concurrent with the seminar. Students wishing to fulfill the internship component of the course in a semester when the seminar is not offered must obtain approval from the instructor prior to the internship. A structured journal documenting the internship experience is required as a basis for seminar participation. Signature of the instructor required. This course may not be repeated for credit by students who have taken IB 92b in previous years.

Encourages students to pool experiences and lessons drawn from various business environments and to analyze and discuss them in the context of related readings. Usually offered every spring.

Mr. Dolbear

BUS 98a Independent Study

Signature of the instructor required.

Normally available for a student who has taken a course and wishes to pursue further reading or research in that field or study a subject not listed among the department course offerings. Usually offered every year.

Staff

BUS 98b Independent Study

Signature of the instructor required.

Normally available for a student who has taken a course and wishes to pursue further reading or research in that field or study a subject not listed among the department course offerings. Usually offered every year.

Staff

ECON 2a Introduction to Economics

[qr ss]

Common final exam.

A one-semester introduction to economic analysis with policy applications. The economist’s approach to social analysis is systematically elaborated. Usually offered every semester in multiple sections. Will be offered in the fall of 2003.

Staff

ECON 8b The Global Economy

[wi ss]

Prerequisite: ECON 2a. A library-intensive course. Common final exam. Enrollment limited to 30.

The basic tools and models of economic analysis are applied to a wide range of topics in micro, macro, and international economics. Usually offered every semester in multiple sections. Will be offered in the fall of 2003.

Staff

ECON 26a Latin America’s Economy

[nw ss]

Prerequisite: ECON 2a. This course may not be repeated for credit by students who have taken ECON 25a in previous years. Enrollment limited to 35.

Introductory survey of economic, financial, and institutional problems, distortions, and reforms in Latin America. Topics include the role of government, privatization, liberalization of trade and capital flows, pension funds reforms, inflation, stabilization, and international debit crisis. Current and future trends will be discussed. Usually offered every second year. Last offered in the fall of 2001.

Staff

ECON 56b Social Priorities and the Market

[ss]

Prerequisite: ECON 2a. Enrollment limited to 35.

Examines the strengths and limitations of free markets in promoting major social goals: efficiency, equity, and technological advance. Usually offered every year. Last offered in the spring of 2002.

Ms. Carter

ECON 57a Environmental Economics

[ss]

Prerequisite: ECON 2a.

This course will investigate the theoretical and policy problems posed by the use of renewable and nonrenewable resources. Theoretical topics include the optimal pricing of resources, the optimal use of standards and taxes to correct pollution problems under uncertainty, and the measuring of costs and benefits. Usually offered every second year. Will be offered in the fall of 2003.

Mr. Jaffe

ECON 59b The Economics of Education

[ss]

Prerequisite: ECON 2a.

An introduction to economic analysis of the education sector. Topics include the concept of human capital, private and social return to investment in education, cost-benefit analysis of special educational programs, and issues in the financing of education. Usually offered every second year. Last offered in the fall of 2001.

Mr. Coiner

ECON 60b The Economics of International Trade Disputes

[ss]

Prerequisite: ECON 8b.

Analyzes economic issues involved in a set of recent international trade disputes at the frontier of disagreement and conflict in international economic relations from the perspective of directly and indirectly affected participants such as firms, workers, consumers, policy makers, and NGOs. Usually offered every year. Will be offered in the fall of 2003.

Mr. Bown

ECON 71a Introduction to Finance

[ss]

Prerequisite: ECON 2a. This course may not be repeated for credit by students who have taken ECON 171a in previous years. Enrollment limited to 75.

Designed to give students an overview of the issues involved in modern finance. Topics include random walks, bubbles, derivative markets, online trading, hedge funds, foreign exchange markets, and recent international crises. Usually offered every year. Last offered in the fall of 2002.

Mr. LeBaron

ECON 74b Law and Economics

[ss]

Prerequisite: ECON 2a. Enrollment limited to 35.

A study of economic foundations of American law in selected areas of interest. Topics include the role of property rights and liability rules in the control of externalities, controlling the cost of accidents, the control of criminal behavior, product failure and damage, medical malpractice. Usually offered every second year. Last offered in the fall of 2001.

Staff

ECON 76b Labor Economics

[ss]

Prerequisite: ECON 2a. Enrollment limited to 60.

Topics include: Analysis of competitive and less-than-competitive markets. Rationale for alternate methods of paying workers (e.g., hourly wages, piece rates, bonuses). Sources of wage differentials among jobs and workers. The U.S. labor movement, the process of collective bargaining, and the economic effects of unions. Effects of government interventions in the labor market, such as the minimum wage and occupational safety regulation. Extent and effects of discrimination in the labor market. Inequality in the distribution of wages. Will be offered in the fall of 2003.

Mr. Coiner

ECON 77a Introduction to Regulation and Public Policy

[ss]

Prerequisite: ECON 2a. Enrollment limited to 35. This course may not be repeated for credit by students who have taken ECON 177b in previous years.

Economic rationale behind government intervention in markets. Theoretical, practical, and historical aspects of regulation. Recent trends toward deregulation or regulatory reform. Specific case studies such as telecommunications, electric utilities, environment, transportation, drugs, and workplace safety. Usually offered every second year. Last offered in the spring of 2002.

Ms. Sanyal

ECON 80a Microeconomic Theory

[ss]

Prerequisite: ECON 8b. Intermediate theory courses (ECON 80a, 82b, 83a) assume a knowledge of calculus at the level taught in MATH 10a. Enrollment limited to 40.

Analysis of the behavior of economic units within a market economy. Emphasis upon individuals' decisions as demanders of goods and suppliers of resources, and firms' decisions as suppliers of goods and demanders of resources under various market structures. Usually offered every semester. Will be offered in the fall of 2003.

Staff

ECON 82b Macroeconomic Theory

[ss]

Prerequisites: ECON 8b. ECON 80a and 83a would be helpful. Enrollment limited to 40.

Models of the determination of economic aggregates—such as national income, consumption, investment, government spending, exports, imports, and international capital flows—and economy-wide variables—such as the interest rate, the exchange rate, the price level and inflation, and the unemployment rate. The influence of fiscal and monetary policies on these aggregates and variables is examined. Usually offered every semester. Will be offered in the fall of 2003.

Staff

ECON 83a Statistics for Economic Analysis

[qr ss]

Prerequisite: ECON 2a. Enrollment limited to 40.

A first course in statistical inference. Topics include descriptive statistics, probability, normal and binomial distributions, sampling distributions, point and interval estimation, properties of estimators, hypothesis testing, regression, and analysis of variance. Usually offered every semester. Will be offered in the fall of 2003.

Staff

ECON 98a Independent Study

Signature of the instructor required. Does not meet the requirement for the major in economics.

Normally available for a student who has taken a course and wishes to pursue further reading or research in that field or study a subject not listed among the department course offerings. Usually offered every year.

Staff

ECON 98b Independent Study

Signature of the instructor required. Does not meet the requirement for the major in economics.

See ECON 98a for course description. Usually offered every year.

Staff

ECON 99a Senior Research

Signature of the instructor required. Does not meet the requirement for the major in economics.

A senior whose grade point average in economics courses is 3.50 or above may petition to be admitted to the Senior Honors Program and to enroll in this course. Usually offered every year.

Staff

ECON 99b Senior Thesis

Prerequisite: Satisfactory completion of ECON 99a. Signature of the instructor required. Does not meet the requirement for the major in economics.

Normally seniors who wish to complete a Senior Honors Thesis enroll in this course. Usually offered every year.

Staff

(100-199) For Both Undergraduate and Graduate Students

ECON 125a Comparative Institutional Economics

[ss]

Prerequisite: ECON 80a. *Enrollment limited to 35.*

Examines the role of institutions in shaping economic behavior and performance, particularly in developing and transition economies. Topics include: problems and models of transition, enterprise reform, market failure in key economic systems, and constitutional economics. Usually offered every second year. Last offered in the spring of 2001.
Mr. Jefferson

ECON 129b Economics for the New Economy

[ss]

Prerequisites: ECON 80a and ECON 82b. *Enrollment limited to 35.*

A study of the economic issues particular to the "new economy," within the framework of economic theory. Topics include causes and consequences of increasing returns, productivity and economic growth, skill-biased technological progress and the wage gap, network economics, and human capital. The objective is to enable a student to use economic theory to understand these issues. Usually offered every year. Last offered in the spring of 2002.
Mr. Subramanian

ECON 134b Public Sector Economics

[ss]

Prerequisite: ECON 80a. *Enrollment limited to 40.*

The effect of tax and expenditure policies on economic efficiency and equity. Topics include externalities and public goods, public choice, cost-benefit analysis, income redistribution, social security, and health care. Also discussion of U.S. tax system, public debt, and state and local finance. Usually offered every year. Will be offered in the fall of 2003.
Mr. Dolbear

ECON 135a Industrial Organization

[qr ss]

Prerequisite: ECON 80a. *Enrollment limited to 40.*

Microeconomic analysis of firm behavior under alternative market structures and implications for market outcomes. Topics include strategic interaction, entry and exit, collusion, predation, price discrimination, product differentiation, vertical relations, imperfect information, advertising, and patents and innovation. Usually offered every year. Will be offered in the fall of 2003.
Staff

ECON 139a Economics of Antitrust

[ss]

Prerequisite: ECON 80a. *Enrollment limited to 35.*

Explores how economic policy has affected corporate strategy. Issues such as mergers and acquisitions, predatory pricing, and collusion are viewed in context of the prevailing regulatory regimes. Case studies of seminal rulings are studies to evaluate the economics of competition and policy. Usually offered every third year. Last offered in the fall of 1999.
Staff

ECON 141b Technology and the Global Economy

[ss]

Prerequisite: ECON 80a. *Enrollment limited to 40.*

Technological change as the central focus of modern economies. Topics include changing industrial and international specialization, economics of research and development, innovation, diffusion and technology transfer, appropriability, patents, information markets, productivity, intersectoral effects, and global competitiveness. Usually offered every year. Will be offered in the fall of 2003.
Mr. Jefferson

ECON 160a International Trade Theory

[ss]

Prerequisite: ECON 80a. *Enrollment limited to 35.*

Causes and consequences of international trade and factor movements. Topics include determinants of trade, effects on welfare and income distribution, trade and growth, protection, foreign investment, immigration, and preferential trading. Usually offered every year. Last offered in the spring of 2002.
Staff

ECON 161a International Finance

[ss]

Prerequisites: ECON 80a and 82b. *Enrollment limited to 35.*

Applications of international economic theory—regarding trade, the balance of payments, investments, and exchange rates—to the management of import/export firms and multinational corporations. Usually offered every year. Last offered in the fall of 2002.
Staff

ECON 171a Financial Economics

[ss]

Prerequisites: ECON 80a and 83a. *May not be taken for credit by students who have previously taken IEF 205a. Enrollment limited to 50.*

An introduction to financial economics. Topics include the selection of assets, portfolio choice under uncertainty, equilibrium asset pricing models, the efficient markets hypothesis, futures, and options markets. Usually offered every year. Will be offered in the fall of 2003.
Mr. Subramanian

ECON 172b Money and Banking

[ss]

Prerequisites: ECON 80a and 82b. *Enrollment limited to 35.*

Considers the operation of banks and other financial institutions in a money- and capital-market setting. The role of central banks in the control of the quantity of money is examined in relation to the performance of the national economy. Supervision of banks, insurance of deposits, reform of banking legislation, as well as the internationalization of banking are also studied. Usually offered every second year. Last offered in the summer of 2001.
Staff

ECON 174a Corporate Finance

[ss]

Prerequisite: ECON 80a. *Corequisite:* ECON 171a. *May not be taken for credit by students who are currently or have previously taken FIN 202a (formerly IEF 210b). Enrollment limited to 40.*

An introductory course in corporate finance and financial management. Covers the theory and application of capital budgeting techniques and capital structure choice of firms. Usually offered every year. Will be offered in the fall of 2003.
Ms. Bulan

ECON 175a Introduction to the Economics of Development

(formerly ECON 75a)

[ss]

Prerequisite: ECON 2a or permission of the instructor. *May not be repeated for credit by students who are currently or have previously taken ECON 75a. Does not count toward the upper-level elective requirement for the major in economics. Enrollment limited to 30.*

An introduction to various models of economic growth and development and evaluation of these perspectives from the experience of developing and industrial countries. Usually offered every year. Last offered in the fall of 2002.
Mr. Jefferson

ECON 176a The Household, Health, and Hunger in Developing Countries

[ss]

Prerequisites: ECON 80a is required and ECON 175a is recommended. *Primarily recommended for juniors and seniors. Enrollment limited to 30.*

Examines aspects of poverty and nutrition that are confronted by households in low-income countries. Examines these issues primarily from a microeconomic perspective, although some macroeconomic angles are explored as well. Usually offered every year. Last offered in the spring of 2003.

Ms. Menon

ECON 177b Economic Regulation and Deregulation

[ss]

Prerequisite: ECON 80a. Enrollment limited to 35.

Rate regulation of natural monopolies, antitrust regulation of horizontal and vertical mergers and contracts, and the deregulation movement. Focus on the peak-load pricing problem, vertical restraints, and case histories of airlines and savings and loan institutions. Usually offered every third year. Last offered in the spring of 2000.

Mr. Jaffe

ECON 184b Econometrics

[qr ss]

*Prerequisites: ECON 80a, 82b, and 83a.**Enrollment limited to 40.*

An introduction to the theory of econometric regression and forecasting models, with applications to the analysis of business and economic data. Usually offered every year. Will be offered in the fall of 2003.

Ms. Menon

Cross-Listed Courses**AAAS 60a**

Economics of Third World Hunger

AAAS 80a

Economy and Society in Africa

HS 104b

American Health Care

HS 110a

Wealth and Poverty

HS 540b

Families, Work, and the Changing Economy

Interdepartmental programs in

Education

Courses of Study:

Minors

Master of Arts in Teaching

Objectives

Four central themes define the Brandeis Education Program. These themes are woven throughout our courses.

Inquiry: Effective teachers continually assess and reflect on their own teaching practices and stay aware of current resources and information related to teaching and learning. Teachers need to have a firm grounding in educational research, theory and practice, and understand the ways in which inquiry and reflection on research, including their own classroom research, can inform practice.

Teaching for Understanding: Good teachers communicate high standards and expectations for student learning, and draw on an exploration of rich content and a repertoire of approaches, using instructional strategies to make knowledge accessible and interesting to diverse learners. Effective educators build on and extend students' ideas, monitor their students' intellectual engagement, and take steps to challenge or re-engage each student in learning.

Knowing Students as Learners: Good teachers work actively to know their students as individuals and learners. They use their knowledge of child development and learning, and their knowledge of individual students, to inform their planning and teaching.

Social Justice: Issues of social justice and injustice affect schools. Effective teachers strive to narrow the achievement gap between students through their use of standards-based, learning-centered curricula. Teachers need to work toward greater equity and access to knowledge for all students, while creating multicultural, democratic classrooms that celebrate respect and diversity.

For a more complete description of the Education Program themes, consult the program's website, www.brandeis.edu/programs/education.

Undergraduate Education Program Minor

The undergraduate education program leading to certification is designed to prepare undergraduates for teaching at the preschool, elementary, and secondary levels, and is taken in addition to the student's major. It is also valuable for those planning careers in related fields such as special education. In addition, some take the program simply as a worthwhile supplement to their liberal arts education at Brandeis. Students who complete the elementary or secondary program may be recommended by Brandeis for Massachusetts certification.

Students who want to be certified to teach in Massachusetts must pass a Massachusetts Communication and Literacy Skills Test, and demonstrate subject matter knowledge on a second part of the examination. Of the students who completed the Education Program and who took these tests in 2001-02, 94% passed the Communications and Literacy Skills test and 89% passed the Subject Matter Knowledge test.

Undergraduate Education Studies Minor

The education studies minor is designed for students seeking an understanding of some of the diverse issues related to education in the United States and other societies. The education studies minor encourages students to think critically and creatively about questions such as: How can we better understand and guide learning? How do various political, economic, and social forces shape education and public expectations for schools? What kinds of cultural understandings form the basis for educational expectations and school systems? What kinds of learning, schools, and teachers do young people need and deserve? The minor's interdisciplinary approach will enable students to examine the impact of political, historic, psychological, economic, and social forces that shape education and public expectations for schools.

This minor is suitable for students interested in the broad social and cultural contexts of education and for those interested in educational careers. Please note, however, that the education studies minor does not lead to a teaching certificate.

Master of Arts in Teaching (Elementary)

The M.A.T. (elementary) is designed to offer preparation for teaching in public elementary schools or Jewish elementary day schools. This 14 month program integrates theory, research, and practice; it begins with a six-week summer session, includes a year of academic study and an internship in classrooms, and concludes with an additional six-week session in a second summer. M.A.T. students investigate children's development; teaching inquiry-based mathematics, science, and balanced literacy programs; and the challenges and benefits of teaching within a standards-based environment. Students focus on the need to connect their class to the school, their school to the community, their community to a surrounding society, and their children to the world at large. Students are clustered for nine-month internships in public elementary or Jewish day schools in the Boston area. Students develop a classroom research project about a challenge in teaching and learning, and later participate in a culminating "Teacher Research Colloquium."

Induction: M.A.T. graduates who pass the Massachusetts Tests for Educator Licensure (MTEL) examinations and whose initial teaching program is in the Boston area are supported in their critical first year of teaching through an induction program. Retired master teachers mentor and coach new graduates, who attend monthly meetings that support reflection and provide a forum for continued professional development. Supporting new graduates in this way provides essential support for these new teachers as well as to the schools that hire Brandeis teacher candidates.

How to Become a Minor**Education Program**

Any undergraduate at Brandeis can begin fulfilling requirements of the minor at any time, without formal admission. A grade of at least B- is required in ED 100a and ED 107a for those pursuing elementary certification; and in ED 100b for those seeking secondary certification. Permission of the director is required for the final stage of the process (ED 101d, ED 105a and ED 111e; or ED 102a, ED 104a and ED 110e; or ED 112e). Students must pass the Massachusetts Communication and Literacy Test before enrolling in the Practice Teaching courses.

Education Studies

Any undergraduate enrolled at Brandeis can begin fulfilling requirements of the minor at any time, without formal admission. A grade of at least B- is required in each course taken for credit in the minor. Pass/Fail courses are not allowed. Permission of the director is required to enroll in the education studies minor, and should be sought no later than when a student has completed the two core courses.

How to Be Admitted to the Graduate Program

The general requirements for admission to the Graduate School, given in an earlier section of this *Bulletin*, apply to candidates for admission in this area of study. Applications should include three letters of reference, the results of the General Graduate Record Examination, a transcript of your undergraduate work, and a personal statement describing your interest in the field of education. After initial review of applications, potential candidates may be invited to Brandeis for a personal interview.

Partial scholarship assistance is available for a limited number of exceptional applicants.

Program Committee**Joyce Antler**

(American Studies)

Marc Brettler

(Near Eastern Jewish Studies)

John Burt

(English and American Literature)

Joseph Cunningham

(Psychology)

Jane Hale

(Romance and Comparative Literature)

Andrew Hahn

(Heller School)

Robert Lange

(Physics)

Paul Monsky

(Mathematics)

Arthur Reis

(Provost's Office)

Joseph Reimer

(Hornstein Program)

Susan Shevitz

(Hornstein Program)

Daniel Terris

(International Center for Ethics, Justice and Public Life)

Faculty**Marya Levenson, Director**

Teacher education. Education policy. Education studies.

Mary Gustafson, Assistant Director

Elementary education. Psychology. Reading.

Sharon Feiman-Nemser

Elementary education. Jewish education. Teacher education.

Jon Levisohn

Philosophy of education. Jewish education.

Catherine Marchant

Preschool education.

Edward Rossiter

Secondary curriculum and instruction.

Theodore Sizer

Public education.

Requirements for the Minors

Education Programs Leading to Certification

Secondary

PSYC 36b (note that PSYC 1a is a prerequisite for PSYC 36b), ED 100b (sophomore year), and ED 102a (junior year), are prerequisites for practice teaching. ED 104a and ED 110e are taken in the senior year or ninth semester. Students must consult the director of the program for other requirements. It is recommended that students take ED 100b in their sophomore year and ED 102a in their junior year. Students must pass the Massachusetts Communication and Literacy Skills Test before enrolling in ED 110e.

Elementary

PSYC 33a (note that PSYC 1a is a prerequisite for PSYC 33a); ED 100a followed by ED 107a (sophomores who have taken ED 100a are advised to take ED 107a as juniors); ED 101d and ED 105a, always begun the semester before practice teaching; and ED 111e. Also a mathematics course at the 5a level or above or a satisfactory score on a special test given by the mathematics department. Students must consult the assistant director of the program for other requirements. The Education Program website lists significant additional liberal arts courses required for certification by the Massachusetts Department of Education. Students must pass the Massachusetts Communication and Literacy Skills Test before enrolling in ED 111e.

Preschool

Practice teaching at the Lemberg Children's Center is possible (ED 112e). Prerequisites are PSYC 33a and ED 103a. These courses, plus one other, will fulfill the Massachusetts Office of Child Care Services requirements for teachers in nursery school or day care. For further information, consult the Director of the Lemberg Children's Center.

Education Studies

A. Core Course: Education and Social Policy (ED 155b)

B. A second core course to be selected from the following electives:

Topics in the History of American Education (AMST 180b)
Reading, Writing, and Teaching across Cultures (COML 165a)
Introduction to the Economics of Education (ECON 59b)
Psychology of Student Learning (ED 157b)
Philosophy of Education (ED 159b) or
The Sociology of Education (SOC 104a)

C. At least four additional program electives, no more than two of which can be taken in the same department or interdepartmental program. Program electives are listed below under "Elective Courses".

Students may substitute successful completion of an essay, thesis, or internship, as described below, for **one** of the four electives:

1. Essay: an approved research or honors essay, usually taken in the senior year. Students would receive credit for this essay through their department major, or ED 98a (Individual Readings and Research in Education), or an independent study or research course approved by the director of education.
2. Honors Thesis: a senior thesis in the student's major that has an emphasis on some aspect of education.

3. Internship: an internship (ED 92a) approved by the director of the education program. (Students who are doing student teaching in the Education Program will also be eligible to receive internship credit if they are concurrently pursuing an education studies minor.) Students who choose this option will keep a journal about their experiences and produce a final paper.

D. Among courses offered to fulfill the requirements of this minor: no courses may be taken pass/fail and students must achieve a grade of B- or higher in each course taken for credit in the minor.

E. Students may double minor in the education program. No more than two courses may be double-counted. Students undertaking this program are subject to restrictions to minimize the overlap in content. Consult your advisor for approval.

Requirements for the Degree of Master of Arts in Teaching (Elementary)

This program has a 14-month residency requirement, including an internship in an elementary school. Students are expected to be full time in the M.A.T. (elementary) program. The M.A.T. program combines academic study at Brandeis with a nine-month internship in public elementary or Jewish day schools in the Boston area. M.A.T. students are part of a professional learning community that includes a cohort of students who move through the program together, as well as a team of University faculty and classroom practitioners who share common objectives, expertise, and clear expectations for M.A.T. student achievements.

The course offerings for the public elementary and Jewish day school concentrations include:

Public School Concentration

Summer One

ED 261a Teaching Mathematics
ED 107a Teaching of Elementary Reading and Writing
ED 264a Foundations of Education

Fall

ED 265d Field Internship
ED 263a Reflective Teaching Seminar
ED 101d Literacy, Social Studies, and other topics
ED 157b Psychology of Student Learning

Spring

ED 265d Field Internship
ED 266d Teachers as Researchers Seminar
ED 261a Inquiry-based Science Teaching and Learning

Summer Two

ED 266d Teachers as Researchers Seminar
ED 260a Special Education: Teaching for Inclusion

Jewish Day School Concentration*

Fall

ED 265d Field Internship
ED 263a Reflective Teaching Seminar
Jewish Studies course (Hornstein or NEJS)

Spring

ED 265d Field Internship
ED 266d Teachers as Researchers Seminar
Jewish Studies course (Hornstein or NEJS)

Summer Two

ED 266d Teachers as Researchers Seminar
ED 260a Special Education: Teaching for Inclusion
Jewish Studies course (Hornstein or NEJS)

*In 2003-04, the M.A.T. program will accept into the Jewish day school concentration only those students who have completed the DeLeT program. The following DeLeT courses will be accepted for credit in the M.A.T. program: Teaching Mathematics, Teaching Elementary Reading and Writing, and Jewish Child as Learner (JCS 215a).

Internship/Field Experience

Students are placed in cohorts in area public and Jewish elementary schools, in districts such as Waltham, Newton, Watertown, Framingham, Weston, Belmont, Wellesley, Boston, and Providence (RI). The field experience is supported by regular mentoring from school personnel and a weekly reflective teaching seminar that examines such topics as curriculum development, classroom environment, teaching strategies, and assessment.

Inquiry

In the spring semester, M.A.T. students begin an inquiry project that requires development of some kind of classroom research about a challenge in teaching and learning. Graduating students participate in a culminating Teacher Research Colloquium in which they present their projects to faculty, friends, and colleagues.

Induction

M.A.T. graduates whose initial teaching positions are in the Boston area are supported by mentor/coaches in their first year through an induction program managed by Brandeis. New graduates also attend monthly meetings that support reflection and provide a forum for continued professional development.

Courses of Instruction

(1-99) Primarily for Undergraduate Students

ED 92a Internship and Analysis

Signature of the instructor required.
Usually offered every year.
Staff

ED 98a Individual Readings and Research in Education

Signature of the instructor required.
Usually offered every year.
Staff

ED 98b Individual Readings and Research in Education

Signature of the instructor required.
Usually offered every year.
Staff

(100-199) For Both Undergraduate and Graduate Students

ED 100a Exploring Teaching (Elementary)

[ss]
Not open to first year students.
Examines the relationship of teaching and learning, the purposes of elementary schooling and the knowledge requirements for elementary school teaching. Through readings, analysis of videotapes, and guided observations, students investigate classroom culture, student thinking, and curriculum standards. Three hours per week of participant/observation in an elementary classroom are required. Usually offered every fall semester. Will be offered in the fall of 2003.
Ms. Feiman-Nemser

ED 100b Exploring Teaching (Secondary)

[ss]
Not open to first year students.
Examines the relationship of teaching and learning, the purposes of secondary schooling and the knowledge requirements for middle and high school teaching. Through readings, analysis of videotapes and guided observations, students investigate classroom culture, student thinking, and curriculum standards. Three hours per week of participant/observation in a secondary classroom are required. Usually offered every spring semester. Will be offered in the spring of 2004.
Ms. Levenson

ED 101d Elementary School Curriculum and Teaching: Literacy, Social Studies, and Other Topics

[ss]
Limited to students enrolling in ED 111e spring semester. Signature of the education program director or assistant director required.
In the fall semester, focuses on principles and effective procedures for teaching literature and social studies in elementary classrooms. Emphasizes the cognitive, social, and cultural dimensions of literacy learning as well as strategies for reading and writing nonfiction, and critical approaches to the teaching of social studies. The spring semester includes other topics such as art, music, creative drama, multicultural education, special education, and physical education. Usually offered every year. Will be offered in the fall of 2003 and the spring of 2004.
Staff

ED 102a Secondary Curriculum, Instruction and Assessment

[ss]
It is strongly recommended that juniors who are planning to student teach (ED 110e) in their senior year enroll in ED 102a in their junior year. ED 102a is a prerequisite for ED 110e. Signature of the education program director required.
Principles of curriculum, instruction, and assessment in secondary schools. Two hours per week of participant/observation in a secondary classroom are required. Usually offered every fall semester. Will be offered in the fall of 2003.
Mr. Rossiter

ED 103a Teaching Strategies for Early Childhood

[ss]
Enrollment limited to 20.
Provides classroom experience, principles, and methods for teaching young children. Students plan and analyze early childhood learning experiences, based on current theory and best practices, as well as study positive approaches to classroom management and developmentally appropriate curricula. Related field placement required, once a week, at Lemberg Children's Center, 8:00 am-12:00 pm or 2:00-6:00 pm. Usually offered every spring semester. Last offered in the spring of 2003.
Ms. Marchant

ED 104a Secondary School: Theory into Practice

[ss]
Must be taken concurrently with ED 110e. Signature of education program director required.
Principles and methods of teaching in specific subject areas in secondary schools. Usually offered every fall semester. Will be offered in the fall of 2003.
Ms. Levenson and staff

ED 105a Elementary School Curriculum and Teaching: Mathematics and Science

Limited to students enrolling in ED 111e spring semester. Must be taken concurrently with ED 101d in the fall semester. Signature of the education program director or assistant director required.
Principles and strategies of teaching mathematics and science in elementary classrooms. Emphasizes understanding mathematical and scientific concepts needed by elementary teachers, effective teaching procedures, and recommended materials. Usually offered every year. Will be offered in the fall of 2003.
Staff

ED 107a Teaching and Learning Reading in Elementary Schools

[ss]

Signature of the education program director or assistant director required.

Examines theories and methods of teaching reading and language arts to children in elementary schools. Emphasizes competencies necessary for developmental reading. Explores strategies for literacy, including the interrelated aspects of writing and spelling. Requires a field experience of 15 hours. Usually offered every year. Will be offered in the spring of 2004.

Ms. Gustafson

ED 110e Practice Teaching: Secondary School

[ss]

Prerequisites: ED 102a (must be taken the year before ED 110e) and ED 104a (must be taken concurrently). Enrollment limited to students in the education program.

Students must pass the Massachusetts Communication and Literacy Skills Test before enrolling in ED 110e. Signature of the education program director required. Full-time student teaching under supervision of qualified teachers; regular conferences to discuss and evaluate the teaching experience. Includes at least one after-school meeting most weeks, covering such topics as multicultural education, special education, and reading. Usually offered every fall semester. Will be offered in the fall of 2003.

Staff

ED 111e Practice Teaching: Elementary School

[ss]

Prerequisites: ED 101d (fall semester), ED 105a, and ED 107a. Enrollment limited to students in the education program.

Students must pass the Massachusetts Communication and Literacy Skills Test before enrolling in ED 111e. Signature of the education program director or assistant director required.

Full-time student teaching under supervision of qualified teachers; regular conferences to discuss and evaluate the teaching experience. Includes at least one after-school meeting per week. Usually offered every spring semester. Will be offered in the spring of 2004.

Staff

ED 112e Practice Teaching: Preschool

[ss]

Prerequisites: PSYC 33a and ED 103a. Enrollment limited to students in the Education Program. Signature of the education program director required.

Teaching under supervision of qualified head teachers at the Lemberg Children's Center with toddlers, preschoolers, and kindergartners. Thirty-five hours per week includes 30 hours teaching, five hours planning and meeting time. Regular conferences to discuss and evaluate the teaching experience. Usually offered every year.

Staff

ED 155b Education and Social Policy

[ss]

Enrollment limited to 20.

Examines the various functions schools perform in a community, with special attention to the intended and unintended consequences of contemporary policies such as special education, desegregation, charter schools, and the standards/accountability movement. Will be offered in the fall of 2003.

Ms. Levenson

ED 157b The Psychology of Student Learning

[ss]

Enrollment limited to 20.

How do children learn? Topics in this survey course include models of learning, cognitive and social development, creativity, intelligence, character education, motivation, complex reasoning, and learning disabilities. Course methods include contemporary research analyses, case studies, group projects, short lectures, and class discussions. Will be offered in the fall of 2003.

Ms. Gustafson

ED 159b Philosophy of Education

[ss]

Enrollment limited to 20.

Explores several major issues in philosophy of education through close examination and discussion of recent theoretical texts. Issues include the goals of education; the rights of the state to foster civic virtue; multiculturalism; moral education; the problem of indoctrination; education for autonomy, rationality, critical thinking and open-mindedness. Usually offered every second year. Will be offered in the spring of 2005.

Mr. Levisohn

(200 and above) Primarily for Graduate Students**ED 260a Special Education: Teaching for Inclusion**

Examines specific learner characteristics of students with disabilities as well as modifications (program, instructional, environmental) and strategies that facilitate a more successful learning experience for these students. Usually offered every summer. Will be offered in the summer of 2004.

Ms. Levenson

ED 261a Inquiry-Based Science Teaching and Learning

Focuses on the learning and exploration of scientific concepts and strategies needed to teach inquiry-based science in elementary classrooms. Usually offered every year. Will be offered in the spring of 2005.

Mr. Lange

ED 262a Teaching Mathematics in Elementary Classrooms

Open only to M.A.T. students.

Focuses on the learning, discovery, and exploration of the skills and strategies needed to teach mathematical concepts and skills in elementary school classrooms. Usually offered every summer. Will be offered in the summer of 2004.

Staff

ED 263b Reflective Teaching Seminar

Open only to M.A.T. students.

A weekly seminar closely coordinated with the Internship in Elementary Teaching (ED 265d). Students explore and evaluate approaches to classroom organization and management, instructional planning, and assessment. They form habits of critical collegueship and develop skills to study their teaching and their students' learning. Students also assemble a teaching portfolio that documents their learning in relation to program standards. Usually offered every year. Will be offered in the fall of 2003.

Staff

ED 264a Foundations of Education

Open only to M.A.T. students.

Explores the philosophical, sociological, historical, and political perspectives of elementary schools in the United States, including legal issues and concerns, teaching concerns, and current issues and trends. Emphasizes curriculum theory and the link between the developing child and instruction. Usually offered every summer. Will be offered in the summer of 2004.

Staff

ED 265d Internship (Elementary)

Open only to M.A.T. students.

A nine-month internship in elementary classroom teaching; designed to help connect theory and practice. Students gradually build proficiency in teaching, adding responsibilities and skills over time. Students have guided opportunities to observe, plan, and teach core subjects, to manage classrooms, to get to know students and families, and to participate fully in the life of the school. Interns receive regular mentoring from school and university personnel. Usually offered every semester. Will be offered in the fall of 2003.

Staff

ED 266d Teachers as Researchers

Open only to M.A.T. students.

Besides discussing examples of teacher research, students design and carry out an investigation or plan of action addressing a question or problem arising in their practice. Students present their inquiry projects to fellow students, mentor teachers and faculty in a Teacher Research Colloquium held during the summer session. Usually offered every year. Will be offered in the spring of 2004.

Staff

Electives

The following courses are approved for the education program leading to certification as well as the education studies minor. Not all courses are given in any one year. Please consult the *Course Schedule* each semester.

Note: Education studies minors will be required to focus their independent research and writing in any of the following courses on educational topics.

AMST 180b

Topics in the History of American Education

ANTH 61b

Language in American Life

COML 165a

Reading, Writing, and Teaching Across Cultures

ECON 59b

Introduction to the Economics of Education

ED 100a

Exploring Teaching (Elementary)

ED 100b

Exploring Teaching (Secondary)

ED 103a

Teaching Strategies for Early Childhood

ED 155b

Education and Social Policy

ED 157b

Psychology of Student Learning

ED 159b

Philosophy of Education

ENG 21a

Adolescent Literature from Grimm to Voldemort

HBRW 168a

(formerly HBRW 119a)
Proficiency-Based Instruction in Modern Hebrew I

HIST 153a

Americans at Home: Families and Domestic Environments, 1600 to Present

HS 373a

Mental Health: Children and Families of Color

HS 544a

Vulnerable Children and Youth: Policy and Programmatic Responses

HS 549a

Family Policy

JCS 215a

The Developing Learner in Jewish Educational Settings

JCS 216a

Philosophy of Jewish Education

JCS 235a

The Culture of Jewish Educational Settings

JCS 236a

Teaching and Learning in Jewish Classrooms

LING 197a

Language Acquisition and Development

PAX 186a

Introduction to Intercommunal Coexistence

PHYS 22a

The Science in Science Teaching and Learning

PSYC 33a

Developmental Psychology

PSYC 36b

Adolescence and the Transition to Maturity

PSYC 169b

Disorders of Childhood

SOC 104a

Sociology of Education

SOC 108a

Youth and Democracy

SOC 154a

Community Structure and Youth Subcultures

SOC 192b

Sociology of Disability