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Boston University School of Medicine, School of Public Health: 1987-1988

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Boston University
Dear Applicant:

We at Boston University School of Public Health pride ourselves on providing a modern educational program in a flexible format that is responsive to the needs of contemporary graduate students and pressing public health problems. Our students are able to earn the Master of Public Health degree on a full or part-time schedule. Most of our courses meet in the afternoon or evening to enable students to continue to work. This innovative format permits students to obtain their degree in one and one-half to three years. Many of our students are active public health professionals, and the educational process for both students and faculty is enriched by their experiences. Our School's full-time faculty is supplemented by a diverse part-time faculty which adds a "real world" dimension to a unique educational experience.

The School has two major educational goals. The first is to offer an intellectually stimulating and comprehensive educational experience while exposing students to the broader dimensions of public health. Secondly, we seek to provide students with a thorough understanding of all aspects of their field of concentration. Such an education enables students to function more effectively in their work, and to move to new positions of responsibility.

Our School is a graduate school in the true sense of the term. We believe education should not only improve one's vocational skills, but also be intellectually expanding. And we expect that students not be passive learners, but actively engage in all aspects of graduate education, including research and writing.

We believe public health is a rewarding calling, one that contributes not only to the prevention of illness, but to the more efficient and equitable delivery of services and the improvement of public well-being. We welcome your interest in the Boston University School of Public Health.

Sincerely,

[Signature]

Norman A. Scotch, Ph.D.
Director
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The School of Public Health

The School of Public Health, part of the School of Medicine, one of sixteen schools within Boston University, was established in 1976 and graduated its first class two years later. The School received preaccreditation from the Council on Education for Public Health in January 1981 and was fully accredited in October 1983. It is the twenty-second school of public health in the United States.

Purpose

The School of Public Health is designed to meet the educational needs of current and future public health professionals. The School offers both a full- and part-time course of study with most classes scheduled in the late afternoon or evening. This scheduling enables individuals to obtain a public health education while continuing their employment. Through its teaching and research programs, the School provides students with an interdisciplinary graduate education that offers an opportunity for both intellectual and professional advancement. Courses in the School assume either some previous exposure to the professional areas of health care or a professional education in a health-related discipline. The value of each student's education is enriched by the School's policy of selecting a heterogeneous class. (See page 50 for an overview of students' professions.) Students with this variety of experience and education are better prepared not only to benefit from the School of Public Health but also to contribute in a substantial way to the education of other students.

A further purpose of the School is to conduct research in the area of public health and to provide service to the community.

Research

The School of Public Health conducts a variety of research projects. These projects are designed to evaluate the health needs of populations, and to investigate interventions that will lead to better health. A brief survey of some of the School's research activities includes:

- the effects of Massachusetts' seat belt laws;
- research on legal and ethical standards for informed consent to human experimentation using U.S. veterans;
- research on standards for experimenting with the artificial heart and new methods of noncoital human reproduction;
- a research project to develop highly sensitive methods to assess the exposure of people to environmental carcinogens;
- a research investigation to determine the initiation reactions in tumorogenesis caused by chemical carcinogens;


- a multicenter study of myocardial infarction in men under 55 and myocardial infarction in young women;
- a study assessing the effect of a new model of primary medical care for disabled adults;
- a study of the medical care needs of Boston’s nursing home residents;
- a planned intervention to prolong the duration of breast feeding among inner city new mothers;
- research assessing the corporate management of health risks;
- an analysis of proprietary ambulatory care centers and their implications for public policy;
- research on the legal and ethical issues of biological monitoring and medical surveillance of workers;
- a research investigation to determine the health effects of exposure to hazardous wastes;
- a study of the factors influencing compensation of workers with asbestos-related diseases;
- a multistate controlled trial assessing the efficacy of treatment for alcoholism in large industrial plants;
- a joint investigation into the effects of stilbestrol on breast cancer and other cancers among mothers who took DES during pregnancy;
- epidemiologic research into the risk factors for cardiovascular disease;
- an assessment of the effects temperature and humidity have on common oral drugs for primary care in the tropics;
- a study assessing the impact upon individuals of learning they have or do not have sickle-cell trait;
- the impact of drunk driving laws in Maine and Massachusetts, including an analysis of fatal and nonfatal accident rates;
- the extent to which maternal health habits are associated with adverse fetal development;
- a study of the efficacy of a local Boston program that teaches gays safe sex practices;
- a study of the ethical values of clinical geneticists in 19 countries;
- research on the use of medical evidence in occupational and environmental disease litigation; and
- a laboratory investigation of genetic factors that contribute to the virulence of bacteria.

The Drug Epidemiology Unit, a part of both the School of Public Health and the School of Medicine, is considered to be in the forefront of the national effort by the Food and Drug Administration to identify the occurrence (and nonoccurrence) of drug-induced diseases. The Drug Epidemiology Unit is a multidisciplinary research group with specialists in internal medicine, pediatrics, clinical epidemiology, biostatistics, computer science, and administration. Some of their studies include:

- a multicenter case-control study of illnesses requiring hospital admission in relation to drug use;
- a multicenter study of myocardial infarction in men under 55 and myocardial infarction in young women;
- the collection of data on over 2500 malformed infants to serve as a resource for both the discovery of unsuspected drug-induced malformations and the study of hypotheses arising from other sources.

The Normative Aging Study is an interdisciplinary and longitudinal study of aging initiated in 1961 and conducted at the Veterans Administration Outpatient Clinic in Boston. Conducted with faculty from the Epidemiology and Biostatistics, Health Services, and Social and Behavioral Sciences Sections, the study has followed a cohort of 2,280 men — initially healthy — continuously since that time. The objectives of the study are to characterize biomedical and psychosocial parameters of the aging process. Major areas of investigation are biomedical and psychosocial changes related to the aging process, including clinical medicine, biochemical studies, body composition, cardiovascular and pulmonary function, special senses, memory and personality, work and retirement, smoking, drinking, and other behaviors.

The Data Coordinating Center
The Data Coordinating Center in the School of Public Health is a data processing resource center for the entire Boston University Medical Center community. The staff of the Data Coordinating Center is comprised of seven full-time data analysts who have backgrounds in statistics and epidemiology. The Data Coordinating Center’s staff provides assistance with data processing at every stage of research from proposal preparation to the collection and analysis of data, to the publication of results. Currently the Data Coordinating Center is involved in a wide range of research projects, including topics such as drunk driving and seat belt law evaluations, head and neck cancer screening, the effects of DES, a randomized trial of alcohol treatments, and maternal health habits during pregnancy.

The Data Coordinating Center is also a valuable resource for Public Health students who are interested in pursuing a research project involving questionnaire design, data collection, data entry, analysis of data, and interpretation of results. The staff of the Data Coordinating Center is available to students to answer any questions about Boston University’s IBM 3090 mainframe computer and to provide instruction on commonly used statistical packages.

Additional Educational Activities
In addition to teaching public health professionals, the faculty of the School is involved in a number of related teaching activities. As part of the School of Medicine, the School of Public Health plays an important role in the education of medical students. Its faculty teach courses in law and medicine, epidemiology and biostatistics, medical sociology and urban health care to first-year medi-
ca students. It also instructs residents in the Primary Care Residency Training Programs of the Departments of Pediatrics and Medicine at Boston City Hospital.

Faculty also have led continuing education courses for physicians, nurses, social workers, and other health professionals.

Public Health Graduate Study
Graduate education in public health is a phenomenon of the twentieth century. In the early years the focus was on infectious disease and on problems of occupational health. However, as the industrialized world became more complex and the practice of health care became more sophisticated, the subject matter changed dramatically. New professional groups were drawn to the problems of promoting health, and public health soon became a broad, interdisciplinary field.

By incorporating the contributions of many academic disciplines, the School’s curriculum seeks to analyze not only the nature and context of public health problems, but also the organizational, behavioral, legal, and bureaucratic constraints to ameliorating these problems.

Exact characterizations of the public health field are elusive. Each professional group has its own conception of the total picture, and its own way of delimiting the subject matter. Public health education focuses on:

- the development and dissemination of general health and illness knowledge in populations;
- a growing recognition of the importance of psychological and social factors in illness and well-being;
- attempts to control and improve the physical environment in which populations live and work;
- interpreting and implementing the results of research investigations and other scientific and statistical information;
- efforts to understand and influence governmental health policy and regulation; and
- designing more effective and efficient methods for planning and delivering health care services.

The School of Medicine
In 1873, Boston University established the School of Medicine by merging with the New England Female Medical College, which had been founded in 1848 as the first medical college for women in the world. In 1962, the School of Medicine became a constituent member of the Boston University Medical Center. It is situated in the South End of Boston between the Boston City Hospital and the University Hospital.

The School of Medicine offers a four-year program leading to the Doctor of Medicine (M.D.) degree. In cooperation with the College of Liberal Arts, the School offers a six-year liberal arts/medical education program and an eight-year modular medical integrated curriculum (MMEDIC) program, both of which lead to the B.A. and M.D. degrees.

M.A. and Ph.D. programs in medical sciences are available through the Division of Medical and Dental Sciences of the Graduate School. A combined M.D./Ph.D. program is also available.

Boston University Medical Center
In recognition of the increasing interdependence of medical education, research, and health service, Boston University Medical Center was established in 1962. Located in the South End of Boston, it forms a semiautonomous but integral part of the University. It consolidates the resources and activities of the School of Medicine, the School of Public Health, the Goldman School of Graduate Dentistry, University Hospital, and units such as the Humphrey Cancer Research Center and the Cardiovascular Institute. More than twenty New England health institutions are affiliated with the Center. Its purpose is to promote and maintain better health in contemporary society.

Boston University
Boston University is an independent, coeducational, nonsectarian university. Its academic diversity meets the needs of one of the largest bodies of scholars in the world. Incorporated in 1869, the University today provides students with the advantages of a large, contemporary educational complex while maintaining traditional priorities. Its sixteen schools and colleges respond to students’ career needs and the increasingly specialized demands they face in the contemporary world.

With a history free from racial and religious discrimination in the admission of students and hiring of faculty, Boston University is strongly committed to minority recruitment, equality of the sexes, and opportunities for the disabled. It was the first university to open all its doors to female students and it graduated the country's first black woman M.D. and first woman Ph.D.

Most of the University's schools and colleges line the south bank of the Charles River just west of downtown Boston. With the river as boundary to the north, this campus encloses a chain of peaceful waterway parks and esplanades. Architecturally, the University has grown with the city. Contemporary classroom and dormitory buildings sit comfortably among the older gothic structures and the bowfront town houses of Boston's Back Bay.
The School of Public Health offers degree programs leading to the Master of Public Health (M.P.H.) and the Doctor of Science in Epidemiology (D.Sc.). The five academic sections (Environmental Health, Epidemiology and Biostatistics, Health Law, Health Services, and Social and Behavioral Sciences) offer courses at the introductory and advanced levels so that students gain not only a broad education in public health but also a depth of knowledge in a particular concentration. Elective courses may be used to strengthen further the student's concentration or to explore the contributions of other fields in public health.

Students may pursue either the M.P.H. or D.Sc. program on a part-time or full-time basis, and may move from one status to another upon notifying the Registrar. Part-time students usually take two courses each semester, and full-time students take four courses. The School follows a fall/spring semester schedule with a limited summer program. Approximately thirty courses are offered each semester. Courses are offered at the Medical Center campus in the afternoon and evening.

In addition to classroom instruction, students may choose to arrange a directed study or directed research project. These require faculty sponsors who assume responsibility for approving the projects and assigning grades. Nongraded full- and part-time internship opportunities are also available for interested students. Placements in the past have included hospitals, health maintenance organizations, state agencies, environmental organizations and other health care facilities.

**M.P.H. Degree Requirements**

To earn the Master of Public Health degree, students must complete 48 credit hours. Students are required to complete four 3-credit courses (Elementary Biostatistics, Introduction to Health Services, Epidemiology, and Behavioral Sciences and Public Health) and two 2-credit courses (Introduction to Health Law and Introduction to Environmental Health). Environmental Health and Health Law concentrators complete the 4-credit version of their concentration's core course. These core courses provide the basic skills and knowledge necessary for a career in public health. Students must also complete 16 elective credits and satisfy the requirements of one (or more) of the following concentrations: Epidemiology and Biostatistics, Health Law, Health Services, Environmental Health, or Health Behavior, Health Promotion, and Disease Prevention.

Entering M.P.H. students are strongly encouraged to complete the core courses as early as possible. Full-time students are urged to complete four core
courses (11 credits) in their first semester and two core courses (5 credits) in the second semester. The School recommends that part-time students complete all core courses (16 credits) by the end of the second year. Most courses are offered once a year. However, some core courses may be offered more frequently (i.e., twice a year) while advanced courses may be offered less frequently. While students may complete their academic requirements by taking evening courses, to ensure maximum flexibility in course selection students should plan to take some of the courses offered in the afternoon. Students are encouraged to meet with their advisers to plan their curriculum. For specific information and concentration course requirements, applicants should refer to each section's description in this catalogue.

D.Sc. Degree Requirements

The Epidemiology and Biostatistics Section offers a program leading to the degree of Doctor of Science in Epidemiology. The D.Sc. program is intended for the health professional who seeks advanced graduate study to prepare for a career as a professional epidemiologist. It is anticipated that graduates of this program will obtain leadership positions in research, teaching, and administration. Applicants should hold a graduate degree in a field relevant to public health. Exceptional candidates without a graduate degree may apply, but will be required to complete additional course work.

Students complete at least 32 credits (eight courses) beyond the master's degree. It is expected that at least one half of these courses should be from the Epidemiology and Biostatistics course offerings at the School of Public Health. Students may also choose from other courses offered at the School and pertinent graduate courses at Boston University such as those offered by the Department of Mathematics, Computer Sciences, and the Division of Medical Sciences. The intent of the course work is to provide a firm foundation in epidemiologic principles and methods, biostatistical methods, and general public health knowledge.

Students must demonstrate proficiency in their ability to read the epidemiologic literature in at least one of the following languages: French, Spanish, German, or Russian. International students may use English to fulfill the language requirement.

Upon completion of course work, students must pass a comprehensive written examination which may be supplemented by an oral examination to evaluate the students' readiness to begin thesis research. Students are required to develop a written dissertation proposal outlining the nature of the research. The proposal must be approved by the student's adviser and thesis committee. The dissertation is prepared and written under the direction of the candidate's principal adviser. The research usually involves collection, processing, and analysis of original data. Under special circumstances, the requirement of original data may be waived when a student proposes an innovative project involving analysis of an existing data set or a creative theoretical investigation of epidemiologic importance. When the dissertation is completed, the candidate defends his or her work before a five-member committee.

Programs in International Health

The Office of Special Projects offers three courses for health professionals from developing countries. These intensive courses are a major component in the international area of the School's curriculum.

Management for Child Survival is a six-week, 149-contact-hour course that emphasizes practical management for effective delivery of maternal and child health services in developing countries. The course is offered annually, in March, and includes a one-week field practicum in St. Vincent. Unless special arrangements are made with the course director prior to matriculation, Management for Child Survival is a noncredit certificate program.

Summer Certificate Program in Health Care in Developing Countries is a twelve-week, 275-contact-hour course that carries up to 20 graduate credit hours toward an M.P.H. at Boston University. The program emphasizes effective application of epidemiologic principles and methods to primary health care and the impact of socioeconomic development and urbanization on health status and services delivery in countries where resources are severely constrained. It is offered annually, in the summer.

Financing Health Care in Developing Countries is a twelve-week, 270-contact-hour course that emphasizes the application of economic and financial management principles to health services in the public and private sector. A central theme is projecting, managing, and controlling operating/recurrent costs including assessing the impact of hard-currency availability on program content. The course will be offered for the first time in fall 1987 and annually in the fall thereafter.

For additional information about these programs, please refer to the Office of Special Projects on page 28.

Dual-degree Programs

The School of Public Health offers dual-degree programs with the School of Law, the School of Social Work, the School of Medicine, and the Graduate School's Department of Economics.

J.D./M.P.H.
The J.D./M.P.H. dual-degree program is an accelerated four-year course of study leading to the award of both the J.D. and M.P.H. degrees. The program
reflects the University's recognition of the interrelationship between the legal system and the promotion, organization, and delivery of health care services. The University's goal in drawing upon its outstanding teaching and research resources in the field of health law and public health to establish the Law and Public Health Program is to train graduates for leadership roles in dealing with important and complex issues related to the improvement and delivery of public health care. That goal is served by a program that offers a number of highly qualified individuals the opportunity to obtain rigorous training in both law and public health. Graduates of the J.D./M.P.H. dual-degree program will be especially well prepared to understand these complex interrelationships and to exercise leadership in both private- and public-sector decision making in this area of major social and economic significance.

Separate application and admission to the School of Law and the School of Public Health under the procedures and standards of the respective Schools is required for participation in the dual-degree program. Applicants may apply simultaneously to the two Schools, or, alternatively, students enrolled in the School of Law may apply during their first year of law study for admission to the School of Public Health M.P.H. degree program.

Students admitted to the J.D./M.P.H. Law and Public Health Program enroll in the School of Law for each of the first three years of study, but take two School of Public Health courses in both the second and third years of study for credit toward both the J.D. and M.P.H. degrees. The J.D. degree is awarded following the completion of three years of study, and the fourth year of study is in residence at the School of Public Health. The latter gives advanced-standing credit for four courses taken at the School of Law and awards the M.P.H. degree upon completion of the fourth year of course work.

For more information on the J.D./M.P.H. dual-degree program, students should write to the School they will apply to first.

M.S.W./M.P.H.
The M.S.W./M.P.H. dual-degree program is a three-year course of study leading to the award of both the M.S.W. and M.P.H. degrees. The program is based on the recognition that many social workers are involved in the health delivery system and are interested in taking a broader, population-based look at the system. In addition, new roles are evolving for social workers in the health sector. These include social work in the administration of health delivery systems and participation in the health policy process at local, state, and national levels.

Students are admitted to one of the two Schools and complete that School's basic course work. Before the end of the first year, application is made to the other school. Students are held, in each school, to the same admission standards as other students.

For further information on the M.S.W./M.P.H. dual-degree program, students should write to the School they will apply to first.

M.D./M.P.H.
The M.D./M.P.H. dual-degree program enables interested medical students to pursue both the M.D. and M.P.H. degrees during tenure at Boston University. This flexible program, usually completed in five years, combines traditional M.D. preparation with in-depth work in one of the following areas of public health: health services, environmental health, health law, epidemiology and biostatistics, and health behavior, health promotion, and disease prevention. Medical students are admitted to the program after successful completion of the first semester of their medical school year. They continue medical school courses concurrently with public health courses, especially during the fourth and fifth years of the program. Students must successfully complete all School of Medicine requirements and accumulate 48 credits in School of Public Health courses. A grade point average of at least 2.7 (on a 4.0 scale) in School of Public Health courses must be attained. Students may receive up to sixteen credits toward both the M.D. and M.P.H. degrees for courses taken in either School.

Interested students are advised to contact either Associate Dean McCahan in the School of Medicine or Associate Professor Prout in the School of Public Health.

M.A./M.P.H.
The Graduate School's Department of Economics and the School of Public Health offer a dual-degree program for integrated graduate education in health economics and public health applied to developing countries. The basic program requires 24 months of continuous study and awards the degrees of Master of Arts with a concentration in Economic Policy (M.A.) and Master of Public Health (M.P.H.), with a specialization in health care in developing countries. Students may instead elect a 19-month program, which awards the M.A. with a specialization in health economics and a Certificate in Health Care in Developing Countries from the School of Public Health. Both the 24- and the 19-month programs prepare professionals to conduct economic analyses of projects and programs in the health sector of developing countries and to evaluate health services research as it becomes available in the future.

Interested students are advised to contact the Graduate School Secretary, Boston University, Department of Economics, 270 Bay State Road, Boston, MA 02215; 617/353-4454.
Introduction to Environmental Health since EH 765 fulfills the M.P.H. core requirement.

In addition to EH 765 and EH 768, concentrators must choose eight credits from the following courses:

**LW 757** Occupational Health and Safety Law
**LW 758** Corporate Management of Risks to Health, Safety, and Environment
**EH 764** Work and Health
**EH 767** Occupational Health Policy and Economics
**EB 801** Cancer Prevention as a Public Health Problem
**EH 802** Air Sampling and Analysis
**EH 803** Waste and Wastewater
**EB 804** Biologic Basis of Cancer Prevention
**EH 809** Parasites of Humans: A Public Health Perspective
**EB 812** Infectious Disease Epidemiology
**EB 819** Cancer Epidemiology
**LW 852** Environmental Health Law
**EH 860** Municipal Sanitation
**EH 862** Radiation Protection
**EH 864** Environmental Microbiology
**EH 865** Food Sanitation and Safety
**EH 867** Soil Pollution
**EH 869** Environmental Planning
**EH 961** Directed Studies in Environmental Health
**EH 962** Directed Research in Environmental Health

SPH EH 708 Introduction to Environmental Health

Environmental factors are still the most important determinant of the health status of the community. This course surveys the broad areas of this discipline, touching on the fundamentals of air pollution, the provision of pure water and a healthful food supply, the basics of radiation protection, and the problems of solid and hazardous wastes. This core course does not carry concentration credit. Environmental Health concentrators

1 This course may also be applied to the Health Law concentration.
2 This course may also be applied to the Epidemiology and Biostatistics concentration.
3 This course may also be applied to the Health Services concentration.
This course is offered by the Health Law Section. See page 17 for course description.

SPH LW 757 Occupational Health and Safety Law
This course is offered by the Health Law Section. See page 17 for course description.

SPH LW 758 Corporate Management of Risks to Health, Safety, and Environment
This course is offered by the Health Law Section. See page 17 for course description.

SPH EH 764 Work and Health
This introductory course in occupational health covers the nature and magnitude of work-related diseases and injuries in the United States, discusses sociopolitical aspects of occupational health, preventive and curative medical programs in the workplace, and career opportunities in occupational health. The course includes at least one work-site visit. Written requirements include an occupational history, a site visit report, a mid-term, and final examination. 4 credits. (Patterson)

SPH EH 765 Survey of Environmental Health
This course surveys the broad areas of environmental health, including problems associated with contamination of air, water, food and soil, and physical hazards such as radiation and thermal stress. This course is required of all Environmental Health concentrators. 4 credits. (Ozonoff)

SPH EH 767 Occupational Health Policy and Economics
Prereq: Consent of the instructor. This seminar introduces noneconomists to economic analysis of occupational health issues. Students learn to use the tools of economics to analyze public policies designed to affect the incidence of occupational injuries and diseases. The course focuses on selected issues, including the effectiveness of OSHA regulation, the use of cost-benefit analysis in occupational health, problems of compensating workers with occupational disease, and the adequacy of workers' compensation incentives to reduce occupational hazards. A paper and a short oral presentation are required. No prior economics training is needed. 4 credits. (Boden)

SPH EH 768 Principles of Toxicology
This introductory course presents the basic concepts of toxicology, including dose-response relationships, biologic and chemical factors that influence toxicity, types of harmful effects, detoxification mechanisms, mechanisms of carcinogenesis, mutagenesis, and the principles of testing for toxic effects. Current environmental health problems in Massachusetts are discussed as illustrative material, stimulating students to apply basic principles to actual cases. Problem sets are used to develop quantitative skills as applied to toxicological problems. The course assumes basic knowledge of chemistry and biology. This course is required of all Environmental Health concentrators. 4 credits. (Groopman)

SPH EB 801 Cancer Prevention as a Public Health Problem
This course is offered by the Epidemiology and Biostatistics Section. See page 13 for course description.

SPH EB 802 Air Sampling and Analysis
Recommended: SPH EH 765 Survey of Environmental Health. A combination of demonstrations, workshops, and lectures are used to present the student with a methodology for identifying and quantifying air contaminants. Basic chemical and physical principles that affect the behavior of gases, vapors, and particles in the air are covered. Students become familiar with the principles of commonly used air sampling and analysis instrumentation. Applicable OSHA and EPA regulations are discussed.

SPH EB 803 Waste and Wastewater
Prereq: SPH EH 765 Survey of Environmental Health or consent of the instructor. This course provides the student with a background on wastes and wastewater as related to public health issues. Process streams including primary, secondary, and tertiary treatment of municipal wastewater, septage disposal, and sludge stabilization and disposal are presented along with current technologies and limitations. Overland flow, slow-rate infiltration, and other effluent land-treatment systems are described and discussed. Technologies involving solid waste disposal such as incineration, combustion with energy recovery, and landfilling are presented with particular emphases on public health aspects. The course will involve site/field visits and a paper. 4 credits. (Epstein)

SPH EB 804 Biologic Basis of Cancer Prevention
This course is offered by the Epidemiology and Biostatistics Section. See page 13 for course description.

SPH EH 809 Parasites of Humans: A Public Health Perspective
Prereq: Consent of the instructor. This course provides an in-depth exploration of the major diseases of humans that are caused by protozoans and helminths, and deals with the role of arthropods as parasites and vectors. The format of the course is lecture and laboratory. Students are required to prepare and examine blood and stool specimens as well as examine and identify already prepared specimens. The course emphasizes the development of knowledge and skills important for the prevention and control of parasitic diseases in humans. 4 credits. (Duncan)
SPH EB 812 Infectious Disease Epidemiology
This course is offered by the Epidemiology and Biostatistics Section. See page 14 for course description.

SPH EB 819 Cancer Epidemiology
This course is offered by the Epidemiology and Biostatistics Section. See page 15 for course description.

SPH LW 852 Environmental Health Law
This course is offered by the Health Law Section. See page 17 for course description.

SPH EH 860 Municipal Sanitation
Prereq: SPH EH 765 Survey of Environmental Health or consent of the instructor. This course focuses on the fundamentals of large-scale urban sanitary systems, principally those providing water supply and wastewater disposal. The course covers water supply sources, processing, and distribution; wastewater collection, treatment, and disposal; water quality indices and water pollution; and rural water supply and waste disposal systems. 4 credits. (Sebian)

SPH EH 862 Radiation Protection
Prereq: Basic knowledge of physics, biology, and mathematics through algebra, or consent of the instructor. This course provides an introduction to the basic physics of ionizing radiation, its measurement, and biological effects. The origin and sources of different types of ionizing radiation are covered, radiation units and associated measuring instruments are discussed and demonstrated, and the mechanisms and consequences of biological damage are presented. Radiation protection principles and techniques are covered in the context of public health and the regulatory framework. The emphasis will be on radiation protection within medical institutions, although industrial and electric utility applications will also be discussed. 4 credits. (Evdokimoff)

SPH EH 864 Environmental Microbiology
Prereq: College biology or consent of the instructor. This course covers basic concepts of microbial ecology, the roles of soil and water microorganisms in nutrient recycling and degradation of domestic hazardous wastes, and the impact of pollution on microbial communities. Topics to be discussed include waste treatment and disposal, biological pest control, food spoilage, the spread of disease organisms, and the potential benefits and hazards of new advances in biotechnology. 4 credits. (Foster)

SPH EH 865 Food Sanitation and Safety
Prereq: SPH EH 765 Survey of Environmental Health or consent of the instructor. This course explores the various aspects of food service sanitation, including vending. While it concentrates on the prevention and control of microbiological contamination of food in the institutional and retail food establishment, it also covers general aspects of food safety, including additives, processing, and the regulatory framework.

Students taking this course become certified in food service sanitation through the National Institute for the Foodservice Industry, are qualified to plan and manage a program of food sanitation, safety, and inspection, and are able to train and supervise others. 4 credits. (Balsam)

SPH EH 867 Soil Pollution
Prereq: SPH EH 765 Survey of Environmental Health or consent of the instructor. This course examines the origin, movement, and fate of pollutants in the soil matrix. Proper on-site disposal of wastewater in septic systems depends on an understanding of the nature of soil, its different types, and its topography. This course provides the basic background against which these factors can be understood and used in the proper design and evaluation of on-site disposal systems. The movement of chemicals in soil is also presented and the consequences for soil and hazardous waste disposal are given special emphasis. At least one other course in environmental health is required. There are one or more field visits to view local facilities. 4 credits. (Epstein)

SPH EH 869 Environmental Planning
Prereq: SPH EH 765 Survey of Environmental Health or consent of the instructor. Planning is basic to the medium- and long-range management of any environmental protection program. This course examines various theories of planning and shows the student a variety of techniques that can be used in planning an environmental program. Practical examples are used throughout with a special emphasis on the hazardous waste problem. 4 credits. (Anderson)

SPH EH 961 Directed Studies in Environmental Health
This course provides the opportunity for advanced students to explore a special topic of interest under the direction of a faculty member. Arrangements are made directly with the appropriate faculty member and the section chief. Variable credit.

SPH EH 962 Directed Research in Environmental Health
This course provides the opportunity for advanced students to undertake independently, or to become involved in, environmental health research of a public health nature. Arrangements are made with the appropriate faculty member and the section chief. Variable credit.
This concentration provides the student with the principles and methods of research in health. Emphasis is on quantitative approaches as manifested by the disciplines of biostatistics and epidemiology. The intent of this concentration is to equip the student with skills in the design, conduct, and analysis of research endeavors such as clinical trials, etiologic epidemiologic studies, medical surveys, and evaluation of health care programs. Within this concentration students may also choose to specialize in the development of new methodology in research design or in analysis of health data.

Under the auspices of a grant from the National Cancer Institute, the Epidemiology and Biostatistics Section has developed a program of course work with particular emphasis on Preventive Oncology. Students interested in this program should contact Dr. Marianne Prout.

An important component of the Section is the Drug Epidemiology Unit. The Epidemiology Unit is located at 1371 Beacon Street, Brookline, a 20-minute drive from the Medical Center. A small number of students may gain hands-on experience in working with faculty in the Epidemiology Unit on current epidemiologic research projects.

M.P.H. Program
The basic requirement for graduation with a concentration in Epidemiology and Biostatistics is, in addition to EB 703 Intermediate Biostatistics, at least four of the following courses:

- EB 704 Statistical Methods in Research
- EB 705 Statistical Computing
- EB 706 Biostatistical Theory
- EB 720 Applying Epidemiology to the Study of Aging
- EH 765 Survey of Environmental Health
- EB 780 Analysis of Discrete Data
- EB 801 Cancer Prevention as a Public Health Problem
- EB 802 Epidemiology of Reproductive Outcomes
- EB 803 Clinical Trials
- EB 804 Biologic Basis of Cancer Prevention
- EB 805 AIDS: Medical, Economic, Psychosocial, Legal Issues
- EB 806 Theoretical Epidemiology
- EB 810 Psychiatric Epidemiology
- EB 811 Health Services Research Methods
- EB 812 Infectious Disease Epidemiology
- EB 813 Methods in Chronic Disease Epidemiology
- EB 814 Research Methods in Public Health
- SB 815 Program Evaluation Research
- EB 816 Cardiovascular Epidemiology
- EB 817 Practicum in Public Health Research
- EB 818 Statistical Methods for Epidemiology
- EB 819 Cancer Epidemiology
- EB 901, 902 Directed Studies in Epidemiology/Biostatistics

1This course may also be applied to the Environmental Health concentration.
2This course may also be applied to the Environmental Health and Health Behavior, Health Promotion, and Disease Prevention concentrations.
3This course may also be applied to the Health Services concentration.
4This course may also be applied to the Health Services and Health Behavior, Health Promotion, and Disease Prevention concentrations.
Any four of these courses fulfill the requirements of the Epidemiology and Biostatistics concentration, and the faculty of the concentration feel strongly that the student's special interests should determine the pattern. For example, students especially interested in evaluation research (or in health care research) might plan to take the following courses:

- Statistical Methods in Research
- Program Evaluation Research
- Research Methods in Public Health
- Health Services Research Methods

Students who are particularly interested in epidemiology might choose their four concentration courses from the following methodologic courses:

- Methods in Chronic Disease Epidemiology
- Statistical Methods for Epidemiology
- Statistical Methods in Research
- Research Methods in Public Health
- Statistical Computing

and the following discipline-oriented specialty courses:

- Cardiovascular Epidemiology
- Cancer Epidemiology
- Infectious Disease Epidemiology
- Health Services Research Methods
- Epidemiology of Reproductive Outcomes
- Psychiatric Epidemiology

The discipline-oriented specialty courses emphasize the principles and methods of epidemiology that were briefly surveyed in the core epidemiology course. Greater stress is placed on the principles of the various epidemiologic research strategies, and the student pursues some depth of the substantive content of his or her specialty area. The methods courses provide the student with more specific skills in the design, conduct, analysis, and interpretation of epidemiologic studies.

Students may also choose a directed research, which allows them to pursue a particular research project that will serve to synthesize and apply the various facts and techniques they have learned during their tenure.

D.Sc. Program in Epidemiology
See program description on page 6.

SPH EB 701 Elementary Biostatistics
This course is for students who have not had prior experience with statistics. Topics include: the collection, classification, and presentation of descriptive data; the rationale of hypothesis testing, experimental design; t-tests; simple correlation analysis; and analysis of contingency tables. Special attention is directed to the ability to recognize and interpret statistical procedures in articles from the current literature. 3 credits. (Kayne)

This course (or SPH EB 703 or SPH EB 706) is required for all M.P.H. students.

SPH EB 703 Intermediate Biostatistics
This course is for students who have had classroom or work-related exposure to biostatistics at the level of EB 701. Topics include: a review of aspects of EB 701; analysis of variance and multiple comparisons; block, factorial, and repeated measures experimental designs; multiple correlation and regression; covariance adjustment. Focus is on interpretative skills and reading the literature critically rather than on mathematics. 4 credits. (Kayne)

Epidemiology and Biostatistics concentrators must take EB 703 or EB 706, although they may take EB 701 first.

SPH EB 704 Statistical Methods in Research
Prereq: SPH EB 701 Elementary Biostatistics or consent of the instructor. This course complements Intermediate Biostatistics. The main focus is on the use of statistics in health research. Topics may include sampling techniques for health surveys, the use of life tables in analyzing longitudinal data, the Poisson distribution, tests of goodness of fit, contingency table analysis, and nonparametric statistics. Students analyze data from health and related fields. 4 credits. (Cupples)

SPH EB 705 Statistical Computing
Prereq: SPH EB 703 Intermediate Biostatistics or consent of the instructor. This course introduces students to computerized statistical packages, including SAS, SPSS, and BMDP. Topics cover data manipulation, file maintenance, and computation for descriptive statistics, hypothesis testing, multiple regression, analysis of variance, and covariance. Analysis focuses on several data sets, one or two of which derive from ongoing research. No prior experience is necessary. 4 credits. (Cupples and Heeren)

SPH EB 706 Biostatistical Theory
This course offers a more mathematical treatment of topics covered in EB 703. Students are expected to have had exposure to statistics at the level of EB 701. Topics include basic probability theory, distributions, and densities; sampling distributions and likelihood functions; theory of estimation and hypotheses testing; analysis of variance and multiple comparisons; block, factorial and repeated measures designs; and multiple regression and analysis of covariance. Focus is on performing and interpreting statistical analyses and involves computer work. 4 credits. (Heeren)
SPH EB 711 Epidemiology
The primary focus of this course is on the epidemiology of chronic diseases such as cardiovascular disease and cancer. As time allows, the course considers topics such as reproductive outcome, infectious disease, the epidemiology of health services, and the social origins of health and disease. A further objective of the course is the development of the ability to evaluate critically the quality of relevant medical literature. The course includes lectures, smaller seminar discussions, and several exercises based on published epidemiologic studies. 3 credits. (Staff)

This course is required for all M.P.H. students.

SPH EB 720 Applying Epidemiology to the Study of Aging
Prereq: SPH EB 711 Epidemiology or consent of the instructor. This course consists of lectures organized around topics of interest in geriatrics and gerontology. Each session (for each topical area) has three goals. First, the current status of knowledge obtained through epidemiologic studies is reviewed. Second, that status of current knowledge serves as a starting point for discussing the directions that future research should take. Finally, special consideration is given to the unique problems associated with conducting research in an elderly population. The review of such important methodologic issues leads to a practical discussion on how such research should be conducted in the future. 4 credits. (Kern)

SPH EH 765 Survey of Environmental Health
This course is offered by the Environmental Health Section. See page 9 for course description.

SPH EB 780 Analysis of Discrete Data
Prereq: SPH EB 703 or consent of the instructor. This course examines the use of log linear, logistic, and proportional hazards models for analyzing counted data. Topics include the binomial, multinomial, and Poisson distributions, chi-square tests, measures of association, log linear models for contingency tables, survival analysis, and goodness of fit. The course emphasizes practical applications making extensive use of computer packages for data analysis. 4 credits. (Glynn)

SPH EB 801 Cancer Prevention as a Public Health Problem
Prereq: SPH EB 701 Elementary Biostatistics, SPH EB 711 Epidemiology and consent of the instructor. By means of lectures, seminars, and student presentations, this course reviews multidisciplinary approaches to the application of cancer prevention knowledge to individuals and communities. Students analyze and present case examples of approaches to the control of a given cancer or a given carcinogen. 4 credits. (Prout)

SPH EB 802 Epidemiology of Reproductive Outcomes
Prereq: SPH EB 711 Epidemiology. This course surveys the state-of-the-art knowledge concerning the epidemiology of reproductive outcomes. Topics include infertility, miscarriage and fetal deaths, birth defects, prematurity, infant mortality, and adolescent pregnancy. Important medical care issues that affect reproductive outcomes are also covered, including prenatal care, neonatal intensive care units, family planning, and Caesarean section. The goal of the course is to enable students to critically analyze and interpret studies in these various areas. Sessions focus on underlying causal models, research design, and data bases used. Policy alternatives to address adverse reproductive outcomes are considered in the final two sessions of the course. 4 credits. (Valentine)

SPH EB 803 Clinical Trials
Prereq: SPH EB 701 Elementary Biostatistics and SPH EB 711 Epidemiology or consent of the instructor. This course considers a range of issues in the design, conduct, and analysis of clinical trials, namely, planned experiments with patients to assess the efficacy of treatment regimens. The course provides practice in the design of such studies and in the critique of published investigations. Emphasis is placed on statistical principles that affect the size, structure, and duration of a trial, as well as the analysis and interpretation of its results. There is little emphasis on computational methods. 4 credits. (Ash)

SPH EB 804 Biologic Basis of Cancer Prevention
Prereq: SPH EB 701 Elementary Biostatistics, SPH EB 711 Epidemiology, and consent of the instructor. This course presents the concepts that underlie laboratory and epidemiologic studies related to cancer. Using a recently regulated chemical as an example, students report on a review of the scientific data leading to regulatory action. Variable credit. (Prout and Rogers)

SPH EB 805 AIDS: Medical, Economic, Psychosocial and Legal Issues
Recommended: SPH EB 711 Epidemiology and SPH EB 812 Infectious Disease Epidemiology. Through a series of seminars and lectures by several experts from the Boston medical, legal, and economic communities, this course reviews the current AIDS epidemic, the microbiology of HIV infection, the clinical spectrum and natural history of disease. In addition, the legal, economic and social impact of the disease is discussed. Students prepare a paper on an aspect of AIDS. Attention is given to examining the changing policy (health, legal, and economic) implications as the epidemiology of this rapidly changing infection becomes better defined. 4 credits. (Craven/Ryder)
Students enjoy free access to the facilities at the Laboratory for Instructional Technology at the School of Medicine.

SPH EB 806 Theoretical Epidemiology
Prereq: SPH EB 703 Intermediate Biostatistics and SPH EB 711 Epidemiology, or consent of the instructor. This course examines principles of design, analysis, and interpretation of epidemiologic studies. Design issues to be considered include formulation of the occurrence relation, assessments of determinants and outcome, conceptualization of confounding, selection of study population, and methods of sampling. Analysis and inference issues to be considered include hypothesis testing, comparative analyses of rates, case-referent data, and regression analysis. 4 credits. [Glynn]

SPH EB 810 Psychiatric Epidemiology
Prereq: SPH EB 711 Epidemiology. This course applies the epidemiologic method to mental illness and health. The course examines major studies that have used data on treated cases as well as general population surveys. Special attention is given to methodologic issues in the design and implementation of these studies. Behavioral disorders during childhood and adult years are covered. 4 credits. [Galler]

SPH EB 811 Health Services Research Methods
Prereq: SPH EB 701 Elementary Biostatistics and SPH EB 711 Epidemiology. This course emphasizes a problem approach to the study of health care research. Emphasis is on definition of the problem, the scale of the study, and elucidation of the pertinent research methods and analysis. Among the possible topics for inclusion are quality review, health care management and evaluation methods, decision analysis, health status instruments and outcome, and survey studies and arthritis studies. 4 credits. [Kazis and Moskowitz]

SPH EB 812 Infectious Disease Epidemiology
Prereq: SPH EB 711 Epidemiology. This course presents the methods of studying common infectious diseases in populations. It includes the determinants of these diseases, their distribution within populations, and their control. Primary focus is on the process of analysis of actual outbreaks of infectious disease with discussion of prepared homework. In addition, there is lecture presentation regarding specific diseases and agents. Domestic and some tropical diseases are included. Implications for social policy and preventive approaches are discussed. 4 credits. [Lamb]

SPH EB 813 Methods in Chronic Disease Epidemiology
Prereq: SPH EB 701 Elementary Biostatistics or SPH EB 703 Intermediate Biostatistics (or equivalent) and SPH EB 711 Epidemiology. This course emphasizes the specific issues and methods involved in the design, analysis, and interpretation of epidemiologic studies of etiologic factors in chronic diseases. Specific methodology includes parameter estimation and hypothesis testing for
simple and stratified analyses, as well as techniques for the evaluation and control of effect modification and confounding. Students analyze and interpret actual epidemiologic data and present written critical evaluations of published work. 4 credits. [Staff]

SPH EB 814 Research Methods in Public Health
Prereq: SPH EB 711 Epidemiology. Recommended: SPH EB 701 Elementary Biostatistics or SPH EB 703 Intermediate Biostatistics. This course stresses the theory and practice of conducting survey research in health fields. Classes are a mixture of lectures and skill exercises. Topics include research design, sampling, data collection methods, interviewing, coding and data analysis. The course is appropriate for those who will do research as well as those who will be research consumers. 4 credits. [Mangione]

SPH SB 815 Program Evaluation Research
This course is sponsored by the Social and Behavioral Sciences Section. See page 27 for course description.

SPH EB 816 Cardiovascular Epidemiology
Prereq: SPH EB 711 Epidemiology. This course introduces students to the natural history of cardiovascular diseases such as hypertension and coronary heart disease. It also focuses on the principal causes of cardiovascular disease, particularly those that can be modified to effect either primary or secondary prevention. The course also reviews the important noninvasive and multivariate statistical methods that are used in obtaining and analyzing data from studies of cardiovascular epidemiology. The final segment of the course also includes reports of both clinical and community intervention trials. 4 credits. [Stokes]

SPH EB 817 Practicum in Public Health Research
Prereq: SPH EB 711 Epidemiology and SPH EB 814 Research Methods in Public Health. Recommended: SPH EB 701 Elementary Biostatistics or SPH EB 703 Intermediate Biostatistics. This course is a sequel to EB 814. It provides an opportunity for students to conduct a survey research project. Students work as a class on a research problem in the health area. Questionnaire design, sampling, data collection, analysis of data, and report writing are included. This course is appropriate for those who will do research in their careers. 4 credits. [Mangione]

SPH EB 818 Statistical Methods for Epidemiology
Prereq: SPH EB 703 Intermediate Biostatistics and SPH EB 711 Epidemiology or consent of the instructor. This course teaches data analysis techniques specifically relevant to epidemiologic studies. Topics include sources of bias in observational studies, methods for handling confounding variables, multivariate methods in the analysis of observational data, and other analytical techniques frequently encountered in study design. 4 credits. [Cupples]

SPH EB 819 Cancer Epidemiology
Prereq: SPH EB 711 Epidemiology. This course applies the principles developed in the introductory epidemiology course to the study of cancer. The course commences with a descriptive account of time trends and geographic and demographic patterns of cancer mortality and incidence rates. The concepts of hospital-based and population-based tumor registries are reviewed along with their respective merits and limitations. In regard to analytic epidemiology, the course focuses on contemporary issues in cancer etiology including occupation, the environment, lifestyles, drug usage, and genetics. Cancer control is addressed by a review of cancer screening and prevention. The course format consists of a series of lectures by both faculty and guests, seminar sessions, and directed readings from the current literature. 4 credits. [Colton]

SPH EB 901, 902 Directed Studies in Epidemiology and Biostatistics
These courses provide the opportunity for students to explore a special topic of interest under the direction of a faculty member. Arrangements are made directly with the appropriate faculty member and the section chief. Variable credit.

SPH EB 911, 912 Directed Research in Epidemiology and Biostatistics
These courses provide the opportunity for students to undertake independently, or to become involved in ongoing epidemiology and biostatistics research. Arrangements are made with the appropriate faculty member and the section chief. Variable credit.

SPH EB 914 Epidemiology/Biostatistics Research Seminar
Prereq: SPH EB 701 Elementary Biostatistics and/or SPH EB 703 Intermediate Biostatistics, SPH EB 711 Epidemiology, and consent of the section chief. This course consists of a seminar series of presentations on recent developments and current research activities in epidemiology and biostatistics. Speakers at the seminar include researchers both within and outside of the Boston University medical community as well as selected students in the course. The amount of credit for the course depends on the student's degree of participation. Although this course is intended for Epidemiology and Biostatistics concentrators and doctoral students, interested students who have completed their core course requirements in Epidemiology and Biostatistics may enroll. Variable credit.
Public health law is emerging as one of the most important aspects of public health. As an instrument of social policy, the law plays an increasingly significant role in the field of public health. It has a broad impact in such areas as institutional licensing, safety in the workplace, environmental protection, and inoculation — and a very personal impact in such matters as the right to die, personal privacy, individual licensing, and civil commitment.

This concentration is designed primarily for students with a broad interest in health policy and for those who intend to work for public agencies and private association and industrial firms. It may also be appropriate for those holding a J.D. who wish to pursue an academic or research career, who intend to specialize in health law, or who plan a consulting career in health policy. Public health law deals with the traditional legal issues of regulation and the allocation of rights and responsibilities as well as with unresolved issues of major import for the future.


LW 754 Children at Risk
LW 756 Hospital Law
LW 757 Occupational Health and Safety Law

LW 758 Corporate Management of Risks to Health, Safety, and Environment
LW 852 Environmental Health Law
LW 854 Mental Health Law
LW 951 Directed Studies in Health Law
LW 952 Directed Research in Health Law

1This course may also be applied to the Health Services concentration.
2This course may also be applied to the Environmental Health concentration.

Public Health Law I is a prerequisite for most other courses within this concentration, and faculty recommend that it be taken during the first semester of the concentrator’s program.

SPH LW 707 Introduction to Health Law
This core course provides a general introduction to the role of law in the design and implementation of public health programs, and the protection of the health interests of different societal sectors. It has been designed for students who have not had prior experience or education in this field, and deals with the structure, concepts, and processes of decision making on health issues in legislative, administrative, and judicial bodies. Public Health Law I, a more in-depth introduction to health law, also satisfies the core course requirement. Health Law concentrators, law students, and lawyers are required to complete Public Health Law I and should not take this course. With the approval of the Director of the Office of Special Projects, students from developing countries may have this course waived. 2 credits. [Annas]

SPH LW 751 Public Health Law I
This course introduces students to the legal system and to major legal issues and problems confronting the public health professional. By analyzing judicial decisions, students learn about legal analysis and conflict resolution and avoidance. Thus they learn to see the legal system as a tool that can be used to advance — rather than impede — the implementation of specific public health policies. Topics dealt with include state public health powers, federal activity in public health, medical malpractice, privacy and confidentiality of medical information, mental health law, abortion and sterilization, patients’ rights, emergency medical care delivery, legal status of allied health professionals, human experimentation, and rights of the terminally ill. This course is a prerequisite for most other Health Law courses. 4 credits. [Annas and Glantz]
SPH LW 753 Public Health Law II
Prereq: SPH LW 751 Public Health Law I. This seminar is designed to provide students with an opportunity to explore selected topics in public health law in greater depth than was permitted in Public Health Law I. Topics selected change yearly, but all are concerned with issues relevant to the delivery of health care to large populations, such as mass immunization programs, nuclear power, brain death statutes, organ transplants, in vitro fertilization, and food safety laws. The course is required for Health Law concentrators and provides participants with an opportunity to learn legal research techniques. A term paper is required, as is frequent use of the Law School library. 4 credits. (Annas)

SPH LW 754 Children at Risk
This course is an examination of children who are at risk in our society because of health-related problems (e.g., those who are abused, developmentally handicapped, mentally ill, or retarded) and of the effectiveness of services provided these children by existing institutions and by various professionals such as physicians, nurses, lawyers, psychologists, social workers, and educators. Attention is paid to the role of decision makers in determining priorities. Proposals for change, both medical and legal, are analyzed. A paper and an oral presentation are required. 4 credits. (Alpert and Glantz)

SPH LW 756 Hospital Law
Prereq: SPH LW 707 Introduction to Health Law or SPH LW 751 Public Health Law I. This course is designed to explore legal issues that affect the operation of hospitals and other health care facilities. It concentrates on legal issues that are generally not dealt with in other courses in either the health law or health services concentrations, such as staff privileges, antitrust issues, trustees role and liability, the role of in-house counsel, determination of need and other state regulatory mechanisms, labor relations, hospital liability, occupational health in the hospital, and issues involved in long-term care and vertical integration of health care in both for-profit and not-for-profit institutions. 4 credits. (Annas)

SPH LW 757 Occupational Health and Safety Law
Prereq: SPH LW 751 Public Health Law I, or LW 707 Introduction to Health Law. Workers' Compensation law, tort law, and collective bargaining under the National Labor Relations Act are first addressed, followed by a review and analysis of OSHA regulatory programs. Right-to-know rules, sex discrimination, and other issues are also presented as they pertain to new corporate initiatives for screening and the biological monitoring of workers. Emphasis is placed on chronic health risks (e.g., radiation, toxic chemicals, reproductive hazards). A term paper is required. 4 credits. (Baram)

SPH LW 758 Corporate Management of Risks to Health, Safety, and Environment
Prereq: SPH LW 751 Public Health Law I, or LW 707 Introduction to Health Law. This seminar explores how large companies manage risks to consumers, workers, and the environment, including new uses of risk analysis. Students develop an understanding of how relevant fields of law and their economic and other implications converge on management and influence the corporate response to risk — e.g., tort law, insurance law, consumer protection law, worker health law, and environmental law. Guests from industry and various interest groups provide insights. Emphasis is on the chemical, electronic, and petroleum industries. A term paper is required. 4 credits. (Baram)

SPH LW 852 Environmental Health Law
This course examines the use of federal, state, and local regulation, and common law, to protect human health and the environment. Agency regulatory procedures, the use/misuse of cost-benefit analysis and risk assessment in standard setting, judicial review, toxic torts, evidentiary problems, and the use of experts are dealt with as they pertain to air and water pollution, hazardous wastes, and toxic chemicals. Several short written assignments and a final term paper are required. 4 credits. (Baram)

SPH LW 854 Mental Health Law
Prereq: SPH LW 751 Public Health Law I or its equivalent. This course explores the interaction of the fields of law and psychiatry. Subjects discussed include an overview of clinical psychiatry, institutionalization, deinstitutionalization, the insanity defense, incompetence to stand trial, the right to treatment and the right to refuse treatment, involuntary commitment, dangerousness, the meaning of mental illness, the use of invasive treatments, psychotherapy, privacy, and professional ethics. Legal cases make up most of the course material. 4 credits. (Glantz)

SPH LW 951 Directed Studies in Health Law
This course provides the opportunity for advanced students to explore a special topic of interest under the direction of a faculty member. Arrangements are made directly with the appropriate faculty member and the section chief. Variable credit.

SPH LW 952 Directed Research in Health Law
This course provides the opportunity for advanced students to undertake independently, or to become involved in, health law research of a public health nature. Arrangements are made with the appropriate faculty member and the section chief. Variable credit.
The Health Services Concentration is designed to meet the needs of students with a variety of interests. The Section focuses on the organization, delivery, financing, and regulation of health services—areas of major importance to the public's health. Courses address the major components of the United States health system, international comparative aspects of health care, and health care in developing countries. The role of federal, state, and local government in planning, management, regulation, and finance is considered in detail. The structure and dynamics of health services are approached from the perspective of those who receive services, including what is provided, who pays for it, and how quality is monitored. Emphasis is given to understanding policy issues and the interactions between the various components of the health system. Course work relevant to developing countries focuses on the needs of women and children as well as the special demands placed on health planners and managers as they grapple with the allocation and management of scarce resources within the context of balanced socio-economic development.

Enhancing the student's capacity to identify and solve problems in a practical way within a sound conceptual framework is an emphasis throughout the Health Services concentration. As one way of furthering this goal, the case-study method of education is used in some parts of the curriculum.

Students intending to concentrate in Health Services must successfully complete courses totaling 16 credits in Health Services beyond HS 702 Introduction to Health Services.

The section course offerings are grouped into five complementary topic areas (Table 1).

- Health Systems Structure and Policy
- Populations with Special Needs
- Resource Allocation and Decision Making
- International Health
- Generic Skills

The large selection of course offerings by the Health Services Section enables students to choose course sequences tailored to meet their own professional needs. In consultation with their advisor and other faculty, students may select courses in health services and other sections that prepare them well for diverse career paths in such areas as planning, regulation, and service delivery with a public sector orientation; aging and long-term care; health care in developing countries; and medical care and service delivery in the private sector.

The course offerings in the area of International Health are intended to prepare midlevel and senior planners and managers for leadership roles in their own countries, as well as to give students from the United States sufficient knowledge and skills to work effectively in overseas settings.

Directed studies and directed research projects are available to all students on their initiative and with the advice and guidance of a faculty member.

Students who have little or no professional work experience in the health field are encouraged to undertake internship experiences. Section faculty and School staff will assist students on an individual basis for domestic placements.

To fulfill their concentration requirements, students may select from among the following courses.

**HS 710** Nutrition and Public Health
**HS 717** International Health: Introduction to Health Care in Developing Countries
SPH HS 702 Introduction to Health Services
This course provides a basic structural and functional understanding of the United States' health care delivery system. Selective comparative examples are included. Emphasis is placed on major trends in domestic health care: the process of health policy development at federal and state levels, human resources development, financing of health services, the role of third-party payers, the relationship of medical care and public health, alternative forms of service delivery, primary care, aging and long-term care, and the role of hospitals. 3 credits. (Section faculty)
This course is required for all M.P.H. students.

SPH HS 710 Nutrition and Public Health
This course introduces basic nutritional concepts, the role of nutrition in growth and development, and the role of diet in the pathogenesis of infectious and cardiovascular disease as well as cancer. The impact of overall socioeconomic development on nutritional status, infectious diseases, health status and public health policy in developed and developing countries is considered. 4 credits. (Vitale and staff)

SPH HS 717 International Health: Introduction to Health Care in Developing Countries
This course provides an orientation to health care systems, principles of socioeconomic development, and management in developing countries. Attention is paid to decision making, opportunity costs, and resource allocation in resource-poor environments; financing — public, private, and donor; the role of auxiliaries; the environment and its relationship to morbidity and mortality; nutrition; population dynamics and family planning; and preventive and curative services. The intent of this course is to assist the student in developing a good grasp of the basic determinants of health in developing countries, an understanding of alternative intervention strategies, and approaches to solving problems in health care. The format of the class is lecture/seminar, with ample opportunity for group discussion. The course concludes with a real problem-solving exercise designed to encourage application of techniques and principles learned during the course. 4 credits. (Bicknell and staff)

SPH HS 725 Public Health and Clinical Aspects of Disease in Tropical Countries
This course examines diseases that are problems in developing countries. Most of these diseases were endemic to north temperate zone countries, but have disappeared as the countries developed. The reasons for their disappearance are discussed. The effect of the diseases on society, economic growth, education, etc. are considered. The diagnosis, prevention and treatment of each disease is discussed both from the standpoint of a person rendering primary health care and from the na-
tional health program position. The diseases include not only those that are commonly referred to as tropical diseases, but also other major infectious disease problems of tropical and developing countries. 4 credits. [Cadigan]

SPH HS 728 Issues in Long-term Care for the Elderly and Chronically Disabled
The economic and social burdens faced by the elderly and chronically disabled are extreme. Correspondingly, society faces huge financial, moral, and programmatic problems in planning for and implementing health care in the broad sense for these persons. This course explores the health issues facing elderly and chronically disabled persons. Programs in long-term care are analyzed in terms of their rationale, their bureaucratic and cost implications, and in how well they “fit” the elderly and chronically disabled. Particular emphasis is placed on home care, nursing home care for the elderly, independent living programs for chronically handicapped persons, and to a lesser extent, long-term care for children. 4 credits. [Feltin]

SPH HS 730 Social-medical Perspectives on Aging and Old Age
Recommended: SPH HS 702 Introduction to Health Services. This course considers the problems of aging in America and the nature of the older population. Students discuss and criticize the major health and social service programs that have been implemented to meet older people’s needs. Course topics include physiological aging, the demography and epidemiology of aging, aging and industrialization, retirement and the economics of aging, housing, Medicare and Medicaid, the Older Americans Act of 1965, older people and hospitals, and alternatives in long-term care (nursing homes, home care, congregate housing, and ambulatory primary care). 2 credits. [Meyers]

SPH HS 731 Design and Strategy for Health Care Organizations
Prereq: SPH HS 702 Introduction to Health Services and Public Health or consent of the instructor. This course provides an interdisciplinary exploration of the complex nature of health care organizations. It enhances the skills of the learner in collaborative managerial problem-solving through a case study approach and through application of a conceptual framework for analyzing and proposing solutions to health-care organizational and managerial problems. These concepts focus on organizational strategy, design, and change. Its underpinning is the belief in interdisciplinary education as a relevant and necessary approach to enhancing collaborative and team building skills among members of the health care professions. In addition to class discussion, course concepts will be applied in a group project analyzing the strategy and design of a health care organization. 4 credits. [Charns]

SPH HS 733 Principles of Health Program Management
Prereq: SPH HS 702 Introduction to Health Services or consent of the instructor. This course is a presentation of the working principles and techniques of management including planning, organizing, leading, and controlling. This course also focuses on human resources management, financial management, aspects of quality assurance, program evaluation, working with committees, communication skills, and negotiation techniques. Emphasis is on “how to” rather than theory. Management styles of students are assessed, and workplace situations are discussed. The instructor will stress the viewpoint that management is the work of helping others achieve success. 4 credits. [Dann]

SPH HS 734 Principles of Nonprofit Accounting
This course combines didactic and case study approaches to the fundamentals of nonprofit accounting, with emphasis on health care institutions. Topics covered include accrual accounting, fund accounting, budgeting, and financial management control systems. Interpretation of accounting documents for decision making by the nonfinancial manager is stressed. 2 credits. [Thornburg]

SPH HS 735 Health Care Finance
Prereq: SPH HS 702 Introduction to Health Services or consent of the instructor. This course has three aims: to demystify the role of money in health care, to present a variety of useful analytical techniques, and to explore methods of using money to shape a more accessible, affordable, and effective health care system. To do this, we examine current financial crises in health care and their proposed solutions. No financial background is assumed. 4 credits. [Sager]

SPH HS 737 Introduction to Personal Computers
This course is an introduction to the uses of personal computers, exposing the user to four major functional areas: spreadsheet analysis, data base, communications and graphics. The student is expected to complete a project in one of these areas in order to enhance practical experience. Students learn the taxonomy of computers, peripherals, and computer terminology. This course requires no previous experience. Students will have extensive opportunity for hands-on experience with a Hewlett-Packard personal computer. 2 credits. [Meyers and Paul]

SPH HS 738 Health Services Marketing
Prereq: SPH HS 734 Principles of Nonprofit Accounting. This is a marketing management course with specific applications to nonprofit health organizations. The course provides basic marketing knowledge, particularly focusing on those aspects of marketing that are more relevant to health services and public health. The use of case analysis allows the examination of marketing tools, issues,
programs, and institutions, as well as the relationship of marketing to other health care management functions. In addition, cases are used to develop analytical and managerial decision-making skills. 4 credits. [Meyers and Paul]

SPH HS 740 Hospitals: Structures, Functions, and Issues
Prereq: SPH HS 702 Introduction to Health Services. This course introduces the hospital with background information on the size of the health care market, and recent developments in the hospital industry. Current hospital issues are analyzed in detail, with leaders in regulation, and management discussing the financing and determination of need for care, questions of access, teaching costs, clinical decision making, labor relations, and corporate governance. Hospital Policy and Issues: The Practitioner's Perspective (HS 835) is a sequel to this introductory course and is scheduled so that the two can be taken in sequence as a one-semester, four-credit course on hospitals. 2 credits. [Dumbaugh]

SPH HS 741 Consultation Techniques
This course is designed to teach practical techniques and skills for the conduct of health and mental health consultation in various settings. The course covers techniques of initiating, conducting and concluding a consultation, and the consultation contract. A small amount of theoretical background is also provided. The major portion of the course involves examining different types of consultation in detail utilizing cases drawn from hospitals, schools, and national programs such as the Job Corps. Students discuss common problems that confront the consultant and the consultee, as exemplified in case studies, and how to solve them. The course is taught in seminar fashion, utilizing case studies, visiting experts and occasional lecture material. Grading is based on class participation (60 percent) and written exercises (40 percent). 2 credits. [Scherl]

SPH HS 742 Data Base
Prereq: SPH HS 737 Introduction to Personal Computers or prior experience with personal computers. This course is a sequel to HS 737 Introduction to Personal Computers. It is designed for the health care professional who needs to be able to catalogue, track, select, and search for specific information or statistics. The course examines two specific data bases with hands-on experience provided in each. Students design and create their own practical data base on a Hewlett Packard. 2 credits. [Meyers and Paul]

SPH HS 744 Introduction to Health Facility Planning and Design
This seminar introduces the relationship between health care and its architecture. Issues relevant to planning and designing diverse facility types in the U.S. and in less developed countries are explored. Featured are functional space programming, site selection and planning, costs and schedule, decision making, and a user-sensitive approach. 2 credits. [Monserud]

SPH HS 745 Scientific Information and Electronic Data Retrieval
Rapid development of data storage and retrieval systems has greatly expanded the storehouse of statistical and research data available for public health planning, administration, and research. This course introduces students to information systems such as Index Medicus, American Statistics Index, and other resources with information on demographics, labor statistics, and business trends. The goal is to familiarize students with hard copy and electronic sources of essential public health information that might be used, for example, in supporting a Determination of Need (DON) application. 2 credits. [Reich]

SPH HS 747 Medical Care and Public Health in China
This course introduces students to the organization, delivery, and financing of public health and medical care services in the People's Republic of China. Topics covered include planning and decision-making in the health sector, the structure of health services, health personnel, and environmental and occupational health topics. Maternal and child health services, family planning, the evolution of the "barefoot doctor" and the relationship of traditional Chinese medicine to overall medical care are also considered. This course is taught jointly by School of Public Health faculty and visiting faculty from Wuhan Medical College. 4 credits. [Bicknell and staff]

SPH LW 756 Hospital Law
This course is offered by the Health Law Section. See page 17 for course description.

SPH HS 780 Maternal and Child Health Services in the United States
Recommended: SPH HS 702 Introduction to Health Services. This course provides an overview of: (a) the major issues involved in and (b) the content of maternal and child health services in the United States. The health care needs of pregnant women, mothers, and children of all ages are studied with particular attention being focused on services, policies, and societal and institutional forces that directly influence maternal and child health. The course highlights past successes, persistently unmet health needs, and future options for effectively meeting these maternal and child health needs. The weaknesses and strengths of our current health care system, federal programs, and policies for mothers and children are analyzed. 4 credits. [Weitzman]
SPH EH 809 Parasites of Humans: A Public Health Perspective
This course is offered by the Environmental Health Section. See page 9 for course description.

SPH EB 811 Health Services Research Methods
This course is offered by the Epidemiology and Biostatistics Section. See page 14 for course description.

SPH SB 815 Program Evaluation Research
This course is offered by the Social and Behavioral Sciences Section. See page 27 for course description.

SPH HS 816 Analytical Aids to Decision Making
Prereq: SPH HS 735 Health Care Finance or consent of the instructor. This course provides exposure to the use of analytical tools in solving operational problems of health care institutions and in determining the financial and management parameters of specific public policy issues. Operational problems, as exemplified in cases, are explored through the use of analytical techniques such as cash budgeting and cash flow analysis, capital budgeting including discounted cash flow, utilization analysis, and scheduling. Demand analysis explores changes in utilization patterns resulting from the growth of alternative delivery systems. Macroeconomic issues, such as uncompensated care policy, are addressed using demographic, utilization, and financial data. This course is designed for those who wish to obtain a working knowledge of analytical techniques useful in the health care environment. 2 credits. [Katz, et al.]

SPH HS 825 Technology Assessment
Prereq: SPH HS 702 Introduction to Health Services or consent of the instructor. This course examines national policy on health care technology and methods of evaluating the costs and benefits of specific devices. Health technology policies and practices in other nations are explored. Topics include analyses of specific costly new technologies, technology in long-term care, and the problems of affordable technology diffusion. 2 credits. [Meyers and Sager]

SPH HS 833 Health Economics
Prereq: SPH HS 702 Introduction to Health Services or consent of the instructor. This course provides an understanding of basic principles and tools of economic analysis and their application to the production, pricing, and distribution of health services. Methods of assessing resource allocation decisions and cost-benefit, and cost-effectiveness analysis are explored. 4 credits. [Staff]

SPH HS 834 Health Regulation and Planning
Prereq: SPH HS 702 Introduction to Health Services or consent of the instructor. Are planning and regulation effective tools or bureaucratic tortures? To answer this question, students examine the successes and failures of recent efforts, and master specific tools of regulation and planning. Topics include methods of population-based planning, institutional planning, citizen participation, how to use both competition and regulation as tools, and implementation techniques. 4 credits. (Sager)

SPH HS 835 Hospital Policy and Issues: The Practitioner's Perspective
Prereq: SPH HS 702 Introduction to Health Services or consent of the instructor. This course can be taken alone or as a sequel to HS 740 Hospitals: Structures, Functions, and Issues. It provides in-depth analyses of various operational aspects of hospitals: unions in health care, role of the medical staff, competition, mergers, prospective reimbursement, etc. The course is conducted as a seminar with area health care professionals providing insight into particular issues. Each student is expected to prepare a preliminary report on at least one seminar topic to prepare classmates for discussion. 2 credits. [Wathne]

SPH HS 836 HMO Management
Prereq: SPH HS 702 Introduction to Health Services. This course addresses HMO organizational structure, services, and costs. Also examined are methods of attracting and maintaining provider personnel, benefit design, and relationships of HMO costs to premium structure, financial analysis and control, marketing, management information systems, and policy issues. 4 credits. (Staff)

SPH HS 837 Case Mix Analysis
Prereq: SPH HS 702 Introduction to Health Services. This course covers currently recognized aspects of case mix analysis including a survey of various methodologies, applications and implications to health care providers and hospitals; and an assessment of the problems of implementation. Applications include cost-per-case payment, Medicare prospective payment systems, intermediate product costing, quality assurance, case-mix-based market planning, and management. 4 credits. (Staff)

SPH HS 838 Health Politics and Public Policy
Prereq: SPH HS 702 Introduction to Health Services or consent of the instructor. This course examines selected major health policy issues affecting public and private health organizations, the political processes and institutions shaping these policies, and seeks answers to who gets what from whom, when, where, and why in health policy. 4 credits. (Crane)

SPH HS 839 Mental Health System: Structure, Governance, and Current Issues
Prereq: SPH HS 702 Introduction to Health Services. This course examines mental health and illness in historical perspective, analyzing the role of government, and the relationship of care provided
in the public and private sectors. Treatment program efficacy, governance, and staffing issues are also studied. 4 credits. (Staff)

**SPH HS 881 Population Studies and Family Planning**
Prereq: SPH HS 702 Introduction to Health Services or consent of the instructor. This course considers the causes of and problems associated with rapid population growth and international and domestic population issues. It includes sections on the dynamics of population; world population change and current trends; the determinants of human fertility; population growth and social, economic, and health consequences. Attention is given to worldwide strategies for limiting population growth, with particular emphasis on family planning programs. Contraceptive methods, counseling, and delivery systems will be included in the family planning component. 4 credits. (Olafson)

**SPH HS 882 Quality Assurance in Health Services Delivery**
Prereq: SPH EB 711 Epidemiology, or SPH HS 702 Introduction to Health Services, or consent of the instructor. This course explores the design, implementation, management, and evaluation of health service quality assurance systems in a variety of settings. The use of litigation to enforce standards and methods of containing costs without jeopardizing quality are also examined. 4 credits. (Staff)

**SPH HS 884 Ambulatory Care**
Prereq: SPH HS 702 Introduction to Health Services. This course explores in substantial detail alternative modes of ambulatory care delivery, including the several types of health maintenance organizations, solo and group practice, outpatient departments, neighborhood health centers, and proprietary ambulatory care centers. Principles of ambulatory care planning, management, needs assessment, and evaluation are covered. The role of the consumer and community are highlighted. Additionally, students become familiar with the range and role of providers, with factors affecting utilization patterns, and with issues of marketing, financing, and federal policy in the ambulatory care arena. 4 credits. (Bicknell and Cashman)

**SPH HS 886 Comparative Health Systems**
Prereq: SPH HS 702 Introduction to Health Services and at least one other Health Services course or substantial experience in health care services in the United States (or elsewhere) with consent of the instructor. For international students, experience may be substituted for HS 702 with consent of the section chief. This course critically examines the health care systems of the following developed countries: the United States, England, Canada, the Soviet Union, Yugoslavia, and Sweden. Brief descriptions of these countries' level of development and political and economic structure provide the foundation for an analysis of the health care system. The following areas are explored in order to draw useful lessons for public health professionals in the United States and in developing countries: health care financing, cost containment, and regulation. 4 credits. (Woolhandler)

**SPH HS 887 Maternal and Child Health in Developing Countries**
Prereq: SPH HS 702 Introduction to Health Services, SPH HS 717 International Health: Introduction to Health Care in Developing Countries, or consent of the instructor. This course examines the health needs of women and children in developing countries and the problems faced in providing maternal and child health services in both urban and rural areas. Theoretical and practical aspects of designing, administering, and evaluating these services are discussed. Specific topics include: nutrition and growth, immunizations, diarrhea and oral rehydration, traditional beliefs and practices, use of health auxiliaries, and primary health care. 4 credits. (Wolff)

**SPH HS 931 Directed Studies in Health Services**
This course provides the opportunity for advanced students to explore a special topic of interest under the direction of a faculty member. Arrangements are made directly with the appropriate faculty member and the section chief. Variable credit. (Staff)

**SPH HS 932 Directed Research in Health Services**
This course provides the opportunity for advanced students to undertake independently or to become involved in health services research of a public health nature. Arrangements are made with the appropriate faculty member and the section chief. Variable credit. (Staff)
Health Services
Topic Areas and Course Offerings

Health Systems Structure and Policy

HS 702 Introduction to Health Services [D]
HS 740 Hospitals: Structures, Functions, and Issues [D]
LW 756 Hospital Law [2]
HS 833 Health Economics [D+I]
HS 835 Hospital Policy and Issues: The Practitioner's Perspective [D]
HS 836 HMO Management [D]
HS 838 Health Politics and Public Policy [D+I]
HS 882 Quality Assurance in Health Services Delivery [D]
HS 884 Ambulatory Care [D+I]

Populations with Special Needs

HS 728 Issues in Long-term Care for the Elderly and Chronically Disabled [D]
HS 730 Social-medical Perspectives on Aging and Old Age [D]
HS 780 Maternal and Child Health Services in the United States [D+I]
HS 839 Mental Health Systems: Structure, Governance, and Current Issues [D]

Resource Allocation and Decision Making

HS 731 Design and Strategy for Health Care Organizations
HS 733 Principles of Health Program Management [D+I]
HS 734 Principles of Nonprofit Accounting [D+I]
HS 735 Health Care Finance [D]
HS 738 Health Services Marketing [D]
HS 741 Consultation Techniques [D+I]
HS 744 Introduction to Health Facility Design and Planning [D+I]
EB 811 Health Services Research Methods [2]
HS 816 Analytical Aids to Decision Making [D+I]
HS 825 Technology Assessment [D+I]
HS 834 Health Regulation and Planning [D+I]
HS 837 Case Mix Analysis [D]

International Health

HS 717 International Health: Introduction to Health Care in Developing Countries [I]
HS 725 Public Health and Clinical Aspects of Disease in Tropical Countries [I]
HS 747 Medical Care and Public Health in China [I]
EH 809 Parasites of Humans: A Public Health Perspective [2] [D+I]
HS 881 Population Studies and Family Planning [D+I]
HS 886 Comparative Health Systems [D+I]
HS 887 Maternal and Child Health in Developing Countries [I]
HC 890 Certificate in International Health [I] [I]

Generic Skills

HS 710 Nutrition and Public Health [D+I]
HS 737 Introduction to Personal Computers [D+I]
HS 742 Data Base [D]
HS 745 Scientific Information and Electronic Data Retrieval [D]
SB 815 Program Evaluation Research [2] [D+I]

Key:
[1] 20-credit summer course
[2] Course has Health Services Concentration credit

Relevance:
[D] Primarily domestic
[I] Primarily international
[D+I] Both domestic and international
A major objective of the Social and Behavioral Sciences Section is to provide students with knowledge of the conceptual, empirical, and theoretical contributions of the social and behavioral sciences to public health. By understanding the social forces surrounding their professional work, students can participate more fully in societal decision-making concerning public health and become more effective public health practitioners.

Every student in the School of Public Health is required to take SB 721 Behavioral Sciences and Public Health. The course exposes students to important public health program initiatives via a life-cycle approach that draws on social and behavioral factors impeding or facilitating programs. The remaining Section courses reflect a mix of topics felt to be important in public health training, topics of special expertise among the Section faculty, and topics taught as part of the Section concentration.

The concentration focuses on an array of disease prevention and health promotion activities, including, but not limited to, health education programs, behavior modification techniques, change in laws and organizational [occupational] and societal regulation and reform. Programs involving single institutions as well as larger local, state, and federal initiatives are considered.

Health Behavior, Health Promotion, and Disease Prevention concentrators take the following section courses: SB 820 Health Behavior/Health Education, SB 821 Principles and Strategies of Disease Prevention/Health Promotion, SB 823 Professions and Organizations, and SB 815 Program Evaluation Research. In addition, it is recommended that concentrators complete a 2-credit directed study/directed research project with a faculty member in the Section.

The concentration should be of interest to health professionals whose work involves the administration of or research in the design, evaluation, and use of health promotion/disease prevention programs.

The courses in this Section are as follows:

- SB 721 Behavioral Sciences and Public Health
- SB 723 Social Problems
- SB 724 Issues in the Implementation of Health Promotion/Disease Prevention Programs
- SB 725 Ethical Issues in Medicine and Public Health
- SB 726 History and Philosophy of Public Health
- SB 727 Stress, Life Satisfaction, and Health
- EB 801 Cancer Prevention as a Public Health Problem
- SB 802 Public Health and Women: Social and Behavioral Approaches
- SB 804 Selected Topics in Psychology and Public Health
- SB 815 Program Evaluation Research
- SB 820 Health Behavior/Health Education
- SB 821 Principles and Strategies of Disease Prevention/Health Promotion
- SB 823 Professions and Organizations
- SB 827 Public Health and Substance Abuse
- SB 921 Directed Studies in Behavioral Sciences
- SB 922 Directed Research in Behavioral Sciences

1 This course may also be applied to the Epidemiology and Biostatistics and Environmental Health concentrations.
2 This course may also be applied to the Epidemiology and Biostatistics and Health Services concentrations.
An examination of the history of public health provides a cursory overview of the history of public health activity in the United States: mid-eighteenth century to early twentieth century during the rise and fall of horrific rates of premature mortality from infectious disease, early twentieth century to the mid-1960s and the restructuring of public health orientation from sanitation to health care; and finally from the early 1960s to the present, where now public health faces the problem of high rates of chronic disease and multiple models of disease causation. 4 credits. (Staff)

SPH SB 727 Stress, Life Satisfaction, and Health
Recommended: SPH SB 721 Behavioral Sciences and Public Health. This course considers the role of stress in the etiology of such diseases as heart disease and stroke, and the development of such health problems as alcoholism and accidents. Although stress appears to be a very important variable, it is variously defined, and there are a number of conceptual problems in studying “stress.” This course provides an introduction to and critical review of relevant theoretical and empirical literature in this field. Attention is also given to the conceptualization of “quality of life” as a dependent variable in health intervention strategies. 4 credits. (Levine)

SPH SB 726 History and Philosophy of Public Health
An examination of the history of public health provides a useful framework within which to examine the social factors (philosophical, cultural, political, and economic) that have shaped and continue to shape public health policy. This course provides a cursory overview of the history of public health from antiquity to the eighteenth century, and then pays more detailed attention to the historical underpinnings of three periods of public health activity in the United States: mid-eighteenth century to early twentieth century during the rise and fall of horrific rates of premature mortality from infectious disease, early twentieth century to the mid-1960s and the restructuring of public health orientation from sanitation to health care; and finally from the early 1960s to the present, where now public health faces the problem of high rates of chronic disease and multiple models of disease causation. 4 credits. (Amaro)
Application for Admission

1. Name
   Last               First               Middle

2. Application is for entry in □ January 19 □ September 19
   □ Full-time (12–20 credit hours per semester) □ Part-time (11.5 or fewer credit hours per semester)
   Indicate the degree for which you are applying:
   □ M.P.H.      □ M.P.H./J.D.      □ M.P.H./M.D.      □ M.P.H./M.S.W.      □ M.P.H./M.A.
   □ D.Sc. in Epidemiology
   If applying for M.P.H. or a dual degree program, check probable concentration:
   □ Environmental Health      □ Health Behavior, Health Promotion, and Disease Prevention
   □ Epidemiology and Biostatistics      □ Health Services
   □ Health Law

3. Male ☐ Female ☐ 4. Date of Birth               5. U.S. Social Security Number

6. Current Mailing Address
   Street               Home Telephone: (       )
   City
   State               Zip Code

7. Permanent Address
   Street               Work Telephone: (       )
   City
   Telephone: (       )
   State               Zip Code

8. Foreign Applicants: Citizenship (country)
   If you are a resident alien living in the U.S., what type of visa do you hold?
   Date on which you took or plan to take the Test of English as a Foreign Language (TOEFL)

9. If you wish to be identified as a member of a minority group, please specify which group

10. Date(s) on which you took or plan to take the Graduate Record Exam (GRE)

11. List in chronological order all colleges, graduate, and professional schools attended.

   Institution         Campus/Location         Dates         Field of Concentration         Degree Granted or Expected (with date)

   _______________________________  _______________________________  _______________________________  _______________________________

12. Academic or professional honors or awards (please list)

   _______________________________

13. Specialty Board Certifications (please list)

   _______________________________
14. Work experience (please list last five positions in chronological order)

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<tr>
<th>Job Title</th>
<th>Employer</th>
<th>Location</th>
<th>Dates of Employment (Inclusive)</th>
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15. M.P.H. applicants: Describe your motivation for pursuing graduate study. Please relate your interest in public health to your formal education, current employment, and career aspirations.

If you wish to explain or draw the attention of the Admissions Committee to anything concerning your candidacy, please write it briefly on an 8½" x 11" sheet and attach it to this application. Please include your publications on such an addendum.

16. D.Sc. applicants only: Attach a statement describing your career goals, research interests, and justification for pursuing a doctoral degree program in epidemiology. Please include your curriculum vitae.

17. Please give names, titles, and complete addresses of three (3) persons to whom you have sent the enclosed assessment forms.

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<th>Name and Title</th>
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<td>2.</td>
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Boston University prohibits discrimination against any individual on the basis of race, color, religion, sex, age, national origin, physical or mental handicap, marital, parental, or veteran status. This policy extends to all rights, privileges, programs, and activities, including admissions, financial assistance, employment, housing, athletics, and educational programs. Boston University recognizes that nondiscrimination does not ensure that equal opportunity is a reality. Because of this, the University will continue to implement affirmative action initiatives which promote equal opportunity for all students, applicants, and employees. Inquiries regarding the application of this policy should be addressed to the Director, Office of Equal Opportunity, 25 Buick Street, Boston, MA 02215 (617/353-4475).
To the Applicant: This recommendation will become part of your Admissions file. It will not be disclosed to any unauthorized individual without your consent. If you matriculate at Boston University, you will be accorded access to its contents unless you voluntarily waive your right of access. Please check one of the boxes and sign the statement below.

I have read the information above and I hereby □ waive □ do not waive my right of access to this document should I matriculate at Boston University.

Degree for which you are applying:

Applicant's Signature

Date

To the Assessor:

Name of Applicant

The person whose name appears above has applied for admission to the School of Public Health at Boston University. The Admissions Committee attaches great weight to an applicant’s qualifications that are not adequately reflected in past academic records. Therefore, you can assist us in our evaluation of this applicant by responding frankly to the questions in this form.

Note: Under the 1974 Family Educational Rights and Privacy Act, the applicant named above will have access to this recommendation unless he or she has waived that right.

1. How long have you known the applicant?

2. Under what circumstances have you known the applicant?

3. What are the applicant’s main strengths?

4. What are the applicant’s main liabilities or weaknesses?

5. How well does the applicant communicate orally and in writing? (If English is not the applicant’s native language how would you rate his/her oral and written proficiency in English?)
6. Please assess the applicant’s analytical skills (compared to other professionals):

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<th>Unable to Judge</th>
<th>Poor</th>
<th>Average</th>
<th>Very Good</th>
<th>Exceptional (This category is for truly outstanding individuals)</th>
</tr>
</thead>
</table>

7. Are you familiar with the applicant’s scholastic record? ----- Yes ----- No

(Is yes, is the scholastic record an accurate index of the applicant’s academic ability?)

----- Yes ----- No  Please Explain:

8. On the scale below, please compare the applicant’s intellectual ability with that of others of the same general background whom you have known during your professional career. Please indicate the reference group (students, employees, etc.)

<table>
<thead>
<tr>
<th>Unable to Judge</th>
<th>Poor</th>
<th>Average</th>
<th>Very Good</th>
<th>Exceptional (This category is for truly outstanding individuals)</th>
</tr>
</thead>
</table>

9. Please assess the applicant’s capacity for graduate study in public health and his/her potential for a responsible and successful professional career.

10. Summary Evaluation

--- I do not recommend this applicant for admission.
--- I feel that the applicant’s qualifications are marginal, but if admitted he/she would greatly benefit from study in the program.
--- I recommend this applicant for admission and feel his/her performance should be comparable to that of most graduate students.
--- I strongly recommend this applicant for admission and feel that he/she has the capability to perform at a superior level.

Thank you for your cooperation and effort in providing this information.

School of Public Health
Boston University School of Medicine

Signature  Date

Name (Please print clearly or type)  Position

Organization  Address

After you have signed the form, please put it in the enclosed envelope, sign your name across the envelope seal, and return it to the applicant.
Boston University School of Public Health
Letter of Assessment

To the Applicant: This recommendation will become part of your Admissions file. It will not be disclosed to any unauthorized individual without your consent. If you matriculate at Boston University, you will be accorded access to its contents unless you voluntarily waive your right of access. Please check one of the boxes and sign the statement below.

I have read the information above and I hereby □ waive □ do not waive my right of access to this document should I matriculate at Boston University.

Degree for which you are applying: ________________________________

Applicant's Signature ________________________________ Date __________

To the Assessor:
Name of Applicant ________________________________ Last ________ First ________ Middle ________ Maiden ________

The person whose name appears above has applied for admission to the School of Public Health at Boston University. The Admissions Committee attaches great weight to an applicant's qualifications that are not adequately reflected in past academic records. Therefore, you can assist us in our evaluation of this applicant by responding frankly to the questions in this form.

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   Unable to Judge  Poor  Average  Very Good

   Exceptional
   (This category is for truly outstanding individuals)

7. Are you familiar with the applicant's scholastic record? Yes No
   (If yes, is the scholastic record an accurate index of the applicant's academic ability?)
   Yes No Please Explain:

8. On the scale below, please compare the applicant's intellectual ability with that of others of the same general background whom you have known during your professional career. Please indicate the reference group (students, employees, etc.)

   Unable to Judge  Poor  Average  Very Good
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   (This category is for truly outstanding individuals)

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    ___ I strongly recommend this applicant for admission and feel that he/she has the capability to perform at a superior level.

Thank you for your cooperation and effort in providing this information.

School of Public Health
Boston University School of Medicine

________________________________________  ______________
Signature  Date

Name (Please print clearly or type)  Position

Organization  Address

After you have signed the form, please put it in the enclosed envelope, sign your name across the envelope seal, and return it to the applicant.
To the ASSESSOR: Please enclose your letter of assessment in this envelope, seal the envelope, sign your name on the line provided, and return it to the applicant. The School of Public Health will accept from the applicant only those letters of evaluation which are enclosed in sealed, signed envelopes, even in the case where the applicant has retained the right of access.

To the REGISTRAR: Please enclose the applicant's transcript in this envelope, seal the envelope, sign your name on the line provided, and return the envelope to the applicant. The School of Public Health will accept from the applicant only those transcripts which are enclosed in sealed, signed envelopes.
Boston University School of Public Health
Letter of Assessment

To the Applicant: This recommendation will become part of your Admissions file. It will not be disclosed to any unauthorized individual without your consent. If you matriculate at Boston University, you will be accorded access to its contents unless you voluntarily waive your right of access. Please check one of the boxes and sign the statement below.

I have read the information above and I hereby □ waive □ do not waive my right of access to this document should I matriculate at Boston University.

Degree for which you are applying: ____________________________________________

Applicant's Signature ____________________________________________ Date ________

To the Assessor:
Name of Applicant

The person whose name appears above has applied for admission to the School of Public Health at Boston University. The Admissions Committee attaches great weight to an applicant's qualifications that are not adequately reflected in past academic records. Therefore, you can assist us in our evaluation of this applicant by responding frankly to the questions in this form.

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   Yes  No  Please Explain:

8. On the scale below, please compare the applicant's intellectual ability with that of others of the same general background whom you have known during your professional career. Please indicate the reference group (students, employees, etc.)

   Unable to Judge  Poor  Average  Very Good

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10. Summary Evaluation
    
    • I do not recommend this applicant for admission.
    • I feel that the applicant's qualifications are marginal, but if admitted he/she would greatly benefit from study in the program.
    • I recommend this applicant for admission and feel his/her performance should be comparable to that of most graduate students.
    • I strongly recommend this applicant for admission and feel that he/she has the capability to perform at a superior level.

Thank you for your cooperation and effort in providing this information.

School of Public Health
Boston University School of Medicine

Signature  Date

Name (Please print clearly or type)  Position

Organization  Address

After you have signed the form, please put it in the enclosed envelope, sign your name across the envelope seal, and return it to the applicant.
include cognitive and behavioral approaches to psychology, development psychology, the role and nature of emotions, and the significance of contextual factors in stress and social support. Applications include smoking, obesity, hypertension, and stress. 4 credits. [Ebert and Wirtz]

SPH SB 815 Program Evaluation Research
Recommended: SPH EB 701 Elementary Biostatistics (or SPH EB 703 Intermediate Biostatistics) and SPH EB 711 Epidemiology. This course provides an introduction to program evaluation research in public health. It focuses on the principles of designing, conducting, and using the results of research that evaluates the impact of public health programs, whether aimed at the public, patients, or professionals. Through a series of case studies, students acquire an understanding of the strengths and limits of different kinds of evaluation research. Attention is given to special problems in evaluating health programs as, for example, when they use multiple providers and settings or target a variety of goals. Attention is given to the challenge of drawing causal inferences from quasi-experimental research. Practical issues are also addressed, such as how to obtain informed consent and approval of institutional review boards, and how to get the most out of limited resources. 4 credits. [Walsh and Hingson]

SPH SB 820 Health Behavior/Health Education
Recommended: SPH SB 721 Behavioral Sciences and Public Health. This course is devoted to the development of skills in the assessment of health education needs and program outcomes in clinical, community, and school settings. Selected diagnostic models that examine factors that predispose, enable, and reinforce health-related behavior are used to assist participants in setting priorities in their own health education programs. Case studies representing the application of selected theories of individual and group behavior change are presented in an effort to derive principles for the design of effective health education programs. 4 credits. [Merrigan]

SPH SB 821 Principles and Strategies of Disease Prevention/Health Promotion
Recommended: SPH SB 721 Behavioral Sciences and Public Health. This course examines the literature with regard to the risk factors for heart disease, cancer, and stroke. Specifically, it examines the relationship of these diseases to hypertension, physical inactivity, smoking, alcohol abuse, and unhealthy diet in addition to occupational and environmental exposures. The information on risk factors is critiqued with a particular emphasis on the role of epidemiology in the determination of the relative acceptability, efficacy, and costs/benefits of alternative health promotion/disease prevention strategies. 4 credits. [Merrigan and Gute]

SPH SB 823 Professions and Organizations
Recommended: SPH SB 721 Behavioral Sciences and Public Health. While health professions and organizations are major mechanisms to meet the health needs of the population, they also represent major impediments to the achievement of health goals and the provision of humanized health services. This course considers the culture and habits of such established health professions as doctors, nurses, and social workers, as well as various emerging health professions. The interaction between organizational norms and professional norms is examined. The course also treats such topics as role definition, role conflict, and authority systems within the large, complex health organizations and the problems of coordinating personnel and avoiding goal displacement or the departure from established health goals. The problem of appraising the organizational environment and the impact of the environment on the organization is also addressed. 4 credits. [Levine]

SPH SB 827 Public Health and Substance Abuse
Recommended: SPH SB 721 Behavioral Sciences and Public Health. This course provides an indepth review of patterns of substance abuse in the United States, and examines the relationship between substance abuse and adverse health outcomes. Major theoretical formulations of substance abuse are examined. Attention is given to major public health efforts to prevent substance abuse and their assessed efficacy. Alcohol use and abuse is used as a case study. 2 credits. [Perrine]

SPH SB 921 Directed Studies in Behavioral Sciences
This course provides the opportunity for advanced students to explore a special topic under the direction of a faculty member. Arrangements are made directly with the appropriate faculty member and the section chief. Variable credit.

SPH SB 922 Directed Research in Behavioral Sciences
This course provides the opportunity for advanced students to undertake independently or to become involved in behavioral/social science research of a public health nature. Arrangements are made with the appropriate faculty member and the section chief. Variable credit.
The Office of Special Projects (OSP) works closely with other sections in the School and offers three intensive courses of particular interest to students who are either from developing countries or intend to work in international health. Faculty and staff of the Office of Special Projects typically function as advisers to international students pursuing the masters degree. The Office of Special Projects also manages selected overseas and domestic research and service activities. Currently the Office of Special Projects maintains a network of affiliated schools of medicine and public health in Asia, the Near East, Africa, and the Caribbean. Affiliated institutions cooperate in teaching, service, and research activities and provide relevant field placements for public health and medical students.

Opportunities for 1–3 month structured field placements and directed studies are available with field supervision by adjunct faculty in selected countries including China, Egypt, India, Indonesia, Nigeria, Turkey, Yugoslavia, and Zambia as well as the Caribbean, Central and South America. Funding of travel and expenses is the responsibility of the student or their sponsor in the case of international students. These placements are arranged by the Office of Special Projects.

The intensive courses offered by the Office of Special Projects are primarily intended for those with current or prospective professional responsibilities in the developing world. Courses are structured to encourage sharing of experiences through problem solving, case studies, and group discussion. Instructors have relevant, recent overseas experience and have taught in situations where English may be the second or even third language of participants.

Management for Child Survival
A six-week, 149-contact-hour course, first offered in 1986, that emphasizes practical management for effective delivery of maternal and child health services in developing countries. Topics include identification of high-risk mothers and prenatal care, the management of diarrhea and the use of oral rehydration, maternal and infant nutrition including breast feeding and weaning practices, respiratory infections including otitis media, immunization practices; and family planning methods and policies. Management and management-related issues integrate the course components culminating in a management-by-objectives exercise directly related to the individual’s in-country responsibilities. This course includes a one-week field practicum in St. Vincent. The course is offered annually, in March. Noncredit unless special arrangements are made prior to course matriculation.

Summer Certificate Program in Health Care in Developing Countries
Now in its fifth year, this twelve-week, 275-contact-hour course is offered every summer and carries up to 20 graduate credit hours toward the M.P.H. at Boston University. The course focus is on effective and affordable planning, design, implementation, and evaluation of primary care in severely resource-constrained environments. Course components include principles of health-program management concentrating on management by objectives; fundamentals of development economics; issues in population dynamics and family planning; environmental factors affecting health; integration of traditional medicine into primary health care; health manpower planning and education of health workers; community participation; application of existing knowledge and appropriate technology; and essentials of managing selected...
diseases common to the developing world. The participants apply concepts developed during the program by completing projects specific to the improved management and implementation of activities directly relevant to their own responsibilities.

**Financing Health Care in Developing Countries**

This 270-contact-hour course will be offered for the first time in the fall of 1987. It will emphasize the application of economic and financial management principles to health services in the public and private sectors. Components will include budgeting, accounting, and computer applications; financial management and program monitoring; revenue generation; and comparative financing, health services, and economics. Central themes will be projecting, managing, and controlling operating and recurrent costs including assessing the impact of hard-currency availability on program content as well as revenue generation and the role of the private sector in health services delivery.

In addition to the three intensive courses described above, the Office of Special Projects oversees Health Services courses directly related to international health. The courses in international health are intended to prepare mid-level and senior planners and managers for leadership roles. Qualified Summer Certificate Program participants can continue in the M.P.H. program with admission to the degree program substantially contingent on performance during the summer. A separate application is required. The summer program has been designed to satisfy many of the core curriculum requirements of the M.P.H. degree program. Its content and timing is such that the courses offered by all the sections in the fall and spring semesters are much more relevant and available. Students who satisfactorily complete the Summer Certificate Program and who are admitted to and proceed directly into the M.P.H. program often complete their degree requirements in one calendar year.

Inquiries concerning the activities of the Office of Special Projects and requests for OSP brochures and applications for the spring, summer, and fall intensive courses should be addressed to:

**Associate Director for International Programs**
**Office of Special Projects**
**Boston University School of Public Health**
**80 East Concord Street**
**Boston, Massachusetts 02118-2394 USA**

Telex 200191 BUHPI  Telephone 617-638-5234

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Doctors Scotch and Bicknell welcome a delegation from the University's affiliate program at Tongji Medical University, Wuhan Hubei Province, People's Republic of China.
### Environmental Health

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>EH 708</td>
<td>Introduction to Environmental Health</td>
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<tr>
<td>EH 764</td>
<td>Work and Health</td>
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<tr>
<td>EH 765</td>
<td>Survey of Environmental Health</td>
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<tr>
<td>EH 767</td>
<td>Occupational Health Policy and Economics</td>
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<tr>
<td>EH 768</td>
<td>Principles of Toxicology</td>
<td>4</td>
</tr>
<tr>
<td>EH 802</td>
<td>Air Sampling and Analysis</td>
<td>4</td>
</tr>
<tr>
<td>EH 803</td>
<td>Waste and Wastewater</td>
<td>4</td>
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<tr>
<td>EH 809</td>
<td>Parasites of Humans: A Public Health Perspective</td>
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<td>EH 860</td>
<td>Municipal Sanitation</td>
<td>4</td>
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<tr>
<td>EH 862</td>
<td>Radiation Protection</td>
<td>4</td>
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<tr>
<td>EH 864</td>
<td>Environmental Microbiology</td>
<td>4</td>
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<tr>
<td>EH 865</td>
<td>Food Sanitation and Safety</td>
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<td>EH 867</td>
<td>Soil Pollution</td>
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<td>EH 869</td>
<td>Environmental Planning</td>
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<td>EH 962</td>
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### Epidemiology and Biostatistics

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<th>Title</th>
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<tbody>
<tr>
<td>EB 701</td>
<td>Elementary Biostatistics</td>
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<td>EB 703</td>
<td>Intermediate Biostatistics</td>
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<tr>
<td>EB 704</td>
<td>Statistical Methods in Research</td>
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<tr>
<td>EB 705</td>
<td>Statistical Computing</td>
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<tr>
<td>EB 706</td>
<td>Biostatistical Theory</td>
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<tr>
<td>EB 711</td>
<td>Epidemiology</td>
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</tr>
<tr>
<td>EB 720</td>
<td>Applying Epidemiology to the Study of Aging</td>
<td>4</td>
</tr>
<tr>
<td>EB 780</td>
<td>Analysis of Discrete Data</td>
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<tr>
<td>EB 801</td>
<td>Cancer Prevention as a Public Health Problem</td>
<td>4</td>
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<tr>
<td>EB 802</td>
<td>Epidemiology of Reproductive Outcomes</td>
<td>4</td>
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<tr>
<td>EB 803</td>
<td>Clinical Trials</td>
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<td>EB 804</td>
<td>Biologic Basis of Cancer Prevention</td>
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<td>EB 805</td>
<td>AIDS: Medical, Economic, Psychosocial, Legal Issues</td>
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<td>EB 806</td>
<td>Theoretical Epidemiology</td>
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<td>EB 810</td>
<td>Psychiatric Epidemiology</td>
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<td>EB 811</td>
<td>Health Services Research Methods</td>
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<td>EB 812</td>
<td>Infectious Disease Epidemiology</td>
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<td>EB 813</td>
<td>Methods in Chronic Disease Epidemiology</td>
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<tr>
<td>EB 814</td>
<td>Research Methods in Public Health</td>
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<tr>
<td>EB 816</td>
<td>Cardiovascular Epidemiology</td>
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<td>EB 817</td>
<td>Practicum in Public Health Research</td>
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<td>EB 818</td>
<td>Statistical Methods for Epidemiology</td>
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<td>EB 819</td>
<td>Cancer Epidemiology</td>
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### Health Law

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<tr>
<td>LW 707</td>
<td>Introduction to Health Law</td>
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<tr>
<td>LW 751</td>
<td>Public Health Law I</td>
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<td>LW 753</td>
<td>Public Health Law II</td>
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<td>LW 754</td>
<td>Children at Risk</td>
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<td>LW 756</td>
<td>Hospital Law</td>
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<td>LW 757</td>
<td>Occupational Health and Safety Law</td>
<td>4</td>
</tr>
<tr>
<td>LW 758</td>
<td>Corporate Management of Risks to Health, Safety, and Environment</td>
<td>4</td>
</tr>
<tr>
<td>LW 852</td>
<td>Environmental Health Law</td>
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<tr>
<td>LW 854</td>
<td>Mental Health Law</td>
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<td>LW 951</td>
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<td>LW 952</td>
<td>Directed Research in Health Law</td>
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### Health Services

<table>
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<tbody>
<tr>
<td>HS 702</td>
<td>Introduction to Health Services</td>
<td>3</td>
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<tr>
<td>HS 710</td>
<td>Nutrition and Public Health</td>
<td>4</td>
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<tr>
<td>HS 717</td>
<td>International Health: Introduction to Health Care in Developing Countries</td>
<td>4</td>
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<tr>
<td>HS 725</td>
<td>Public Health and Clinical Aspects of Disease in Tropical Countries</td>
<td>4</td>
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<tr>
<td>HS 728</td>
<td>Issues in Long-term Care for the Elderly and Chronically Disabled</td>
<td>4</td>
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<tr>
<td>HS 730</td>
<td>Social-medical Perspectives on Aging and Old Age</td>
<td>2</td>
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<tr>
<td>HS 731</td>
<td>Design and Strategy for Health Care Organizations</td>
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<tr>
<td>HS 733</td>
<td>Principles of Health Program Management</td>
<td>4</td>
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<tr>
<td>HS 734</td>
<td>Principles of Nonprofit Accounting</td>
<td>2</td>
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<tr>
<td>HS 735</td>
<td>Health Care Finance</td>
<td>4</td>
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<tr>
<td>HS 737</td>
<td>Introduction to Personal Computers</td>
<td>2</td>
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<td>HS 738</td>
<td>Health Services Marketing</td>
<td>4</td>
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<tr>
<td>HS 740</td>
<td>Hospitals: Structures, Functions, and Issues</td>
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<td>HS 741</td>
<td>Consultation Techniques</td>
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<tr>
<td>HS 742</td>
<td>Data Base</td>
<td>2</td>
</tr>
<tr>
<td>HS 744</td>
<td>Introduction to Health Facility Planning and Design</td>
<td>2</td>
</tr>
</tbody>
</table>
The Certificate Program in International Health brings together students from many continents for a summer-long, intensive learning experience.
Admission Criteria and Application Procedures

Associate Professor Groopman teaches Principles of Toxicology.

The School of Public Health admits students in two categories: full-time degree status (12–20 credit hours per semester) and part-time degree status (11.5 or fewer credit hours per semester). Students may move freely between full- and part-time status upon notifying the Registrar of the change.

M.P.H. Applicants

Applicants to the School of Public Health should (a) hold a baccalaureate degree from a recognized institution of higher learning and have relevant experience in some field of health,* or, (b) hold a postbaccalaureate degree in a health-related area or an advanced professional degree. On occasion the School will accept applicants with little or no relevant work experience, if the Admissions Committee determines the applicant to be well-qualified based on exceptional academic achievement.

All applicants except those holding an M.D., Ph.D., J.D., or other doctoral-level degree, must take the aptitude section of the Graduate Record Examination. (See below for scheduling details on the GRE.) With prior approval from the Director of Admissions, applicants may submit Graduate Management Admission Test (GMAT), LSAT, or MCAT scores in lieu of GRE scores. Test scores should be less than four years old. The School of Public Health is most interested in accepting qualified, experienced health care professionals, and Graduate Record Examination scores are not the sole criteria for acceptance into the School.

Applicants from countries where English is not the language of instruction must submit TOEFL scores to the Office of Admissions.

Since there are often difficulties in evaluating transcripts from foreign universities, international applicants with doctoral-level preparation should seriously consider taking GREs. If there is any question, applicants should contact the Director of Admissions.

In reviewing applicants for admission, the Admissions Committee takes into account the following factors: (1) Academic ability. Students must be capable of graduate-level work in such areas as research methodology and policy analysis. Therefore, the applicant should have a previous academic average of approximately 3.0/4.0. Precise Graduate Record Examination norms have not been determined, but scores are considered in the evaluation

*The requirement of health experience does not apply to M.P.H. students entering the Epidemiology and Biostatistics concentration or the Health Behavior, Health Promotion, and Disease Prevention concentration.
of academic potential. (2) **Professional background.** This includes the professional education and experience of the applicant as well as his or her employment record. Primary emphasis will be on the quality of the background. In light of the School's stated goal of a heterogeneous student body, the specific nature of the applicant's professional background will be weighed in relation to the backgrounds of other applicants. (3) **Potential for innovation, contribution, and achievement in public health.** The committee attaches particular significance to these characteristics. Applicants who have demonstrated these qualities will be given special consideration.

At times, the Admissions Committee finds it helpful in its assessment of a candidate to conduct a personal interview. In such instances, applicants will be notified by the Admissions Office.

In summary, the School of Public Health is interested in applicants with the academic ability for graduate study of a high caliber, the professional training and experience that will enable them to benefit from and contribute to their education, and the potential for leadership and achievement.

**D.Sc. Applicants**

In addition to the requirements for M.P.H. candidates, applicants for the doctoral program should have substantial health experience, hold an M.P.H. degree or its equivalent, and be capable of conducting original research. Exceptional candidates without a graduate degree may apply, and, if accepted, will have to complete additional course work. Applicants to the D.Sc. program should include a clear and concise statement of their career goals and commitment to epidemiology. An interview may be requested.

**The Graduate Record Examination**

The Graduate Record Examination Aptitude Test is scheduled for October 11 and December 13 in 1986, and February 7, April 11, and June 6 in 1987. Applicants should arrange to take the test as early as possible by writing to the following address:

- Graduate Record Examination
- Educational Testing Service
- Box 955
- Princeton, NJ 08541
- Telephone: 609/883-8900

For those students who are unable to take the Graduate Record Examination at a regularly scheduled time, the Educational Testing Service has a Special Administration Service which offers the General Test on selected Saturday mornings. For further information write to:

- Educational Testing Service
- 111 Washington St.
- Brookline Village, MA 02146
- Telephone: 617/739-2210

Educational Testing Service requires about six weeks to process and forward the scores. Applicants should specify that scores be sent to the Boston University School of Public Health, using the code 3087-4, department code 50.

**Test of English as a Foreign Language**

The TOEFL is administered at test centers all over the world. For more information write to:

- Test of English as a Foreign Language
- Educational Testing Service
- Box 899
- Princeton, New Jersey 08541
- Telephone: 609/883-8900

Application forms are also available at American embassies and consulates, offices of the U.S. Information Service, and binational centers abroad.

**Guest Students**

Students from other graduate programs and individuals of appropriate educational or professional background are permitted to enroll in specific courses without being admitted to the School of Public Health. Guest Students may take a maximum of eight credits and are expected to fulfill all course requirements (such as term papers and exams). Prospective Guest Students should contact the Director of Admissions.

A Guest Student who wishes to become a degree candidate must apply formally to the School. Courses taken by Guest Students will be applied toward their degree.

**Dates for Application and Review**

**M.P.H. Applicants**

The School of Public Health accepts M.P.H. students for January and September admission.

- **Applicants for September admission** who submit completed applications by March 1 will be notified by April 15 of possible early admission.
- Applications received by April 15 will be reviewed, and acceptances will be mailed by May 31.
- Applications completed after April 15 will be reviewed, and admission will depend on available space.

**Applicants for January admission** who submit completed applications by October 25 will be notified by November 25. Applications will be accepted after October 25, but students will be admitted only on a space-available basis.

**D.Sc. Applicants**

D.Sc. applicants must apply by April 15 for September admission. Decisions will be announced by May 31.

There is no January admission for D.Sc. applicants.
Instructions for Application

The admission process has been designed to ensure greater applicant control over the timely arrival of transcripts and letters of assessment. The process is completely dependent on your compilation and submission of the necessary documents. All documents (except GRE scores) must be submitted together to the School of Public Health; these include:

1. Application form
2. Letters of assessment (3)
3. Transcripts
4. Application fee

Please follow these instructions:

1. Read all application material thoroughly.
2. Fill in the application form completely. All applications must be typed or printed clearly. Additional information you would like to provide in support of your application must be typed or printed clearly on a separate sheet of paper.
3. Enclose the application fee. The application fee is a nonrefundable $30. Please make checks payable to Boston University.
4. Arrange to take the aptitude section of the Graduate Record Examination and have the results sent to the School of Public Health at the address under item 8 below. Remember to specify our code number (code 3087-4, department code 50).
5. Applicants from countries where English is not the language of instruction must arrange to have their TOEFL scores sent to the Office of Admissions.
6. Use the enclosed assessment forms and envelopes. Enclosed in this application packet are envelopes specially designed to enable you to maintain control over your application while ensuring confidentiality to assessors and school officials. Send the assessment forms and envelopes, with your name and address clearly printed on both the form and the envelope and the appropriate box checked on the back of the envelope, to those individuals from whom you are requesting a letter of assessment. The assessor will complete the form, type his or her name and title in the appropriate place at the end of the form, seal it in the enclosed envelope, and sign his or her name on the line across the envelope seal. This envelope is then returned to you.

Transcripts will be handled in a similar manner. Enclose one of the envelopes, with your name and address clearly printed on the front and the appropriate box checked on the back, with your transcript request. The school registrar will enclose the transcript in the envelope, seal the envelope, and enter his or her signature on the line across the envelope seal. This envelope will also be returned to you. Additional envelopes may be requested from the address below. If for some reason a school registrar is unable or unwilling to send the requested credential[s] directly to you (1) notify the School of Public Health admissions office in writing prior to submission of your application and (2) advise the registrar to mail the requested credential[s] to the address below.

7. When you have received all the necessary assessments and transcripts, filled out the application form, and included the fee, your application will be complete.
8. Send your complete application to:
   Office of Admissions
   Boston University School of Public Health
   Building A-403
   80 East Concord Street
   Boston, MA 02118

As soon as your application has been received, the Office of Admissions will verify receipt of your application in writing.
Financial Information

James Scaramucci, research assistant, works on a number of studies at the School of Public Health Data Coordinating Center.

Tuition and Fees

Tuition and fees are to be paid in full at the time of registration. Preregistered continuing students must pay by the deadline indicated on their tuition bill.

Checks to cover tuition and fees should be made payable to Boston University. Boston University also accepts MasterCard or Visa for payment of tuition and fees up to the unused credit limit. Students planning to use this method of payment must contact the School of Public Health Registrar at least one week prior to the registration deadline.

The Trustees of the University reserve the right to change tuition rates or fees at their discretion whenever it is deemed advisable.

Tuition and Fees for 1986–1987

It has been and remains the policy of Boston University to withhold all diplomas, degrees, official transcripts, and other official recognition of work done at the University from students with respect to whom there are any outstanding overdue debts to the University, including, but not limited to, amounts owed in satisfaction of tuition, loan agreements, fees, and charges, as well as monies owed for occupancy in University-owned or operated residence facilities and apartments and for food service. No student may withdraw from the University in good standing or graduate from the University unless all current obligations to the University are paid in full.

Part-Time Students

(1.0 to 11.5 credit hours)

Tuition per credit hour $342
Registration fee per semester $30
Activity fee—degree candidates only $5

Full-Time Students

(12.0 to 20.0 credit hours)

Tuition per semester $5,475
Activity fee per semester $5
Continuing student fee [doctoral candidates only] $684

These figures are for 1986–87 only and may not be accurate in subsequent years. There is no registration fee for full-time students. All fees are nonrefundable. The student is assessed at actual cost for any breakage or damage to University property. Library fines are assessed by the librarian.

Medical Insurance

Costs for full-time students are:

U.S. citizens (optional): $144 per year
International students (required): $144 per year

Part-time students are also eligible to purchase medical insurance. For information, contact the Office of the Comptroller, 881 Commonwealth Avenue, Boston, MA 02215; 617/353-2269. International students should contact the International Student Office. A brochure on medical insurance is available from the Registrar. The insurance premium is subject to change.

Service Charges

Transcript: $2 each
Late Registration Fee: $50 full-time students, $15 part-time students
Late Payment Fee: $75 full-time students, $25 part-time. For students who have petitioned and received permission to register after the registration deadline, the minimum late payment fee is $150 for full-time students, $75 for part-time.
Reissue of photo I.D. card: $10

Financial Aid

Presently, there are six loan programs available to students enrolled in the School of Public Health: the Guaranteed Student Loan (GSL), the Massa-
chusetts Education Loan Authority [MELA], and the Auxiliary Loan to Assist Students [ALAS] are available to students who are enrolled at least half time; the School of Public Health [SPH] Alumni Loan is available to all students; and the National Direct Student Loan [NDSL] and Health Education Assistance Loan [HEAL] are available to full-time students. GSL applications are available at participating banks; HEAL and ALAS applications are available in the School’s Office of Student Financial Management. Call 617/353-4193 for information and an application for MELA. Inquiries about all programs and procedures should be made to the Office of Student Financial Management, L318, Boston University Medical Center, 80 East Concord Street, Boston, MA 02118; 617/638-5130.

International Students
Federal regulations restrict all federal funds to citizens or permanent residents of the United States. The Office of Student Financial Management is unable to offer scholarship aid to foreign students. Boston University therefore requires international students applying for admission to present evidence of sufficient funds to cover all tuition, fees, books, and living expenses for their study.

The Guaranteed Student Loan Program
Guidelines vary slightly from lender to lender, but the basic features of the Guaranteed Student Loan Program permit any student pursuing at least a half-time course of study toward a degree (i.e., two courses each semester) to borrow funds for educational purposes. A first-time borrower is not required to repay on principal until six months after discontinuation of enrollment. Half-time graduate students may borrow up to the amount sufficient to cover direct expenses (tuition, fees, and so on) not exceeding $2,500 per year. Full-time graduate students (12-20 credits per semester) may borrow up to the amount sufficient to cover direct expenses not exceeding $5,000 per year. No graduate or professional student may borrow more than $25,000 altogether, not exceeding $5,000 per year.

The standard rate of interest for guaranteed loans is 7 percent and 9 percent for continuing borrowers and 8 percent for first-time borrowers plus a guarantee fee of up to 1 percent in most states. Borrowers receive a federal subsidy for the interest during at least half-time enrollment. Thus, a needy student might borrow under the program without interest liability until six months [8 percent, 9 percent loans] or nine months [7 percent loans] after leaving school.

A loan origination fee of 5.5 percent is now charged on the principal amount of a loan and is deducted from the loan proceeds. A student submitting a GSL loan application whose adjusted gross family income is more than $30,000 must submit a need analysis form with the application. This can be accomplished by use of a short form GSL Needs Test; if the adjusted gross income is over $75,000, a GAPSFAS form must be submitted to Educational Testing Services in Princeton.

Guaranteed Student Loans are available through local banks or other financial institutions. A student should inquire at his or her hometown bank about the program. Specific guidelines for the program vary from lender to lender, and students are advised to consult local banks to determine their eligibility and obligations under the program.

Auxiliary Loan to Assist Students
Under the ALAS program, graduate and professional students may borrow up to $3,000 per year and $15,000 in the aggregate in addition to the amounts they receive through the regular GSL program. Thus, graduate and professional students can receive up to $8,000 per year and $40,000 in the aggregate through the two programs. The ALAS program currently carries a 12 percent interest rate, but the rate can fluctuate periodically based on changes in the Treasury Bill rate. Although the loans enter “repayment status” immediately, full-time students are eligible for a full-time student deferment. While you would not have to make principal payments on the loan while you are in school full time, you would have to make interest payments. If you cannot find a lender, the Office of Student Financial Management has applications for a few banks.

SPH Alumni Loan
This loan is funded by the donations of alumni and other interested persons and organizations. The amount of each loan is based on need. The interest rate is 2 percent in-school, 9 percent during repayment. Repayment varies from 1 year to 10 years maximum, with a minimum payment of $50 principal monthly. Funds are awarded by the Office of Student Financial Management.

National Direct Student Loan
This low-interest (5 percent) loan is made directly to students demonstrating need by the school that has received federal money for this purpose. Eligible students may borrow up to an aggregate of $12,500, including any amount borrowed as an undergraduate. There is a six-month grace period immediately after graduation before repayment begins. Funds are awarded by the Office of Student Financial Management.

Health Education Assistance Loan
A student may borrow up to $12,500 per academic year, to an outstanding total of $50,000. Loans may be used only for educational expenses (including tuition, fees, and so on). In addition, students who borrowed while in school may also borrow during periods of internship, residency, and authorized periods of deferment, but only to pay interest accruing on prior loans.
There is no federal interest subsidy under this program. Interest is charged at the 91-Day Treasury Bill rate plus 3 percent. Interest may be paid on an ongoing basis or accrued until repayment begins. If interest is accrued, it will be compounded semiannually and added to the loan principal. An insurance premium, not to exceed 2 percent per annum, will be charged at the time an individual loan is processed.

Repayment will begin 9 to 12 months after all formal training has been completed, including that provided in accredited internship and residency programs. A deferment of up to 3 years will be granted to borrowers who return to full-time study at an institution of higher education, train in an internship or residency program, or serve in the Armed Forces, Peace Corps, or specified programs under ACTION or the National Health Service Corps after the repayment period has commenced. Borrowers may take from 10 to 25 years to repay the loan once repayment commences.

Repayment will be carefully monitored. Under law, there will be no discharge of loans by bankruptcy during the first 5 years of the designated 10- to 25-year repayment period. Persons in professional practice who default on their loans may have payments for any federally supported health care service such as Medicare or Medicaid reduced by the amount of the loan default. If a borrower breaches obligations entered into under a federal payment for service contract, the United States Government will be entitled to recover damages.

Massachusetts Education Loan Authority

In an effort to provide more money for college students, several universities in Massachusetts, including Boston University, have instituted a new long-term, low-interest loan under the Massachusetts Education Loan Authority. The program is open to any U.S. citizen who is a full- or half-time student attending a participating college in Massachusetts.

Under this program, qualified students may borrow up to 75 percent of their total educational costs (minus any financial aid), with a minimum of $2,000 at 11.25 percent interest. Repayment begins 30 days after disbursement and extends over a 15-year period. Although parents must be creditworthy and must demonstrate need, the qualifying needs test is less severe than for federal funds. It is expected that many students not eligible for the GSL may be able to receive funds under this new loan program.

Traineeship Program

The School of Public Health cooperates with the U.S. Public Health Service in offering Public Health Traineeships to persons from a variety of professional backgrounds who wish to enter the field of public health. A traineeship is an award based on need which will help to defray part of a student's educational expenses. The recipient of a traineeship is not required to perform services for the School. To be eligible for an award a student must be matriculated full time or part time in a degree program. The availability of traineeships is entirely dependent on the receipt of federal funds, and they therefore are awarded solely on a yearly basis. Funds are awarded by the Office of Student Financial Management.

College Work-study

In this program funds come from a grant made to participating schools by the federal government. A student earns the CWS grant by working at an agency that is nonprofit, nonsectarian, and apolitical. The Work-study account pays a percentage of the wages and the employer pays a percentage. Awards are made to full-time students demonstrating the greatest financial need. Funds are awarded by the Office of Student Financial Management.

Summer Work-study

Depending upon fund availability, students demonstrating need are sometimes able to secure Summer Work-study funds. A separate application must be completed, usually in mid-February. Again, preference is given to students with the greatest financial need and who have been and will continue to be enrolled full time. Funds are awarded by the Office of Student Financial Management.

Veterans' Affairs Office

In cooperation with the Veterans Administration, the University participates in numerous veterans' benefits programs, including educational assistance, work-study, rehabilitation, deferred payment, and tutorial programs.

If you are eligible for veterans' benefits or would like more information about VA rules and veterans' programs, contact the Boston University Office of Veterans' Affairs, 881 Commonwealth Avenue, Boston, MA 02215; 617/353-2390.
Adminstrative Policies

Requirements for the M.P.H.

Students must satisfactorily complete 48 credits of course work, including 16 credits of core courses, between 16 and 20 credits of concentration courses depending on the concentration, and the remainder, electives. A grade point average of no less than 2.7 (see Grading System below) must be maintained in order to graduate.

Students must complete at least 32 credits of course work from among the course offerings, as degree candidates in residence.

All of the requirements for the degree must be completed within five calendar years after initial registration for the School. A degree candidate in good standing may request a leave of absence from the School. Leaves of absence will be included in this five-year period.

Transfer of Credit

Requests for transfer of credit will be considered on an individual basis by the section chiefs. Transfer credits will normally be applied only toward core or concentration requirements. Under unusual circumstances, transfer credits may be applied toward elective requirements, but never in reference to courses that have been taken in the past.

Waiver of Courses

Students may petition to have core courses in the School of Public Health waived on the basis of course work performed elsewhere or comparable professional experience. Students may be asked to demonstrate their proficiency in the courses to be waived. Such waivers will not reduce the overall number of course credits to be taken in the School of Public Health (48), nor will they be applied to courses other than core courses.

Requirements for the D.Sc. in Epidemiology

Students with a master's degree are required to complete the equivalent of a minimum of eight graduate-level semester courses (32 credits). Generally, these courses should be taken at Boston Uni-
Versity. However, under special circumstances, students may transfer a maximum of two courses with permission of the Epidemiology Doctoral Committee. Students without an M.P.H. or an equivalent graduate degree must fulfill additional course requirements. For all other requirements for the completion of the D.Sc. degree, see page 6.

The post-bachelor's program must be completed within ten years after the first registration for doctoral study. The post-master's program must be completed within seven years after the first registration for the doctoral program.

Minimum residency requirements are the equivalent of two consecutive regular semesters of full-time graduate study at Boston University. Students who have completed their course requirements must register each subsequent regular semester as continuing students and pay the continuing student fee, until they have completed all requirements for the degree. Authorized leaves of absence, approved by the Epidemiology Doctoral Committee, are the only means of waiving the residence and registration requirements.

Transcripts

All students are entitled to transcripts of their records in either official or unofficial form. An official transcript bears the signature of the registrar and school seal. It may be sent directly only to a school, firm, or agency and may not be given to the student. A student may obtain an unofficial transcript which does not have a signature or the school seal and is stamped "Unofficial Transcript."

All transcript requests should be made in writing to the Registrar of the School of Public Health. Each transcript (official or unofficial) costs $2.

Withdrawals, Leaves of Absence, and Refunds

During a regular semester, up to the end of the fifth week, a student who reduces his or her course load and thus becomes responsible for a lower tuition charge than that which was initially assessed will receive a credit for the difference.

Students who find it necessary to withdraw from the University must file an Official Withdrawal Form with the School of Public Health office within five days of withdrawal. Mere absence from classes does not reduce a student's financial obligation nor guarantee that a final grade will not be recorded.

Students who withdraw from a course after the fifth week of class will receive a grade of "W" (Withdrawn) on their permanent record card. Students may withdraw from a course at any time up to the end of regularly scheduled classes (see the Calendar at the end of the catalogue); anyone withdrawing from a course after this point will receive a grade of "F" for the course. Students not planning to register for one or more semesters, but who are not withdrawing, must file an official leave of absence form with the School of Public Health during the normal registration period prior to the semester that the leave of absence will become effective.

Upon receipt of the Official Withdrawal Form from the School of Public Health, the Comptroller's Office will credit the student's account as follows:

- Prior to the start of classes: 100 percent of tuition and fees
- During the first two weeks of classes: 80 percent of tuition
- During the third week of classes: 60 percent of tuition
- During the fourth week of classes: 40 percent of tuition
- During the fifth week of classes: 20 percent of tuition
- After the fifth week of classes: 0 percent

Note: Tuition payments will not be refunded after the start of classes; rather, a credit will be made to the student's account. A credit balance in a student's account resulting from a withdrawal, over-payment, or adjustment will be refunded upon written request. Registration fees and deposits are nonrefundable.

Absence for Religious Reasons

According to Chapter 151C of the General Laws, Commonwealth of Massachusetts, any student in an educational or vocational training institution, other than a religious or denominational educational or vocational training institution, who is unable because of his (or her) religious beliefs, to attend classes or to participate in any examination, study, or work requirements on a particular day shall be excused from any such examination or study or work requirement, and shall be provided with an opportunity to make up such examination, study, or work requirement which he (or she) may have missed because of such absence on any particular day; provided, however, that such makeup examination or work shall not create an unreasonable burden upon such school. No fees of any kind shall be charged by the institution for making available to the said student such opportunity. No adverse or prejudicial effects shall result to any student because of his (or her) availing himself (or herself) of the provision of this section.

Suspension or Dismissal

Boston University, through its various faculties and appropriate committees, reserves the right to suspend or dismiss any student for failure to maintain a satisfactory academic record, acceptable personal behavior, or satisfactory standards of health. (See the School of Public Health Students' Hand-
book for a more detailed discussion of the grounds for termination or suspension. See also the University regulations on nonacademic grievances and arbitration.

**Grading System**

Each student receives a point grade in each course. To be recommended for the master's degree, a candidate must have a minimum cumulative grade point average of 2.7, based on the following grading system:

- A = 4.0
- A- = 3.7
- B+ = 3.3
- B = 3.0
- B- = 2.7
- C+ = 2.3
- C = 2.0
- C- = 1.7
- D+ = 1.0
- D = 0.0
- W = Withdrawn after five weeks

Doctoral-degree candidates must maintain a minimum cumulative grade point average of 3.0.

**Registration**

Registration will be conducted by mail for entering students and via student mailboxes for continuing students in the weeks preceding the beginning of classes. There will also be an opportunity for on-site registration prior to the first week of instruction.

Late-registration and late-payment fees are charged if a student registers later than the official close of the registration period. Registrations may not be accepted without full payment. Students with pending loan applications or other aid must submit University-approved documentation. Students should contact the Boston University Office of Student Financial Management, Boston University Medical Center to receive proper documentation.

No student may register after the deadline announced in each semester's registration material.

**Privacy Act Information**

Under the provisions of the Family Educational Rights and Privacy Act, also known as the Buckley Amendment, students have the right to inspect the educational records kept by the University concerning them, to request correction of any inaccurate data, and to file complaints concerning any misleading information contained therein. Parents of dependent students may inspect their son's or daughter's academic record after establishing proof of that dependency. Disclosures are restricted to those who are authorized and who have legitimate need for the data. The University safeguards against third-party redisclosure of personally identifiable information.

An annual notification of rights and the procedures for exercising them are printed on the University registration form and mailed to supporting parents. Copies of the University's Compliance Manual and forms for obtaining access to records are available at each school or college office.

For further information contact your school or college office or the Assistant to the Registrar at the University Access Office, 881 Commonwealth Avenue, 617/353-3678.

**Grievance and Arbitration Procedures Under Title IX**

Students who believe they have been discriminated against because of their race, color, creed, religion, ethnic origin, sex, age, or physical disability may file a formal grievance in writing with the Director of the School. The statement should be as specific as possible regarding the action that precipitated the grievance: date, place, and people involved, efforts made to settle the matter informally, the remedy sought.

Within one week of receiving the statement, the Director of the School forwards a copy to the appropriate administrative head. Individuals whose actions or inactions are the subject of the grievance receive a copy from the administrative head and have an opportunity to respond in writing.

The administrative head will try to meet with all concerned parties within two weeks of receiving the statement. He or she may receive both oral and written presentations and may make independent inquiry.

Within one week after such a meeting, the administrative head makes a decision as to the merits of the statement and the appropriate resolution of the grievance. Copies of this decision are sent to the student, the individuals whose actions are the subject of the grievance, the Director of the School, and the Provost. If dissatisfied with the decision, the student may appeal to the Director of the School and from there to the Provost.

A record of all formal grievances is kept in the office of the Director of the School. Copies of all written statements, letters, etc., relating to a grievance should be sent to that office.

**Equal Opportunity Policy**

Boston University prohibits discrimination against any individual on the basis of race, color, religion, sex, age, national origin, physical or mental handicap, marital, parental, or veteran status. This policy extends to all rights, privileges, programs, and activities, including admissions, financial assistance, employment, housing, athletics, and educational programs. Boston University recognizes that nondiscrimination does not ensure that equal opportunity is a reality. Because of this, the University will continue to implement affirmative action initiatives which promote equal opportunity for all students, applicants, and employees. Inquiries regarding the application of this policy should be addressed to the Director, Office of Equal Opportunity, 25 Buick Street, Boston, MA 02215; 617/353-4475.
University Facilities and Resources

Libraries

All of the libraries within the University are open to the University community. The libraries have holdings of more than 1,500,000 volumes, with an additional 2,000,000 volume equivalents in microform.

The Alumni Medical Library is located at the Medical Center in the Instructional Building, 80 East Concord Street. It houses over 99,000 books, periodicals, and audiovisual materials. Services such as interlibrary loans are available on request. The library has a substantial collection in public health. Of particular interest to public health students are the American Statistical Index and the computerized literature search service with access to data bases such as Medline and Toxline.

Mugar Memorial Library, 771 Commonwealth Avenue, is the central library of Boston University. It has a large collection of materials relevant to health systems, health planning, ethics, and the behavioral sciences. The library maintains an audio listening area, a music library, an African studies library, and an excellent Department of Special Collections containing rare books and manuscripts.

Mugar Library also holds the personal papers of over 1,200 public figures in literature, journalism, theatre, film, music, politics, and diplomacy.

The department of Astronomy, the School for the Arts, the School of Theology, and the School of Law maintain their own specialized libraries. Additional libraries include the Science/Engineering Library, the Educational Resources Library, the Krasker Film Library, the Minority Research Library, the Career Resource Library, and the Gerontology Library.

An interlibrary loan system further extends the resources, and a consortium arrangement enables graduate students to use the libraries of Boston College, Brandeis, M.I.T., Northeastern, Tufts, Wellesley, and the University of Massachusetts.
Academic Computing Center

The Academic Computing Center, located at 111 Cummington Street, houses 140 IBM 3278 full-screen display terminals, DECwriters, local printers, a technical assistance office, and a batch input/output window. The Center operates an IBM 3090 computer for instructional programs and research activities throughout the University. The principal operating system is VPS, which provides high-speed interactive and batch processing and up to 11 megabytes of user memory. VPS supports all popular programming languages (and many others as well) including Ada, APL, Assembler, BASIC, C, COBOL, FORTRAN, LISP, LOGO, Pascal, PL/I, SNOBOL, and XPL.

The Center operates a graphics laboratory for research and production. In addition, 32 DEC VT220 terminals operating in full-screen emulation mode are located in Mugar Library, and 24 VT220s are installed in the Science and Engineering Center. For those wishing to access the system remotely, VPS has over 100 available dial-in ports.

A local area broadband network on campus allows high-speed terminal-to-computer and computer-to-computer communications. Boston University is also a charter member of the BITNET inter-university electronic message and mail network.

Boston University maintains a liberal policy toward computing. Any Boston University graduate student may obtain a nonfunded research account (NFR) under his or her adviser. The initial allocation for the account is $500 per semester; more computer time may be requested as needed. Students use the terminals on a first-come, first-served basis. Staff is available to answer questions about the system, terminal usage, and program syntax.

Boston University Bookstore

The Boston University Bookstore, located at 660 Beacon Street in Kenmore Square, contains over 80,000 titles including general reading, academic and professional reference, course, used, and sale books, as well as one of the widest selections of American and international periodicals available. The eighteen fine specialty shops located throughout the complex feature an outstanding complement of gifts, professional materials, and personal accessories.

Center for Law and Health Sciences

The Center for Law and Health Sciences, at 765 Commonwealth Avenue, is the component of the School of Law responsible for organizing and conducting research and educational programs that examine selected relationships between the legal and health care systems. The Center provides the Law School with a vehicle not only for focusing research on interactions between law and health care, but also for incorporating legal analytical techniques into the projects of other health affairs units of the University.

Disability Services

Mainstreaming at Boston University means that physically impaired students can expect to use the same campus facilities (in some cases with enabling accommodations) as students who are not disabled. Therefore, most of the facilities and the programs described in this catalog make no mention of separate services for the disabled. Consultations with Disability Services staff are available to individuals or groups requesting assistance or having questions or concerns about campus accessibility. Auxiliary aids, such as interpreters for hearing-impaired students, are available for all of the University's educational programs. The Disability Services office is located in the King Center, 19 Deerfield Street.

George Sherman Union

The George Sherman Boston University Union, 775 Commonwealth Avenue, serves many of the social, cultural, and recreational needs of the University community. Special exhibits, lectures, recitals, films, gallery showings, and a comprehensive recreation program are some of the activities that take place here.

Gerontology Center

The University's commitments to research, education, and service in the field of aging are coordinated and augmented by the Boston University Gerontology Center, 730 Commonwealth Avenue, which promotes understanding and professional competence in dealing with the biological, medical, psychological, and social aspects of aging. The Center maintains a library that includes journals, directories, state-of-the-art information, statistical data, training aids, and governmental and legislative references. An updated listing is kept of local and nation-wide conferences.

In addition to sponsoring lectures, workshops, and conferences, the Center offers a multidisciplinary seminar series and an annual Summer Institute in Gerontology.

Center for English Language and Orientation Program

CELOP, at 730 Commonwealth Avenue, offers intensive English courses and orientation programs for international students who wish to improve their English and prepare academically and culturally for college study in the United States.
The Center awards the Louis Lowy Certificate in Gerontological Studies, upon graduation, to students in any of the University degree programs who have completed a specified number of courses focusing on gerontology. The Center also awards the Certificate of Recognition for the Study of Aging to nondegree students undertaking substantive study pertaining to gerontology.

Health Care Management Program

The Boston University School of Management offers a program leading to the MBA with a concentration in health care management. The program provides professional management training for a wide variety of employment settings in the health care industry, including hospitals, long-term care facilities, mental health and related human services, and prepaid group practices. The Health Care Management Program requires completion of sixteen 4-credit courses and can be pursued on either a part-time or full-time basis.

Health Policy Institute

The Health Policy Institute, located at 53 Bay State Road, is an umbrella organization for Boston University scholars and professionals engaged in the organization, delivery, and financing of health services in this country and abroad.

The Center for Industry and Health Care is the main arm of the national division of the Institute. The Center assists the private sector in evaluating its existing health programs, and in developing an improved health care system that is both cost-effective and responsive to community needs.

The international division consists of the Program for Strengthening Health Delivery Systems in Central and West Africa, the Office of Special Health Programs, and the Center for Educational Development in Health. Current projects in this division include developing primary care activities in 20 nations of West and Central Africa; assisting Egypt’s Suez Canal University in providing medical education and health services for the Suez Canal Area; and collaborating with universities and ministry of health officials of Middle East, African and South American countries to develop and evaluate health curricula and human resources needs.

The Health Policy Institute and the School of Public Health enjoy a close working relationship with many joint research, service, and teaching activities.

International Student Office

The International Student Office (ISO), 19 Deeringfield Street, provides services to approximately 2,500 international students and 211 international faculty at the University, who, combined, represent 112 countries. The office regularly conducts workshops to inform students and staff about U.S. immigration regulations, employment regulations, and tax laws, and regulations of foreign governments regarding currency exchange.

Contact with ISO is the last stage of the admissions process for international applicants. After an applicant is academically admitted, ISO verifies that the student has adequate proficiency in English and sufficient financial resources to cover the costs of studies in the United States. If these conditions are met, ISO issues a Certificate of Visa Eligibility that allows the student to enter the United States with the appropriate visa.

To assist new students in adjusting to the University, Boston, and life in the United States, ISO conducts special orientation programs every September and January. The Office also advises students on such matters as housing, cultural adjustment, and personal and financial problems. Other services include an International Hospitality Program, an Intercultural Series, monthly social events, and a week-long International Festival each spring. ISO also publishes a newsletter, coordinates an emergency loan fund, and sponsors numerous activities to promote international awareness. Its basic mission is to act as a resource to the entire University community in regard to international educational exchange programs.

King Center

Dedicated to the values and memory of alumnus Martin Luther King, Jr., the King Center, at 19 Deeringfield Street, addresses the personal, educational, and career development needs of Boston University students. The Center is a centralized source of comprehensive professional services and programs for students seeking counseling, learning, career planning, or placement assistance. The Center also houses the Minority Affairs and Disability Services offices.

Off-Campus Housing Services

Off-Campus Services, located in the George Sherman Union, 775 Commonwealth Avenue, maintains listings of local, off-campus housing. New listings of privately owned apartments, houses, rooms, and people seeking roommates come in daily and generally cover the Allston/Brighton, Back Bay, Brookline, and Newton areas. Listings may be seen in the office during regular business hours. Also available is the Off-Campus Housing Guide, which is helpful in starting an apartment search.

The Office of Rental Property Management, 19 Deeringfield Street, provides information on faculty, staff, and graduate student apartments.
Administration and Faculty

Katherine Lavallee is the Administrator for the Health Services Section.

Administration

John R. Silber, President of the University
Richard H. Egdahl, Director, Boston University Medical Center; Academic Vice President for Health Affairs, Boston University; Executive Vice President, University Hospital
John I. Sandson, Dean, School of Medicine
Norman A. Scotch, Director, School of Public Health
Leonard H. Glantz, Associate Director, School of Public Health
Lisa K. Jackson, Assistant Director, Academic Services
Dzidra J. Knecht, Assistant Director, Administration
Barbara J. St. Onge, Director of Admissions
Rachel H. Paquette, Registrar
Carol Ann Morgan, Assistant to the Director
Louise T. Saluti, Administrative Assistant/Executive Secretary to the Director

Faculty

Full-Time

Hortensia Amaro, Ph.D., M.A., University of California, Los Angeles. Assistant Professor of Public Health (Social and Behavioral Sciences). Assistant Professor of Pediatrics, Boston University School of Medicine. Areas of interest: health psychology, alcohol use and alcoholism among women, reproductive attitudes and behavior, and ethnic and cultural differences in health behavior and health problems.


Michael S. Baram, LL.B., Columbia University. Professor of Public Health (Health Law). Adjunct Professor of Law, Boston University School of Law. Areas of interest: environmental law, occupational health law, regulatory decision-making, corporate management of health risks, and liability and insurance systems.

M. Anita Barry, M.D., Columbia University College of Physicians and Surgeons. Assistant Professor of Public Health (Epidemiology and Biostatistics). Assistant Professor of Medicine, Boston University School of Medicine, and Medical Director, Community Infectious Disease Epidemiology Program, City of Boston Department of Health and Hospitals. Areas of interest: infectious disease epidemiology and communicable disease control.

William J. Bicknell, M.D., Duke University, M.P.H., University of California at Berkeley. Professor of Public Health (Health Services), and Director, Office of Special Projects, Boston University School of Public Health, School of Medicine, and Health Policy Institute. Areas of interest: the organization, delivery, and financing of health care, international health, health manpower and medical education, health and social services for the elderly, and public-private sector interactions.

Leslie I. Boden, Ph.D., Massachusetts Institute of Technology. Associate Professor of Public Health (Environmental Health). Areas of interest: occupational and environmental health, regulation, product liability, and workers' compensation.

Laurence G. Branch, Ph.D., M.A., Loyola University. Chief, Health Services Section, and Professor of Public Health (Health Services). Areas of interest: longitudinal studies; gerontology, organization, delivery, financing of health services; and functional status.

Suzanne B. Cashman, Sc.D., Harvard University; M.S., Cornell University. Assistant Professor of Public Health (Health Services), and Associate Director for Research, Office of Special Projects. Areas of interest: health manpower, organization and delivery of services, rural health, and health economics.

Theodore Colton, Sc.D., Johns Hopkins University. M.S., University of North Carolina. Chief, Epidemiology and Biostatistics Section, and Professor of Public Health (Epidemiology and Biostatistics). Areas of interest: biomedical research design, cancer epidemiology, and clinical trials.

Stephen C. Crane, Ph.D., M.P.H., University of Michigan. Assistant Professor of Public Health (Health Services). Director, Educational Programs, (Pew Health Policy Doctoral Program), Boston University Health Policy Institute. Areas of interest: state health politics, health interest groups, manpower policy and utilization management.

L. Adrienne Cupples, Ph.D., M.A., Boston University. Associate Professor of Public Health (Epidemiology and Biostatistics). Areas of interest: biostatistics and survival analysis.

Robert R. Ebert, Ph.D., M.S., University of Wisconsin, Madison. Assistant Professor of Public Health (Social and Behavioral Sciences). Areas of interest: psychology and public health, stress, coping, and social support; and families of handicapped children.

Patricia L. Foster, Ph.D., Cambridge University, M.A., Harvard University. Assistant Professor of Public Health (Environmental Health). Areas of interest: mechanisms of bacterial mutagenesis, environmental microbiology, and the effects of environmental chemicals on the DNA of mammalian cells.

Leonard H. Glantz, J.D., Boston University. Associate Director, School of Public Health, and Professor of Public Health (Health Law). Areas of interest: patient rights, rights of children, legal aspects of health care regulation, and mental health law.
Richard Goldstein, Ph.D., University of Pennsylvania. Professor of Public Health (Environmental Health). Director, Laboratories for Molecular Genetics and Molecular Epidemiology, and Electron Microscopy at the Maxwell Finland Laboratory for Infectious Diseases. Areas of interest: molecular biology, regulation of gene expression in plasmids and bacterial viruses, virulence factor genes of bacterial pathogens, molecular epidemiology, construction and use of cloning vectors, and high resolution electron microscopy.

John D. Groopman, Ph.D., Massachusetts Institute of Technology. Associate Professor of Public Health (Environmental Health) and Chairman of the Admissions Committee. Areas of interest: environmental health, chemical carcinogenesis, and biochemical/molecular epidemiology.

Timothy C. Heeren, Ph.D., Boston University. Assistant Professor of Public Health (Epidemiology and Biostatistics). Areas of interest: biostatistics and analysis of scaled data.


Don C. Holloway, Ph.D., M.S., University of Wisconsin, Madison. Associate Professor of Public Health (Health Services). Director, Health Systems Engineering, Boston University Health Policy Institute. Areas of interest: incentive systems for improved hospital productivity, application of quantitative methods to health services delivery, and health services utilization management systems.

David W. Kaufman, Sc.D., M.Sc., Harvard University. Assistant Professor of Public Health (Epidemiology and Biostatistics). Assistant Director, Drug Epidemiology Unit, Boston University School of Public Health. Area of interest: chronic disease epidemiology.

Herbert L. Kayne, Ph.D., M.S., University of Illinois. Associate Professor of Public Health (Epidemiology and Biostatistics). Associate Professor of Physiology and Biometrics, Boston University School of Medicine. Areas of interest: cancer prevention and malignant melanoma.

Howard K. Koh, M.D., Yale University. Assistant Professor of Public Health (Epidemiology and Biostatistics). Clinical Instructor in Dermatology, Boston University School of Medicine. Areas of interest: cancer prevention and malignant melanoma.


Samuel M. Lesko, M.D., Thomas Jefferson University, M.P.H., Yale University. Assistant Research Professor of Public Health (Epidemiology and Biostatistics). Areas of interest: drug epidemiology—premature infants and chronic disease epidemiology.

Suzette M. Levenson, M.P.H., M.Ed., Boston University. Assistant Research Professor of Public Health (Social and Behavioral Sciences). Assistant Director of Research and Data Coordination, Boston University School of Public Health. Areas of interest: traffic safety and maternal health habits during pregnancy.

Sol Levine, Ph.D., M.A., New York University. Professor of Public Health (Social and Behavioral Sciences). University Professor and Professor of Sociology, Boston University. Areas of interest: health organizations and social policy, social stress, social epidemiology, and quality of life.


Allan R. Meyers, Ph.D., M.A., Cornell University. Associate Professor of Public Health (Health Services). Areas of interest: social gerontology, disability, alcohol, and international health.

Allen A. Mitchell, M.D., Tufts University. Associate Professor of Public Health (Epidemiology and Biostatistics). Associate Director, Drug Epidemiology Unit, Boston University School of Public Health. Areas of interest: drug-induced birth defects and epidemiology of adverse drug reactions in children.

David M. Ozonoff, M.D., Cornell University, M.P.H., Johns Hopkins University. Chief, Environmental Health Section, and Associate Professor of Public Health (Environmental Health). Areas of interest: health effects of improperly managed toxic waste disposal, environmental carcinogens, history of public health, hazards of asbestos exposure, and risks and benefits of recombinant DNA technology.

M. W. Perrine, Ph.D., Princeton University. Professor of Public Health (Social and Behavioral Sciences). Areas of interest: alcohol use and abuse, driving behavior and traffic safety, attitude formation, change, and measurement, and evaluation research.

Marianne N. Prout, M.D., Cornell University, M.P.H., Harvard University. Associate Professor of Public Health (Epidemiology and Biostatistics). Areas of interest: cancer prevention, both social policy and societal attitudes toward it.


Lynn Rosenberg, Sc.D., M.S., Harvard University, M.S., Boston University. Associate Professor of Public Health (Epidemiology and Biostatistics). Assistant Director, Drug Epidemiology Unit, Boston University School of Public Health. Areas of interest: drug-induced disease, cardiovascular disease, and cancer.

Robert W. Ryder, M.D., Columbia University, M.Sc., London School of Hygiene and Tropical Medicine. Associate Professor of Public Health (Epidemiology and Biostatistics). Areas of interest: infectious disease epidemiology, diarrheal disease, liver cancer prevention, and AIDS.

Alan Sager, Ph.D., Massachusetts Institute of Technology. Associate Professor of Public Health (Health Services). Areas of interest: equal access to effective acute and ambulatory care, hospital finance and configuration, and program design for long-term care.

Norman A. Scotch, Ph.D., Northwestern University, S.M.Hyg., Harvard University. Director, School of Public Health, and Professor of Public Health (Social and Behavioral Sciences). Associate Dean for Public Health, and Adjunct Professor of Anthropology, Boston University. Areas of interest: epidemiology of chronic disease, social stress, the dying patient, alcohol use and abuse, and applied genetics.

Samuel Shapiro, M.B.BCh., University of Witwatersrand Medical School, Johannesburg, South Africa; M.R.C.P., London; F.R.C.P., Edinburgh. Research Professor of Public Health (Epidemiology and Biostatistics). Director, Drug Epidemiology Unit, Boston University School of Public Health. Area of interest: epidemiology.

Lee Strunin, Ph.D., Brandeis University. Assistant Professor of Public Health (Social and Behavioral Sciences). Areas of interest: sociocultural issues in health and health care, physician-patient interaction, and international health.

Diana Chapman Walsh, Ph.D., M.S., Boston University. Associate Professor of Public Health (Social and Behavioral Sciences, and Health Services). Associate Director, Boston University Health Policy Institute. Areas of interest: industry and health care, occupational health, health promotion, fertility-related health services, and alcoholism.

*Appointment not yet acted on by the Board of Trustees.
Part-Time

Ayorinde A. Ajayi, M.B., B.S., University of Ibadan Medical School, Nigeria, M.P.H., Boston University. Adjunct Assistant Professor of Public Health [Health Services]. Regional Representative, The Pathfinder Fund, Nairobi, Kenya.

Carolyn M. Aldwin, Ph.D., University of California, San Francisco. Assistant Professor of Public Health [Social and Behavioral Sciences]. Research Psychologist, Veterans Administration Normative Aging Study.

Joel J. Alpert, M.D., Harvard Medical School. Professor of Public Health [Health Law]. Professor and Chairman, Department of Pediatrics, Boston University School of Medicine; Pediatrician-in-Chief at Boston City Hospital.

Arlene S. Ash, Ph.D., University of Illinois, M.S., Washington University. Adjunct Assistant Research Professor of Public Health [Epidemiology and Biostatistics].* Assistant Professor of Mathematics in Medicine, Boston University School of Medicine.

Nicholas A. Ashford, Ph.D., J.D., University of Chicago. Adjunct Associate Professor of Public Health [Environmental Health]. Associate Professor of Technology and Policy, Massachusetts Institute of Technology.

Alan L. Balsam, M.P.H., Boston University, M.S., Framingham State College. Adjunct Instructor in Public Health [Environmental Health], Nutrition Project Director, Somerville/Cambridge Elder Services.

Stanley F. Battle, Ph.D., M.P.H., University of Pittsburgh, M.S.W., University of Connecticut. Associate Professor of Public Health [Social and Behavioral Sciences]. Associate Professor, Boston University School of Social Work.

Louis P. BertonaZZI, M.A., Suffolk University. Adjunct Assistant Professor of Public Health [Health Services]. State Senator.

Ryan E. Bliss, M.A., University of Minnesota. Instructor in Public Health [Epidemiology and Biostatistics].* Health Science Specialist, Veterans Administration Normative Aging Study.

Gary A. Borkan, Ph.D., M.A., University of Michigan. Adjunct Assistant Professor of Public Health [Environmental Health]. Research Anthropologist, Veterans Administration Normative Aging Study.

Raymond Bossé, Ph.D., Boston University, M.A., Fordham University. Adjunct Professor of Public Health [Social and Behavioral Sciences]. Associate Director and Research Sociologist, Veterans Administration Normative Aging Study.


Julie E. Buring, D.Sc., Harvard University, M.S., University of Washington. Adjunct Assistant Professor of Public Health [Epidemiology and Biostatistics]. Instructor, Department of Preventive Medicine and Clinical Epidemiology, Harvard Medical School.

George A. Clark, Ph.D., M.A., University of Massachusetts. Assistant Professor of Public Health [Health Services]. Research Anthropologist, Veterans Administration Normative Aging Study.

Roberta N. Clarke, D.B.A., M.B.A., Harvard University. Associate Professor of Public Health [Health Services].* Associate Professor of Marketing, Boston University School of Management.

Donald E. Craven, M.D., Albany Medical College. Associate Professor of Public Health [Epidemiology and Biostatistics]; Associate Professor of Medicine, Boston University School of Medicine; Assistant Visiting Physician and Hospital Epidemiologist at Boston City Hospital.

Arthur J. Culbert, Jr., Ph.D., M.S., Boston University. Assistant Professor of Public Health [Social and Behavioral Sciences]. Assistant Professor of Socio-Medical Sciences and Community Medicine. Assistant Dean for Student Affairs, Director, Office of Special Projects, and Director, Early Medical School Selection Program, Boston University School of Medicine.

Ralph B. D’Agostino, Ph.D., Harvard University, A.M., Boston University. Professor of Public Health [Epidemiology and Biostatistics]. Professor of Mathematics, Boston University College of Liberal Arts and Lecturer in Law, Boston University School of Law.

William M. Dann, M.D., Cornell University. Adjunct Assistant Professor of Public Health [Health Services]. President, Dann and Associates, Inc.

Lorraine O. deLabry, M.A., University of Hartford. Instructor in Public Health [Epidemiology and Biostatistics].* Research Associate, Veterans Administration Normative Aging Study.

Daniel Deykin, M.D., Harvard Medical School. Professor of Public Health [Epidemiology and Biostatistics].* Professor of Medicine, Boston University School of Medicine and Chief, Cooperative Studies Program, Veterans Administration.


Karlin A. Dumbaugh, D.Sc., M.S., Harvard University, M.A., Case-Western Reserve. Adjunct Associate Professor of Public Health [Health Services]. Executive Director, Massachusetts Hospital Research and Educational Association.

Stewart Duncan, Ph.D., A.M., Boston University. Professor of Public Health [Health Services], Environmental Health]. Professor of Biology, Boston University College of Liberal Arts.

Richard H. Egdahl, M.D., Harvard Medical School, Ph.D., University of Minnesota. Professor of Public Health [Health Services]. Director, Boston University Medical Center; Vice Chairman of the Board, University Hospital, Academic Vice President for Health Affairs, Boston University, Professor of Surgery, Boston University School of Medicine; and Director, Boston University Health Policy Institute.

David J. Ekerdt, Ph.D., Boston University. Assistant Professor of Public Health [Social and Behavioral Sciences]. Research Sociologist, Veterans Administration Normative Aging Study.

Victor N. Evdokimoff, Sc.M., Johns Hopkins University, Certified Health Physicist. Adjunct Assistant Professor of Public Health [Environmental Health]. Radiation Protection Officer, Boston University Medical Center.

Robert G. Feldman, M.D., University of Cincinnati. Professor of Public Health [Environmental Health]. Chairman and Professor, Department of Neurology and Professor of Pharmacology, Boston University School of Medicine.

David T. Felson, M.D., Johns Hopkins University, M.P.H., Boston University. Assistant Professor of Public Health [Epidemiology and Biostatistics]. Assistant Professor of Medicine, Boston University School of Medicine.

Marie C. Felton, M.D., University of California at San Francisco, M.P.H., Harvard University. Adjunct Assistant Professor of Public Health [Health Services]. Program Head, Independent Living Primary Care Program; Internist, The Urban Medical Group, Inc.

Neville Rex Edwards Feuillard, M.B., B.S., University College and Hospital, London, D.T.M., University of Edinburgh, M.D., D.P.H., London School of Hygiene and Tropical Medicine. Visiting Professor of Public Health [Health Services]. Professor Emeritus, Liverpool School of Tropical Medicine, United Kingdom.
Terry S. Field, M.S., Indiana University. Instructor in Public Health (Health Services).* Instructor of Socio-Medical Sciences and Community Medicine* and Director of Special Educational Projects, Boston University School of Medicine.

Deborah A. Frank, M.D., Harvard Medical School. Assistant Professor of Public Health (Social and Behavioral Sciences). Assistant Professor of Pediatrics, Boston University School of Medicine.

Robert H. Friedman, M.D., Stanford University. Associate Professor of Public Health (Epidemiology and Biostatistics). Associate Professor of Medicine, and Assistant Research Professor of Neurology, Boston University School of Medicine.

Hugh S. Fulmer, M.D., State University of New York at Syracuse; M.P.H., Harvard University. Adjunct Professor of Public Health (Health Services). Clinical Professor of Medicine, Boston University School of Medicine and Medical Director, Ambulatory and Community Services, Carney Hospital.

Janina R. Galler, M.D., Albert Einstein College of Medicine. Professor of Public Health (Epidemiology and Biostatistics). Professor of Psychiatry; Director, Center for Behavioral Development and Mental Retardation, Boston University School of Medicine.

Arthur J. Garvey, Ph.D., M.Ed., Boston College. Assistant Professor of Public Health (Epidemiology and Biostatistics). Research Statistician, Veterans Administration Normative Aging Study.

John T. Gentry, M.D., Washington University, M.P.H., Harvard University. Adjunct Research Professor of Public Health (Epidemiology and Biostatistics).* President, Gentry Associates.

Donald R. Gillier, M.S., Boston University. Adjunct Assistant Professor of Public Health (Health Services). Director, Marketing and Public Affairs, Boston University Medical Center.

Jerome Glickman, Ed.D., Boston University. Assistant Professor of Public Health (Health Services). Assistant Professor of Socio-Medical Sciences and Community Medicine, Director, Educational Media Support Center, Boston University School of Medicine, and Manager, Television Systems, University Hospital.

Robert J. Glyn, Sc.D., S.M., Brandeis University; M.A., Boston College. Assistant Professor of Public Health (Epidemiology and Biostatistics). Statistician, Epidemiology Unit, Massachusetts Eye and Ear Infirmary.

Willis B. Goldbeck, Adjunct Assistant Professor of Public Health (Health Services). President, Washington Business Group on Health.

Michael A. Grodin, M.D., Albert Einstein College of Medicine. Associate Professor of Public Health (Social and Behavioral Sciences). Associate Professor of Pediatrics, Boston University School of Medicine, and Director of Pediatric Emergency Services at Boston City Hospital.

Jerilyn West Heimold, M.P.H., Boston University. Instructor in Public Health (Epidemiology and Biostatistics). Epidemiologist, Veterans Administration Normative Aging Study.

Charles H. Hennekens, M.D., Cornell University; Dr.P.H., M.P.H., M.S., Harvard University. Adjunct Associate Professor of Public Health (Epidemiology and Biostatistics). Associate Professor of Medicine and Preventive Medicine and Clinical Epidemiology, Harvard Medical School, Brigham and Women's Hospital.

John A. Hermes, M.D., Boston University. Associate Professor of Public Health (Social and Behavioral Sciences).* Associate Professor of Medicine, Boston University School of Medicine, and Staff Physician in Medicine and Chief, Section in Addictive Disorders, Veterans Administration Medical Center.

Theodore H. Ingalls, M.D., Harvard Medical School. Professor of Public Health (Epidemiology and Biostatistics). Emeritus. Director, Epidemiology Study Center, Framingham Union Hospital.

William B. Kannel, M.D., University of Georgia; M.P.H., Harvard University. Professor of Public Health (Epidemiology and Biostatistics). Chief of Preventive Medicine and Epidemiology and Professor of Medicine, Department of Medicine, Boston University School of Medicine.

Jack Kasten, J.D., Boston College; M.P.H., University of Michigan. Adjunct Professor of Public Health (Health Services). Vice President, Arthur D. Little, Inc.

Barbara F. Katz, J.D., Boston University. Adjunct Assistant Professor of Public Health (Health Law). Medical Center Counsel, University of Massachusetts.


William N. Kavesh, M.D., Albert Einstein College of Medicine. Adjunct Assistant Professor of Public Health (Health Services). Associate Professor of Medicine, Boston University School of Medicine; Associate Director, Nursing Home Care Program, The Urban Medical Group, Inc.

Lindsey V. Kayman, S.M., Harvard University. Assistant Professor of Public Health (Environmental Health). Industrial Hygienist, Boston University Medical Center.

Lewis E. Kazis, Sc.D., S.M., Harvard University. Assistant Professor of Public Health (Epidemiology and Biostatistics). Assistant Research Professor of Medicine and Adjunct Assistant Professor of Socio-Medical Sciences and Community Medicine, Boston University School of Medicine.

Donald C. Kern, M.D., Tufts University; M.P.H., Boston University. Assistant Professor of Public Health (Epidemiology and Biostatistics). Assistant Professor of Medicine, Boston University School of Medicine; Associate Director, Boston Geriatric Research, Education, and Clinical Center, Veterans Administration.

Jon M. Kingsdale, Ph.D., University of Michigan. Adjunct Assistant Professor of Public Health (Health Services). Assistant Director, Health Care Reimbursement, Blue Cross of Massachusetts, Inc.

Donald R. Korst, M.D., University of Wisconsin. Professor of Public Health (Epidemiology and Biostatistics). Professor of Medicine, Boston University School of Medicine, Associate Director, Evans General Internal Medicine Group, University Hospital; and Medical Director, John Hancock Alternative Health Delivery Systems.

George A. Lamb, M.D., State University of New York, Upstate. Professor of Public Health (Epidemiology and Biostatistics). Professor of Pediatrics, Boston University School of Medicine, Director, Community Health Services, City of Boston Department of Health and Hospitals.

Joel H. Lamstein, S.M., Massachusetts Institute of Technology. Adjunct Assistant Professor of Public Health (Health Services). President, John Snow, Inc.

Slobodan Lang, M.D., University of Zagreb Medical School; D.Sc., M.P.H., A. Stampar School of Public Health, Zagreb, Yugoslavia. Adjunct Associate Professor of Public Health (Health Services). Associate Professor, Department of Social Medicine and Primary Care, A. Stampar School of Public Health.

Seymour Lederberg, Ph.D., University of Illinois. Adjunct Professor of Public Health (Health Law). Professor of Biology and Associate Dean for Graduate Studies in Biology and Medicine, Brown University.

* Appointment not yet acted on by the Board of Trustees.
Daniel F. Liberman, Ph.D., University of Rochester, M.S., Washington University. Adjunct Assistant Professor of Public Health (Environmental Health). Biobehavioral Assessment Officer, Environmental Medical Service, Massachusetts Institute of Technology.

Joseph S. LoCastro, Ph.D., University of Maryland. Assistant Professor of Public Health (Social and Behavioral Sciences). Assistant Professor of Medicine, Boston University School of Medicine and Clinical Psychologist, Veterans Administration Medical Center.

William I. Malamud, M.D., Boston University. Professor of Public Health (Health Services). Professor of Psychiatry, Boston University School of Medicine.

Thomas W. Mangione, Ph.D., M.A., University of Michigan. Adjunct Associate Professor of Public Health (Epidemiology and Biostatistics, and Social and Behavioral Sciences). Director, Center for Survey Research.

Ann Marshak-Rothstein, Ph.D., University of Pennsylvania. Assistant Professor of Public Health (Environmental Health). Assistant Professor of Microbiology and Director, Hybridoma Laboratory, Hubert H. Humphrey Cancer Research Center, Boston University School of Medicine.

Robert J. Master, M.D., New York Medical College. Assistant Professor of Public Health (Health Services). Medical Director, Medicaid Division, Department of Public Welfare, and physician, The Urban Medical Group, Inc.

Robert J. McCunney, M.D., Thomas Jefferson University Medical School, M.P.H., Harvard University; M.S., University of Minnesota. Adjunct Assistant Professor of Public Health (Environmental Health). Corporate Medical Director, Cabot Corporation and Medical Director, Goddard Occupational Health Services.

Frances H. Miller, J.D., Boston University. Professor of Public Health (Health Law). Professor of Law, Boston University School of Law.

Marc D. Mitchell, M.D., Boston University. Adjunct Assistant Professor of Public Health (Health Services).

Susan D. Monseur, M.D., North Carolina State University. Adjunct Assistant Professor of Public Health (Health Services). Senior Associate, Metcal and Associates, Architects-Planners, Washington, D.C.

Daniel D. Moriarty, M.B.A., Clark University. Adjunct Instructor in Public Health (Health Services).* Vice President, Information Systems Group, John Snow Public Health Group, Inc.

Mark A. Moskowitz, M.D., Albert Einstein College of Medicine. Assistant Professor of Public Health (Epidemiology and Biostatistics, and Health Services). Assistant Professor of Medicine, Boston University School of Medicine.

Laura H. Myers, Ed.D., M.A., Columbia University, M.S.W., University of Connecticut. Adjunct Assistant Professor of Public Health (Social and Behavioral Sciences). Director, College of Professional and Continuing Education, and Adjunct Assistant Professor of Management, Clark University.

Freya Olafson, M.P.H., University of California at Berkeley. Adjunct Assistant Professor of Public Health (Health Services). Chief, Women's Programs Division, The Pathfinder Fund.

A. Mead Over, Jr., Ph.D., M.S., M.A., University of Wisconsin. Associate Professor of Public Health (Health Services). Associate Professor of Economics, Boston University College of Liberal Arts and Research Associate in African Studies, Boston University African Studies Center.

William B. Patterson, M.D., University of Vermont. Assistant Professor of Public Health (Environmental Health). Assistant Professor of Medicine, Boston University School of Medicine and Director, Occupational Health Services, Choate-Symmes Health Services, Inc.

Philip F. Paul, B.S., University of Southern California. Adjunct Assistant Professor of Public Health (Health Services). President, Philip F. Paul Management Consultants, Inc.

Lewis W. Pollack, M.S.P.H., University of North Carolina, M.Ed., Boston University. Adjunct Professor of Public Health (Health Services). Commissioner, City of Boston Department of Health and Hospitals.

Peter Reich, M.P.H., Boston University. Adjunct Instructor in Public Health (Health Services). Director, Public Resource Strategies, Inc.

Joseph D. Restuccia, Dr.P.H., M.P.H., University of California at Berkeley. Assistant Professor of Public Health (Health Services). Assistant Professor of Health Care and Operation Management, Boston University School of Management and Assistant Research Professor of Medicine, Boston University School of Medicine.

Alberto Rizo, M.D., Universidad Nacional de Colombia, Bogota, M.P.H., Royal Dutch Tropical Institute, Amsterdam. Adjunct Associate Professor of Public Health (Health Services). Regional Representative for Latin America (North), The Pathfinder Fund, Bogota, Colombia.

Adrienne E. Rogers, M.D., Harvard Medical School. Professor of Public Health (Environmental Health). Professor of Pathology and Associate Chairman, Department of Pathology, Boston University School of Medicine.

Alan S. Rosenfeld, Ph.D., University of Massachusetts, M.A., Boston College. Adjunct Associate Professor of Public Health (Health Services).* Adjunct Associate Professor, Boston University School of Management, and Director, Regional Operations, University Hospital.

Hugues J. P. Ryser, M.D., Dr. Med., University of Berne, Switzerland. Professor of Public Health (Environmental Health). Professor of Pathology, Pharmacology, and Biochemistry, Boston University School of Medicine.

Does Sampaerno, M.D., University of Indonesia; M.P.H., University of Hawaii. Adjunct Professor of Public Health (Health Services). Professor, University of Indonesia School of Public Health.

Philip E. Sartwell, M.D., Boston University, M.P.H., Harvard University. Adjunct Professor of Public Health (Epidemiology and Biostatistics). Professor Emeritus, Department of Epidemiology, Johns Hopkins University.

Donald J. Scherl, M.D., Harvard Medical School. Adjunct Professor of Public Health (Health Services). President and Professor of Psychiatry, State University of New York, Health Science Center at Brooklyn.

Ascher J. Segall, M.D., University of Lausanne, Switzerland; Dr.P.H. and M.P.H., Harvard University. Adjunct Professor of Public Health (Epidemiology and Biostatistics). Co-director, Center for Educational Development in Health, Boston University Health Policy Institute. On leave 1985–87.


Kazim Sheikh, M.B., B.S., Dow Medical College, University of Karachi, Pakistan; D.I.H., M.F.O.M., University of London. Adjunct Assistant Professor of Public Health (Epidemiology and Biostatistics).* Director of Environmental Epidemiology and Toxicology, Center for Health Promotion and Environmental Disease Prevention, Massachusetts Department of Public Health.

David W. Sparrow, D.Sc., Boston University, M.S., University of Massachusetts. Lecturer on Public Health (Epidemiology and Biostatistics). Epidemiologist, Veterans Administration Normative Aging Study.
Joseph Stokes III, M.D., Harvard Medical School. Professor of Public Health (Epidemiology and Biostatistics). Professor of Medicine, Section of Preventive Medicine and Epidemiology. Evans Department of Clinical Research, Boston University School of Medicine.

Saraswati Swain, M.D., Bihar University, D.P.H., D.M.C.W., Calcutta University, M.B.B.S., Utkal University. Adjunct Professor of Public Health (Health Services). Professor and Head, Department of Social and Preventive Medicine, SCB Medical College, Cuttack Orissa, India.

Judith P. Swazey, Ph.D., Harvard University. Adjunct Professor of Public Health (Social and Behavioral Sciences). President, The Acadia Institute, Bar Harbor, Maine.

Donald S. Taylor, M.S., University of Connecticut. Adjunct Professor of Public Health (Health Services).* Health Science Specialist, Veterans Administration Normative Aging Study.

Ann M. Thornburg, B.B.A., University of Wisconsin. Adjunct Assistant Professor of Public Health (Health Services). Audit Partner, Coopers & Lybrand.

Ralph J. Timperi, Jr., M.P.H., Boston University. Adjunct Assistant Professor of Public Health (Environmental Health). Deputy Director, Center for Laboratories and Communicable Disease Control, Massachusetts Department of Public Health.

Ann K. Tousignant, M.P.H., Yale University. Adjunct Assistant Professor of Public Health (Health Services).

Patricia H. Travers, M.S., R.N., Boston University; M.Sc., Harvard University. Instructor in Public Health (Environmental Health). Consultant, Occupational Health Program, Boston University Medical Center.

Elaine Shepard Ullian, M.P.H., University of Michigan. Adjunct Assistant Professor of Public Health (Health Services). Vice President, New England Medical Center.

Jeannette M. Valentine, Ph.D., Cornell University. Assistant Professor of Public Health (Epidemiology and Biostatistics). Assistant Professor of Pediatrics, Boston University School of Medicine and Director of Health Statistics and Research, Division of Community Health, City of Boston Department of Health and Hospitals.

Hannelore F. Vanderschmidt, Ph.D., Boston College, Ed.M., Harvard University. Adjunct Associate Professor of Public Health (Health Services). Associate Professor of Education, Boston University School of Education and Co-Director, Center for Educational Development in Health, Boston University Health Policy Institute.

Peter W. Van Etten, M.B.A., Harvard University. Adjunct Assistant Professor of Public Health (Health Services). Chief Financial Officer, New England Medical Center.

Barbara H. Vinick, Ph.D., Boston University. Assistant Professor of Public Health (Social and Behavioral Sciences). Research Sociologist, Veterans Administration Normative Aging Study.

Pantel S. Vokonas, M.D., Ohio State University. Associate Professor of Public Health (Epidemiology and Biostatistics). Associate Professor of Medicine, Boston University School of Medicine and Director, Veterans Administration Normative Aging Study.

Bailus Walker, Jr., Ph.D., University of Minnesota; M.P.H., University of Michigan. Adjunct Professor of Public Health (Environmental Health). Commissioner of Public Health, Commonwealth of Massachusetts.

Carl H. Wathne, M.S., Columbia University. Adjunct Assistant Professor of Public Health (Health Services). President, Board of Trustees and Chief Executive Officer, Leominster Health System, Inc.

Michael Weitzman, M.D., State University of New York, Upstate. Associate Professor of Public Health (Health Services). Associate Professor of Pediatrics, Boston University School of Medicine and Medical Director, Maternal and Child Health Services, City of Boston Department of Health and Hospitals.

Dorothy C. Wertz, Ph.D., A.M., Harvard University. Associate Research Professor of Public Health (Social and Behavioral Sciences).

Philip A. Wolf, M.D., State University of New York, Syracuse. Professor of Public Health (Epidemiology and Biostatistics). Professor of Neurology and Research Professor of Medicine, Boston University School of Medicine.

Steffie Woolhandler, M.D., Louisiana State University; M.P.H., University of California at Berkeley. Adjunct Associate Professor of Public Health (Health Services). Physician, The Cambridge Hospital.

Barry S. Zuckerman, M.D., Georgetown University. Associate Professor of Public Health (Social and Behavioral Sciences). Associate Professor of Pediatrics, Boston University School of Medicine.

* Appointment not yet acted on by the Board of Trustees.
The student body of the School of Public Health reflects the policy of selecting a heterogeneous class. Students with diverse skills and backgrounds enrich the courses and contribute to the overall learning experience. The following is a sample of occupations from Public Health classes:

Director of Outpatient Services, Hospital
Research Operations Manager, Neighborhood Health Center
Coordinator of Maternal and Child Health Services, State Department of Public Health
Director of Health, Town
Marketing Coordinator, Health Maintenance Organization
Administrator, Nursing Home
Environmental Consultant
Director of Community Health Education, Hospital
Biohazards Safety Officer, University
Director, Inpatient Psychiatric Service, Mental Health Center
Quality Assurance Coordinator, Environmental Research Company
Supervisor, Physical Therapy Services, Visiting Nurse Association
Assistant General Counsel, State Department of Mental Health
Assistant Research Professor, School of Medicine
Service Representative, Pharmaceutical Company
Director of Service and Rehabilitation, American Cancer Society
Clinical Director, Alcoholism Rehabilitation Program
Health Educator, Nonprofit Organization
Director of Development, Health Maintenance Organization
Executive Director, Emergency Medical Services Corporation
Food Service Director, Hospital
Health Agent, Town Board of Health
Director, Infection Control and Epidemiology, Hospital
Nutrition Consultant
Administrative Manager, Hospital Department
Industrial Hygienist, Private Industry
Certified Public Accountant
Director of Social Services, Hospital

Recent graduates of the School of Public Health celebrate after receiving their diplomas.
Analyst, Insurance Company
Reimbursement Manager, Hospital
Scientist, Environmental Research Company

Research
Public Health students are project directors, analysts, research associates, and research assistants in a multitude of settings and content areas. Settings include hospitals, health maintenance organizations, environmental research companies, health systems agencies, the Department of Public Health, the Department of Environmental Quality Engineering, insurance companies, private consulting companies, medical schools, schools of public health, and local universities. The subject matter varies from highly scientific areas to health services research.

Medicine
Physicians who have been enrolled are from such areas as cardiology, pediatrics, general surgery, hematology, pathology, and endocrinology. Some have specialized in epidemiology and preventive medicine, others are making the transition from private practice to administrative medicine.

The educational backgrounds of the students are varied. The include the following:


Master’s level—M.S.W., M.Sc. (nursing, library science, audiology, biophysics, biology, environmental engineering, physical therapy), M.A. (urban affairs, English, communications science, philosophy, sociology, religion, political science), M.B.A. (accounting, general management), M.P.A., M.Ed.

Baccalaureate level—B.A. and B.S. degrees in liberal arts, science, and health professions.

Boston
Boston has long been recognized as one of the leading health care centers of the world. With more than seventy hospitals in the greater metropolitan area, the health care industry is the largest employer in the city. Twenty-six independent health centers serve the needs of the neighborhood communities. The city is proud of its reputation for operating one of the most efficient medical emergency systems in the country. Being in the forefront of progressive and innovative medical care delivery and research activity, Boston offers public health students a wide variety of opportunities in a dynamic environment.

Boston, the largest city in New England, is a seaport whose character results from a rich blend of historical heritage, active cultural life, and contemporary growth in high technology, medicine, and business. Greater Boston, with more than fifty colleges and universities, remains an unrivaled center of learning. Within the city's compact center are the Boston Common and the Public Garden, Faneuil Hall Marketplace, a host of galleries, Chinatown, and the Freedom Trail, along which are located some of the most important landmarks in U.S. history. The Museum of Fine Arts is open without charge to Boston University students. The Boston Symphony Orchestra, the Opera Company of Boston, and many fine chamber and jazz groups offer annual seasons, as do dance and theatre companies. Boston is also home to the Celtics, New England Patriots, Red Sox, and Bruins.

The Charles River, separating Boston from Cambridge, offers sailing and canoeing, and beaches are a short ride to the north and south by car or public transportation. Local skiing is minutes away in the Blue Hills; for the serious skier, the resorts of New Hampshire and Vermont are only a two-hour drive.

Associate Professor Meyers in his course, Social-Medical Perspectives on Aging and Old Age.
# Academic Calendar

**Boston University**  
**Office of the University Registrar**  
**Official Academic Calendar 1987-88**

## SUMMER I
- Registration begins: Tuesday, April 21, 1987  
- Registration ends, instruction begins: Monday, May 19, 1987  
- Holiday, classes suspended: Tuesday, May 25, 1987  
- End of session: Saturday, June 27, 1987

## SUMMER II
- Registration begins: Tuesday, May 26, 1987  
- Registration ends, instruction begins: Tuesday, June 30, 1987  
- Holiday, classes suspended: Friday, July 3, 1987  
- End of session: Saturday, August 8, 1987

## SEMESTER I
- Registration ends*, instruction begins: Wednesday, September 2, 1987  
- Mid-semester: Saturday, October 17, 1987  
- Registration begins for spring 1988: Monday, November 2, 1987  
- Holiday, classes suspended: Wednesday, November 11, 1987  
- Fall recess—instruction suspended at 12 noon: Wednesday, November 25, 1987  
- Instruction resumes: Thursday, December 10, 1987  
- Instruction ends: Monday, December 14, 1987  
- Final exams begin: Friday, December 11, 1987  
- Final exams end: Tuesday, December 15, 1987  
- Study period: Wednesday, December 23, 1987

## SEMESTER II
- Registration ends*, instruction begins: Monday, January 11, 1988  
- Holiday, classes suspended: Monday, January 18, 1988  
- Mid-semester: Monday, February 15, 1988  
- Spring recess: Saturday, March 5, 1988  
- Instruction resumes: Saturday, March 5, 1988 through Sunday, March 13, 1988  
- Registration for fall 1988: Monday, April 5, 1988  
- Holiday, classes suspended: Monday, April 18, 1988  
- Instruction ends: Wednesday, April 27, 1988  
- Study period: Thursday-Friday, April 28, 29, 1988  
- Final exams begin: Monday, May 2, 1988  
- Final exams end: Tuesday, May 10, 1988  
- Commencement: Sunday, May 15, 1988

*Registration for evening programs and late registration for day programs continue during the first week of classes, September 2-8 and January 11-15.

The University, in scheduling classes on religious holidays, intends that students observing those holidays be given ample opportunity to make up work. Faculty members who wish to observe religious holidays will arrange for another faculty member to meet their classes or for cancelled classes to be rescheduled.  
**NOTE:** Classes will be held on Columbus Day, October 12, 1987.
Getting to Boston University Medical Center

**Legend**

- **A** = Building A (BUSM) (BUSPH)
- **B** = Robinson Building (UH)
- **C** = Collamore Building (UH)
- **D** = Old Evans Building (UH)
- **DOB** = Doctors Office Building (incl. parking garage), 720 Harrison Avenue
- **E** = New Evans Building (UH)
- **F** = Preston Family Building (UH)
- **G** = Goldman School of Graduate Dentistry (GSGD)
- **H** = Health Services Building (UH)
- **K** = Centers for Advancement in Health and Medicine (BUSM)
- **L** = Boston University School of Medicine Instructional Building (BUSM)
- **N** = Naval Blood Research Center (BUSM)
- **PRP** = Site of Partial Replacement Project (UH)
- **R** = Housman Medical Research Center (BUSM)
- **T** = Talbot Building (UH)
- **V** = Vose Hall (UH)
- **=** = Dining Facilities
- **=** = Emergency Services (Ambulance entrance)
- **=** = Entrance
- **=** = Medical Center parking facility

**Via Major Highways**

- **From the North:**
  - Routes 1 (via Mystic/Tobin Bridge) or 93 to Route 3 (93) (Southeast Expressway or Central Artery) South. Take Albany/East Berkeley Street exit. Follow Albany Street, then take a right onto East Newton Street.
  - **From the North Shore and Logan Airport:**
    - Summer Tunnel (Route 1A South) to Expressway South, then take Albany/East Berkeley Street exit. Follow Albany Street, then take a right onto East Newton Street.
  - **From the West:**
    - Take Route 90 (Massachusetts Turnpike) East to end. Take Expressway (Route 93) South to Albany/East Berkeley Street exit. Follow Albany Street, then take a right onto East Newton Street.
  - **From the South Shore:**
    - Take Expressway (Route 3) North to Massachusetts Avenue exit. Take a right onto Massachusetts Avenue, then take first right onto Albany Street. Take a left at second intersection onto East Newton Street.

**Via Public Transportation**

- **Bus #47:**
  - From Central Square, Cambridge, to Boston University Medical Center. Stops at Boston University's Charles River campus. Frequency varies. Operates daily, with limited service on Sundays and holidays.
- **Bus #58:**
  - From Copley Square, Boston, to Boston University Medical Center. Monday through Friday only.
- **Bus #49:**
  - From Downtown (Essex and Washington Streets), via Boston University Medical Center to Northampton Station. Limited service Monday through Sunday.

Because transit schedules are subject to change, we urge you to contact the Massachusetts Bay Transportation Authority for the latest information about schedules and routes. Call 617/722-3200, days, or 722-5657 or 722-5672, evenings and weekends.

University Hospital (UH) at Boston University Medical Center
Boston University School of Medicine (BUSM)
Goldman School of Graduate Dentistry (GSGD)
Boston University School of Public Health (BUSPH)

CIS-84-10 10K BUPS
Highlights of Boston University
Charles River Campus

Schools and Colleges
5. College of Engineering, 110 Cummington St.
   - Henry M. Goldman School of Graduate Dentistry, 100 E. Newton St. (not on map)
7. School of Law, 765 Comm. Ave.
   - School of Medicine, 80 E. Concord St.
   - (not on map)
11. School of Nursing, 635 Comm. Ave.
12. Sargent College of Allied Health Professions, University Rd.
13. School of Social Work, 264 Bay State Rd.

Major Residence Halls
15. Danielsen Hall, 512 Beacon St.
16. Myles Standish Hall, 620 Beacon St.
17. Shelton Hall, 91 Bay State Rd.
   - South Campus (not on map)
19. West Campus, 273-277 Babcock St.

University Facilities
21. Academic Computing Center, 111 Cummington St
22. Admissions (Undergraduate) Visitors' Center, 121 Bay State Rd.
23. Bookstore, 660 Beacon St.
25. Center for English Language and Orientation Programs, 730 Comm Ave.
27. Concert Hall, 855 Comm. Ave.
32. International Student Office, 19 Deierfield St.
34. Martin Luther King Jr. Center for Career, Educational and Counseling Services, 19 Deierfield St.
35. Metcalf Science Center, 590 Comm. Ave.
38. President's Office, 147 Bay State Rd.
40. Student Health Services, 881 Comm. Ave.
41. Students, Dean of, 775 Comm. Ave.
42. Summer Term, 755 Comm Ave.
   - Theatre, 264 Huntington Ave. (not on map)
43. University Information Center, 771 Comm Ave.
44. MBTA Stops

Walking time from Kenmore Square to West Campus Residence Halls is approximately 30 minutes.