

## College of Public Health Course Catalog

Course abbreviation and number ex. PUBHLTH 3550)	Course Title	Credit Hours	Course Description	Prerequisites/Exclusions/Cross Listings
<b>Public Health (PUBHLTH)</b>				
PUBHLTH 1100	Survey of Public Health	1	An introduction to the University community; strategies for successful transition to and participation in that community; information about University resources and procedures; and (4) information about the College of Public Health and its programs.	none
PUBHLTH 2010	Introduction to Global Public Health	3	Public health concepts examining the philosophy, purpose, history, organization, functions, and results of public health practices domestically and internationally. Presents the pressing global public health concerns of the 21st century.	Not open to students with credit for 400. GE soc sci indivs and groups and diversity global studies course.
PUBHLTH 3180	Undergraduate Capstone Preparation	1	The purpose of the class is to prepare undergraduate students in Public Health for their Capstone Experience. Students will learn the critical elements of Public Health Practice and Research as well as professional development skills to prepare them for the workplace and equip them with the tools needed to apply for graduate school.	Jr. standing in BSPH, or Soph standing for students who intend to complete an Honors Research Thesis.
PUBHLTH 3180E	Undergraduate Capstone Preparation	1	Prepares undergraduate students in Public Health for their Capstone Experience. Students will learn the critical elements of Public Health Practice and Research as well as professional development skills to prepare them for the workplace and equip them with the tools needed to apply for graduate school.	Jr. standing in BSPH, or Soph standing for students who intend to complete an Honors Research Thesis.
PUBHLTH 3189.01	Field Experience in Global Public Health: India	3	Global public health concepts and associated metrics; role of cultural, social, economic, and environmental factors on public health in India; instructions in a classroom setting on an Indian campus and through field trips.	English 1110 (110), good academic standing, and completion of minimum 4 semesters (2 academic years) of undergraduate education.
PUBHLTH 3189.01E	Field Experience in Global Public Health: India	3	Global public health concepts and associated metrics; role of cultural, social, economic, and environmental factors on public health in India; instructions in a classroom setting on an Indian campus and through field trips.	English 1110 (110), good academic standing, and completion of minimum 4 semesters (2 academic years) of undergraduate education.
PUBHLTH 3189.02	Field Experience in Global Public Health: China	3	Global public health concepts and associated metrics; role of cultural, social, economic, and environmental factors on public health in China; instructions in a classroom setting on a Chinese campus and through field trips.	Major or minor in Public Health or in health/biology-related areas, or permission of instructor.
PUBHLTH 3189.02E	Field Experience in Global Public Health: China	3	Global public health concepts and associated metrics; role of cultural, social, economic, and environmental factors on public health in China; instructions in a classroom setting on a Chinese campus and through field trips.	Major or minor in Public Health or in health/biology-related areas, or permission of instructor.
PUBHLTH 3189.03	Field Experience in Global Public Health: Japan	3	Global public health concepts and associated metrics; role of cultural, social, economic, and environmental factors on public health in Japan; instructions in a classroom setting on a Japanese campus and through field trips.	English 1110 (110), good academic standing, and completion of minimum 4 semesters (2 academic years) of undergraduate education.

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PUBHLTH 3189.03E	Field Experience in Global Public Health: Japan	3	Global public health concepts and associated metrics; role of cultural, social, economic, and environmental factors on public health in Japan; instructions in a classroom setting on a Japanese campus and through field trips.	English 1110 (110), good academic standing, and completion of minimum 4 semesters (2 academic years) of undergraduate education.
PUBHLTH 3189.04	Field Experience in Global Public Health: Finland and Estonia	3	Global public health concepts and associated metrics; role of cultural, social, economic, and environmental factors on public health in Finland and Estonia; instructions in a classroom setting and through field trips.	none
PUBHLTH 3189.04E	Field Experience in Global Public Health: Finland and Estonia	4	Global public health concepts and associated metrics; role of cultural, social, economic, and environmental factors on public health in Finland and Estonia; instructions in a classroom setting and through field trips.	none
PUBHLTH 3191	Undergraduate Internship in Public Health	2	Placement of BSPH students in a public health agency or related site for supervised practice experience.	Jr. or Sr. standing, enrollment in BS Public Health major, and permission of advisor.
PUBHLTH 3191E	Undergraduate Internship in Public Health	2	Placement of BSPH students in a public health agency or related site for supervised practice experience.	Jr. or Sr. standing, enrollment in BS Public Health major, and permission of advisor.
PUBHLTH 3193	Individual Studies in Public Health	1-3	Individual study in a public health topic approved by and under the guidance of a faculty advisor.	Permission of faculty advisor.
PUBHLTH 3194	Group Studies in Public Health	1-6	Group studies in selected areas of Public Health.	Permission of instructor.
PUBHLTH 3550	Special Topics in Public Health	1-6	Regular class on topics that are relevant to students enrolled in programs in the College of Public Health undergraduate program.	Enrollment as a Public Health major or pre-major, or permission of instructor.
PUBHLTH 3999	Undergraduate Capstone Research in Public Health	2	The goal of the Undergraduate Public Health Research Experience Capstone is to provide Public Health students with opportunities to apply public health principles outside of a typical classroom setting and build on public health coursework. This course allows students the opportunity to integrate classroom experiences and principles in an applied research setting.	PUBHLTH 3180.
PUBHLTH 4998	Undergraduate Research in Public Health	1-6	Undergraduate research under the guidance of a faculty mentor in a basic or applied area of public health.	Jr. or Sr standing, and enrollment in BSPH major, and permission of advisor.
PUBHLTH 4999.01H	Senior Honors Thesis	1-3	An independent senior thesis course with faculty advisor; subject matter will vary depending upon student's topic. At least two semesters are required for the BSPH degree with research distinction. Failure to receive a mark of S in this course is a disqualification for special honors.	Honors standing and permission of the instructor.
PUBHLTH 5760	Public Health Informatics	3	Introduction to the emerging and interdisciplinary field of Public Health Informatics. This course will highlight the history, current and future use of informatics in the public health settings, and give students an understanding of the role and broad application of informatics to promoting health and preventing disease.	Cross listed in BMI
PUBHLTH 6000	Introduction to Global Health	2	Overview of current and emerging global health issues, their determinants, actions, and interventions.	Open to Grad students with registration priority for students enrolled in Interdisciplinary Global Health Specialization. Not open to students with credit for 600.
PUBHLTH 6010	Essentials of Public Health	3	An overview of the history and philosophy of public health, and the fundamental principles, concepts, and tools used in promoting the health of populations. The course is intended to orient students to the breadth of the field and introduce cross-specialization perspectives on major issue and problems in public health	Enrollment in Public Health Master's or PhD program, or permission of instructor

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PUBHLTH 6189.01	Field Experience in Public Health	1-6	Placement in a public health agency or related site for supervised practice experience.	Enrollment in Public Health degree program, and permission of the instructor.
PUBHLTH 6189.02	Field Experience in Global Health	1-6	Placement in a public health agency or related site for supervised international practice experience.	Enrollment in Public Health degree program, and permission of the instructor.
PUBHLTH 7000	Public Health in Developing Countries	3	Overview of core public health principles and practices applied to global health issues.	PUBHLTH 6000; open to all Grad and professional students with registration priority for students enrolled in the Graduate Interdisciplinary Global Health specialization. Not open to students with credit for 700.
PUBHLTH 7040	Public Health Organization	3	Review of the historical background leading to the evolution of public health with a focus on the contemporary practice of public health; a review of current policy and practice; and, an outlook for the future of public health.	none
PUBHLTH 7189	Practicum in Public Health	1-6	Placement in a public health agency or related site for supervised practice experience.	Enrollment in Public Health degree program, and permission of the instructor.
PUBHLTH 7191	Internship	1-6	Placement in an agency or related site for supervised practice experience.	Enrollment in Public Health degree program, and permission of the instructor.
PUBHLTH 7350.01	Topics in Applied Public Health Practice: General	1-3	The foundation of the course includes theory and applications relevant to specific rubrics of applied public health practice, with a theme of general public health practice.	none
PUBHLTH 7350.02	Topics in Applied Public Health Practice: Leadership	1-3	Includes theory and applications relevant to specific rubrics of applied public health practice, with a theme of public health management and leadership.	none
PUBHLTH 7350.03	Topics in Applied Public Health Practice: Res Tools	1-3	Includes theory and applications relevant to specific rubrics of applied public health practice, with a theme of public health research tools.	none
PUBHLTH 7998	Culminating Project in Public Health	1-3	Final project for MPH degree that can be a research report, program evaluation or grant proposal. Students should see division specific requirements.	Enrollment in MPH degree program, and permission of instructor.
PUBHLTH 7999	Thesis Research in Public Health	1-12	Research for master's students: Thesis research.	Enrollment in MS degree program, and permission of instructor.
PUBHLTH 8998	Pre-Candidacy Research in Public Health	1-12	Independent research for doctoral students: pre-candidacy.	Enrollment in PhD program.
PUBHLTH 8999	Post-Candidacy Research in Public Health	1-12	Independent research for doctoral students: post-candidacy.	Enrollment as PhD Candidate in Public Health Program.
<b>Public Health: Biostatistics (PUBHBIO)</b>				
PUBHBIO 2210	Biostatistics for Public Health Research	3	Hands-on experience using statistical tools to answer real-world questions. Students will design and implement a short survey and analyze their results. Emphasis on analysis of actual survey data using statistical software. Statistical topics include numerical/graphical summaries, measures of association, and hypothesis testing. Focus is on interpretation, not calculation.	STAT 1350 (135) or STAT 1450 (145), or equivalent; or permission of instructor.
PUBHBIO 2210H	Honors Biostatistics for Public Health Research	3	Hands-on experience using statistical tools to answer real-world questions. Students will design and implement a short survey and analyze their results. Emphasis on analysis of actual survey data using statistical software. Statistical topics include numerical/graphical summaries, measures of association, and hypothesis testing. Focus is on interpretation, not calculation.	Honors standing, STAT 1350 (135) or STAT 1450 (145), or equivalent; or permission of instructor.

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PUBHBIO 5280	Introduction to Genomic Data Analysis	2	Provides an in-depth analysis of a specific question to which genomic methods are applied. Intersperses experimental methods and statistical analysis of biological data. Some experience with programming is recommended.	Jr. standing or above, and Math 1151 or 1156, STAT2450 or 2480, and Biology 1113 or MolGen 5660, or Grad standing; or permission of instructor.
PUBHBIO 6210	Design & Analysis of Studies in the Health Sciences I	3	Theory and application of basic statistical concepts for design of studies in health sciences, integrated with statistical software applications.	Grad standing in PUBHLTH, or enrollment in MACPR program or permission of instructor. Not open to students with credit for 701
PUBHBIO 6211	Design & Analysis of Studies in the Health Sciences II	3	A second course in applied biostatistical methods with an emphasis on regression methods commonly used in the health sciences. The focus is on linear regression and ANOVA. Integrated with use of computer statistical packages.	Grade of B- or above in 6210 (701), or permission of instructor. Not open to student with credit for 702.
PUBHBIO 6212	Regression Methods for the Health Sciences	3	Regression models for three problems: repeated measures data, logistic regression and time-to-event analysis. Hypothesis tests, evaluating assumptions, confounding, selection of predictors. Illustrated with real data sets and analysis assignments.	Grade of B- or above in 6211 (702), or in both STAT 6410/6910 (641) and 6450/6950 (645), or permission of instructor. Not open to students with credit for 703.
PUBHBIO 6270	Introduction to SAS for Public Health Students	2	Introduction to programming using SAS software to accomplish public health data management and analysis.	Grad standing in PUBHLTH, or permission of instructor. Not open to students with credit for 604, STAT 5740, or 6740.
PUBHBIO 6280	Practical Biostatistics for Biomedical Laboratory Researchers	3	Introduction to statistical principles and methods appropriate for experimental laboratory data with applications in biomedical sciences. Intended for students in the IBGP	Enrollment in the Integrated Biomedical Graduate Program (IBGP), or permission of instructor. Not open to students with credit for 610 (701x) or 6211 (702x).
PUBHBIO 7193	Individual Studies in Biostatistics	1-6	Independent study in Biostatistics.	Permission of instructor.
PUBHBIO 7194	Group Studies in Biostatistics	1-3	Group studies in biostatistical methods. Format will include lectures, readings, presentations and discussions in an area of special interest to students and faculty.	Permission of instructor.
PUBHBIO 7215	Design and Analysis of Clinical Trials	2	Design, monitoring, and analysis of clinical trials; includes protocol development, randomization schemes, sample size methods, and ethical issues.	Prereq: Stat 5301, or PUBHBIO 6210, or equiv; or permission of instructor.
PUBHBIO 7220	Applied Logistic Regression	3	Theoretical and practical training in statistical modeling of a categorical response variable; conditional and unconditional models, assessment of model performance, determination of scale.	Grade of B- or above in 6211 (702xx). Not open to students with credit for STAT 6510.
PUBHBIO 7225	Survey Sampling Methods	3	Sampling from finite populations, simple random, stratified, systematic and cluster sampling design, ratio and regression estimates, non-sampling errors, models.	PUBHBIO 6211 (703), or Stat 5301 (529) or equiv.
PUBHBIO 7230	Applied Longitudinal Data Analysis	3	Statistical models and methods for the analysis of data arising from longitudinal studies with repeated measurements on subjects over time.	Prereq: 6211, or Stat 6450, or Stat 6950
PUBHBIO 7235	Applied Survival Analysis	3	Introduction to time-to-event data analysis. Kaplan-Meier estimation, log rank tests, proportional hazards regression analysis for censored or truncated data with extensions to time-dependent covariates and model building.	6211, STAT 6450, or 6950. Not open to students with credit for STAT 6605 (PUBHBIO 605).
PUBHBIO 7240	Applied Statistical Analysis with Missing Data	3	Models and methods for the dataset with missing values, including imputation, likelihood-based, and Bayesian models.	Prereq: 6211 (703), or Stat 6201, or Stat 6302, or Stat 6802 (622), or Stat 6302, or Stat 6450, or Stat 6950, or permission of instructor.
PUBHBIO 7245	Biostatistical Collaboration	2	Basic biomedical research methodologies; collaborate with biomedical researchers to design experiments and plan analyses; protocol preparation; professional skills development; statistical report preparation.	Not open to students with credit for STAT 7755 (PUBHBIO 709). Cross-listed in Stat 7755 (Biostat 709).
PUBHBIO 7250	Special Topics	1-6	Regular class on special topics in biostatistics. Format will include lectures, readings, presentations and discussions in an area of special interest to students and faculty.	Permission of instructor.

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PUBHBIO 7255	Introduction to Causal Inference in Health Science Research	3	This is an introduction course to the commonly used statistical methods for casual inference. The course starts with potential outcome framework as the conceptual foundation for inferring causality.	B- or higher in PUBHBIO 6211, or permission of instructor
PUBHBIO 7899	Seminar in Biostatistics	1-3	Seminar on topics that are relevant to students enrolled in programs in the Division of Biostatistics.	Grand standing in Public Health and permission of instructor.
PUBHBIO 8230	Advanced Longitudinal Data Analysis	3	Classical and modern statistical approaches for continuous and discrete longitudinal data. Random effects and growth curve models, measurement error, generalized estimating equations, estimation with missing data, multivariate longitudinal data.	STAT 6802 (622) and 6950 (645). Not open to students with credit for STAT 7470 (726)
PUBHBIO 8235	Advanced Regression Modeling of Time-to-Event Data	3	Advanced topics in survival analysis. Proportional hazards models, parametric regression models, length-bias and prevalent sampling, multivariate survival analysis, counting processes, recurrent events.	STAT 6802 (622) and 6950. Not open to students with credit for 706 or STAT 7605. Cross-listed with STAT 7605.
PUBHBIO 8450	Stochastic Epidemic Models	3	Introduces the basic methods for analyzing large population epidemic data from the viewpoint of the stochastic processes theory. The course will cover the basic SIR (susceptible-infective-removed) epidemic models both under the homogenous and restricted contact structures.	STAT 6801, 6540 or 7540; or permission of instructor.
PUBHBIO 8999	Doctoral Seminar	1-3	Seminar for doctoral students in Biostatistics.	Permission of instructor.
<b>Public Health: Environmental Health Sciences (PUBHEHS)</b>				
PUBHEHS 3310	Current Issues in Global Environmental Health	3	Fundamental concepts and principles of environmental health are presented through a critical review and discussion of current issues in global environmental health.	none
PUBHEHS 3320	Fundamentals in Environmental Health Risk Assessment	3	The scientific process used by governmental agencies to evaluate public health threats due to environmental contamination. An orientation to the fundamental and applied components of risk assessment including: hazard identification, toxicology/dose-response, exposure assessment, and risk characterization.	none
PUBHEHS 4530	Food Safety and Public Health	2	Principles and practice of food safety; transmission, inactivation and control of foodborne pathogens, hazards, toxins and allergens; risk assessment, sanitation, and pest control in foods.	Cross listed in FDSCTE 4536
PUBHEHS 5315	Principles of Toxicology	3	Fundamentals of dose-response, exposure, disposition and biotransformation of chemicals in mammalian systems; actions of toxicants in major organ systems.	Not open to students with credit for 732.
PUBHEHS 5320	Climate Change and Human Health	3	Recognize current controversies about climate change, summarize the evidence about climate change on human health, and identify major human diseases associated with climate change.	Not open to students with credit for 794.
PUBHEHS 5325	Principles of Occupational Health Science	3	Principles and practice of occupational health, including, among other topics, a history of the discipline and in-depth consideration of occupational hazards and risks, including types, sources, exposures and health impacts.	Not open to students with credit for 830.
PUBHEHS 5395/ENVENG 5195	Engineering Design for Environmental health	3	Students in this course will learn how to incorporate health information into the engineering design process. This material complements risk assessment by focusing on the design of engineering systems. Course will discuss balancing financial, health, performance, and other considerations. Quantitative analysis will be conducted in soil, water, air, buildings, and occupational health scenarios.	Prereq: Math 1151,1161.01, or 1161.02, and Chem 1210 or 1250, and enrollment in the CivilEn, EnvEng, or PubHEHS major program; or grad standing; or permission of instructor.

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PUBHEHS 6300	Environmental Health Science Issues in Health Administration	1.5	In this course, we will consider environmental health sciences as a cornerstone to public health	Enrollment in HSMP-MHA, or permission of instructor
PUBHEHS 6305	Principles of Environmental Health for Professionals	3	Survey of environmental influences on human health and strategies for prevention.	Enrollment in the MPH program.
PUBHEHS 6310	Principles of Environmental Health Science	3	Survey of environmental influences on human health and strategies for prevention considering source emissions, environmental fate and transport, human exposure, dose, and biological effects.	Not open to students with credit for 731.
PUBHEHS 6315	Advanced Environmental Health Science	3	Survey of environmental influences on human health and strategies for prevention considering source emissions, environmental fate and transport, human exposure, dose, and biological effects.	Enrollment in the EHS program and Grad standing.
PUBHEHS 6320	Global Health and Environmental Microbiology	3	Fundamentals and emerging issues of health significant microorganisms (bacteria, viruses, protozoa) from water, air, soil and food, and their sources, transmission routes, treatments, detection methods and study tools.	Not open to students with credit for 730. Cross listed in FdScTe
PUBHEHS 7193	Individual Studies in Environmental Health Sciences	1-6	Individual studies in Environmental Health Sciences focusing on applied topics.	none
PUBHEHS 7194	Group Studies in Environmental Health Sciences	1-3	Group studies in Environmental Health Sciences.	none
PUBHEHS 7330	Principles of Exposure Assessment	3	Introduction to concepts of routes of exposure, intake, uptake, dose, exposure modeling and data collection. Focus is on exposure assessment in environmental and occupational epidemiology.	Not open to students with credit for 832.
PUBHEHS 7340	Environmental Law and Policy for Public Health	3	Basic concepts of environmental law and policy relevant to public health practice.	Not open to students with credit for 736.
PUBHEHS 7350	Special Topics in Environmental Health Sciences	1-3	Opportunity for students to pursue a particular environmental health interest that is not available through existing topical offerings.	none
PUBHEHS 7360	Water Contamination: Sources and Health Impact	3	Topics focus on understanding the sources, the transport mechanisms and the fate of microbial and chemical contaminants in water, human exposure risks, tracking methods, linking to other environmental matrices and the public health impacts.	Not open to students with credit for 729.
PUBHEHS 7365	Principles of Risk Assessment	3	Introductory course that includes discussion of a variety of topics in human exposure and related risk assessment.	Not open to students with credit for 831.
PUBHEHS 7380	Exposure Science Monitoring Techniques	3	Environmental health science is a multidiscipline profession focusing mainly on public (human) health issues related to food/water/beverage sanitation, and water, air and land contamination and pollution. Emphasis on the principles and practices of human exposure monitoring of contaminants in air, water, soil, and food including field sampling, analytical instrumentation, and methods.	none
PUBHEHS 7390	Major Human Diseases in Global Public Health	3	Public health is focused on preventing illnesses and injuries or intervening to decrease the impact to populations of people. Emphasize on basic physiology, pathophysiology, and clinical evaluation of major human diseases that have significant global public health impact epidemiologically, politically, and economically with a focus on disease causes and prevention.	none
PUBHEHS 7899	Seminar in Environmental Health Sciences	1-3	Seminar on topics that are relevant to students enrolled in programs in the division of environmental health sciences.	none
PUBHEHS 8340	Molecular Techniques for Environmental Health Sciences	3	Practical introduction to molecular techniques, as applied to research in environmental health sciences.	Not open to students with credit for 835.

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PUBHEHS 8899	Doctoral Seminar in Environmental Health Sciences	1-3	Doctoral level seminar on topics that are relevant to students enrolled in the PhD program in health environmental health sciences.	none
<b>Public Health: Epidemiology (PUBHEPI )</b>				
PUBHEPI 2410	Introduction to Epidemiology	3	Introduction to the study of public health; history, methods, applications, and issues in epidemiology.	none
PUBHEPI 3410H	Honors Case Studies in Public Health	3	This is an advanced undergraduate course in epidemiology that is designed for Honors students in Public Health or a related field. Students will learn about how epidemiology is used in the field of Public Health through a case study approach.	Honors standing, and 2410.
PUBHEPI 4410	Social Epidemiology	3	This is an advanced undergraduate course in epidemiology that presents students with the latest information about how social factors relate to disease outcomes. Students will learn about how epidemiologists measure social factors and then use these measures to study the relation between social factors and risk for different infectious and chronic diseases.	2410
PUBHEPI 4432	Injury: A Public Health Problem	3	This introductory course in injury prevention & control is designed primarily for upper-division undergraduates. Students will be exposed to/learn to develop skills such as summarizing research findings, translating & communicating these findings to an identified audience, & utilizing policy & advocacy for initiating public health change as it relates to injury prevention and control.	2410, and PubHHBP 3510; or permission of instructor.
PUBHEPI 5411	Outbreak Investigations	3	Principles and practice of field epidemiology, including outbreak investigation and disease surveillance.	2410, or Grad Standing, or permission of instructor.
PUBHEPI 5412	Infectious Diseases in the Developing World	3	Introduction to the study of infectious diseases in the developing world. Recommended: 2410.	Not open to students with credit for 718.
PUBHEPI 5420	Infectious Disease Modeling in Humans and Animals	3	Provides an introduction to computer models of infectious diseases and their applications. It includes lecture and laboratory and focuses on applications rather than mathematical theory.	Jr. or Sr. standing, or Grad standing; or permission of instructor.
PUBHEPI 5421	Mathematics of Infectious Disease Dynamics	3	Provides an introduction to mathematical modeling of infectious diseases, including techniques for building and analyzing disease models, and discussions of calibration and comparison of models with data. This course is intended for graduate students in public health or other related disciplines and for upper level undergraduate and graduate mathematics students.	Math 1152, 1172, or 153; or permission of instructor.
PUBHEPI 5438	Cardiovascular Disease Epidemiology	3	Introduction to the epidemiology of cardiovascular disease; risk factors, specific diseases, diagnostic procedures; review of classic and current studies.	2410, 6410, or 6430; or permission of instructor. Not open to students with credit for 817.
PUBHEPI 6400	Epidemiology for Experienced Health Professionals	3	Introduction to the nature and scope of epidemiology; survey of basic epidemiological methods and their application to selected acute and chronic health problems. For experienced health professionals.	Enrollment in MPH-PEP program, or permission of instructor. Not open to students with credit for 6410 and 6420.
PUBHEPI 6410	Principles of Epidemiology	3	Introduction to the nature and scope of epidemiology; survey of basic epidemiological methods and their application to selected acute and chronic health problems. For non-majors.	Not open to students with credit for 6430.

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PUBHEPI 6411	Biological Basis of Public Health	3	Molecular and epidemiologic evidence of biological mechanisms in major diseases of concern for public health.	Grad standing in Public Health, or permission of instructor. Not open to students with credit for 704.
PUBHEPI 6412	Basic Principles in Clinical and Translational Science	2	Identification of clinical and translational research issues, assessment of the literature, ethically responsible research, cross-disciplinary training and mentoring.	Enrollment in MPH-CTS program, or permission of instructor.
PUBHEPI 6413	Conducting and Communicating Research in Clinical and Translational Science	2	Design and writing of protocol, study methods and implementation, community engagement, informatics, translational teamwork. Scientific communication skills and dissemination of clinical and translational science.	Enrollment in MPH-CTS program, or permission of instructor.
PUBHEPI 6414	Scientific Writing for Biomedical and Clinical Scientists	1	Writing for the peer-reviewed literature in clinical and translational science.	Enrollment in MPH-CTS program, or permission of instructor.
PUBHEPI 6415	Nutrition in Public Health	3	Relationships between dietary intake and diseases affecting the public health.	6410 or 6430, or permission of instructor.
PUBHEPI 6430	Epidemiology I	4	Introduction to the nature and scope of epidemiology; survey of basic epidemiological methods and their application to selected acute and chronic health problems. Lecture and laboratory sessions.	Enrollment in MPH-Epidemiology, or any Public Health MS or PhD program, or permission of instructor.
PUBHEPI 6431	Design & Implementation of Health Surveys	3	Introduction to health survey methods, with public health applications.	6410 or 6430, or permission of instructor. Not open to students with credit for 705.
PUBHEPI 6432	Injury Epidemiology	2	Introduction to injury epidemiology; historical context, trends, research methods and issues; survey of areas of injury epidemiology and prevention.	6410 or 6430, or permission of instructor. Not open to students with credit for 714.
PUBHEPI 6434	Tuberculosis: A Public Health Issue	1	Epidemiology of tuberculosis in the United States and internationally.	6410 or 6430, or permission of instructor. Not open to students with credit for 717.
PUBHEPI 6435	Chronic Disease Epidemiology	3	Survey of the epidemiology of chronic diseases, including cancer, heart disease, stroke, diabetes mellitus, chronic obstructive pulmonary disease, and neurodegenerative diseases.	6410 or 6430, or permission of instructor. Not open to students with credit for 814.
PUBHEPI 6436	Infectious Disease Epidemiology	3	Introduction to the epidemiology of infectious diseases, with focus on basic methods for investigation, control, and prevention of communicable disease.	6410 or 6430, or permission of instructor. Not open to students with credit for 815.
PUBHEPI 6437	Cancer Epidemiology	3	Epidemiology of cancer, including etiology, risk factors, neoplastic processes, screening, control; application of statistical methods; molecular genetic basis of carcinogenesis.	6410 or 6430, or permission of instructor. Not open to students with credit for 816.
PUBHEPI 6440	Reproductive and Perinatal Epidemiology	3	Epidemiology of reproductive and perinatal health and methodologic challenges unique to this area.	6410 or 6430, or permission of instructor. Not open to students with credit for 820.
PUBHEPI 6441	Women's Health Issues	3	Overview of issues related to women's health from epidemiological and behavioral perspectives.	6410 or 6430, or permission of instructor. Not open to students with credit for 818.
PUBHEPI 7193	Individual Studies in Epidemiology	1-6	Individual Studies in Epidemiology.	Permission of instructor.
PUBHEPI 7194	Group Studies in Epidemiology	1-3	Group Studies in Epidemiology.	Permission of instructor.
PUBHEPI 7410	Epidemiology II	4	Design of epidemiologic studies including cross-sectional studies, case-control studies, cohort studies, clinical trials, and group-randomized trials.	6430, or permission of instructor. Not open to students with credit for 711.
PUBHEPI 7411	Epidemiology in Environmental Health	3	Principles and application of epidemiologic methods in the investigation and control of health problems stemming from environmental hazards	6430, or permission of instructor.
PUBHEPI 7412	Principles and Procedures for Human Clinical Trials	3	Principles and procedures for clinical professionals in the design, conduct and analysis of human clinical trials.	7410 and PUBHBIO 6211, or permission of instructor. Not open to students with credit for 715.
PUBHEPI 7430	Epidemiology III	4	Analysis and interpretation of data from case-control and cohort studies and from clinical trials.	7410 and 6211, or permission of instructor. Not open to students with credit for 712.



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PUBHEPI 7431	Epidemiologic Methods	3	Critique and justification for methods of designing, analyzing and interpreting epidemiological data; social, historical and philosophical foundations of epidemiologic methods.	7430 and 6212, or permission of instructor. Not open to students with credit for 810.
PUBHEPI 7450	Topics of Epidemiology	1-6	Regular class on topics that are relevant to students enrolled in programs in the Division of Epidemiology.	Enrollment in Public Health, Grad standing, and permission of instructor.
PUBHEPI 7830	Phytochemicals in Human Health: Crops to the Clinic	3	Covers the function and control of phytochemicals in plants, the function of phytochemicals in human health, delivery of phytochemicals through foods in the diet, strategies when designing studies examining foods for health, and policy and sustainability considerations.	Biochem 4511 (511) or 5613 (613), or equiv; or permission of instructor. Not open to students with credit for FdScTe 7810.
PUBHEPI 7899	Seminar in Epidemiology	1-3	Seminar on topics that are relevant to students enrolled in programs in the Division of Epidemiology.	Enrollment in Public Health, Grad standing, and permission of instructor. Not open to students with credit for 850.
PUBHEPI 7998	Culminating Project Seminar	1	The goal of this course is to facilitate students through the process of developing their culminating project. By the end of the semester, it is expected that students will have submitted their culminating project proposals and literature reviews, culminating project approval form, and their application to the IRB and other review boards as needed.	Enrollment in MPH program in Epidemiology.
PUBHEPI 8411	Epidemiology of Obesity	3	Prevalence, trends, risk factors, measurement, outcomes and issues related to obesity; critical reading and discussion of research on epidemiology of obesity.	7410 and PUBHBIO 6211, or permission of instructor. Not open to students with credit for 819.
PUBHEPI 8413	Molecular Epidemiology of Infectious Diseases	3	Provides students with the knowledge and skills to study disease outbreaks in humans and animals using molecular biology techniques. Recommended basic knowledge of infectious diseases and molecular biology.	Permission of instructor. Not open to students with credit for VetPrev 700 or 724.
PUBHEPI 8430	Epidemiology IV	1-4	Students will gain hands-on experience working with data from existing epidemiological studies. Through structured projects, students learn to develop appropriate research questions, and analyze, interpret, and present their results.	7430 and PUBHBIO 6212, or permission of instructor.
PUBHEPI 8899.01	Doctoral Seminar in Epidemiology: Research Methods	1-3	Seminar for doctoral students in epidemiology with a focus on critically reviewing research articles.	Enrollment in PhD program.
PUBHEPI 8899.02	Doctoral Seminar in Epidemiology: Teaching Methods	2	Seminar for doctoral students in epidemiology with a focus on teaching methods.	Enrollment in PhD program.
PUBHEPI 8899.03	Introductory Doctoral Seminar in Epidemiology	1	Designed for PhD students in the Division of Epidemiology. During the course of two semesters, students will be introduced to the faculty in Epidemiology and learn about their research programs and read important papers in the field of Epidemiology. Through these activities, students will be introduced to the philosophy and practice of epidemiology.	Enrollment in Public Health PhD program.
<b>Public Health: Health Behavior and Health Promotion (PUBHHBP)</b>				
PUBHHBP 3510	Role of Behavioral in Public Health	3	Introduction to concepts of health behavior and its role in public health; social determinants of health; applications to selected community health problems and issues.	none
PUBHHBP 5520	Public Health in Action	2	Directed service learning group project in partnership with a public health agency.	Enrollment in Public Health, and Grad standing; or permission of instructor. Not open to students with credit for 860.
PUBHHBP 6510	Preventing Disease and Promoting Health through Behavioral Science	3	Examination of behavioral and social science concepts as the basis for public health practice; topics include transferring knowledge, motivating and aiding behavior change efforts, and working with the community.	Grad standing, and enrollment in Public Health program. Not open to students with credit for 720.

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PUBHHBP 6515	Advanced Preventing Disease and Promoting Health through Behavioral Science		This course will address the philosophical underpinnings, health behavior theories, and strategies for effective behavioral and social change efforts in public health	Enrollment in the College of Public Health graduate program with a specialization in Health Behavior and Health Promotion.
PUBHHBP 7193	Individual Studies in Health Behavior and Health Promotion	1-6	Individually designed study of selected topics in health behavior and health promotion.	Permission of the instructor.
PUBHHBP 7520	Community Health Assessment	2	Models of community health assessment; skills in identifying, analyzing and integrating information concerning community resources and needs.	Enrollment in Public Health, and Grad standing; or permission of instructor.
PUBHHBP 7522	Program Planning and Implementation	3	Planning and implementation of programs to address public health issues in defined populations; development of a health promotion program for a specific community partner.	Enrollment in Public Health, or Grad standing; or permission of instructor. Not open to students with credit for 827.
PUBHHBP 7528	Foundations of Professional Practice in Health Promotion	2	Professional practice settings and expectations for health promotion; application of health promotion theories and perspectives to community problems.	Enrollment in Public Health, and Grad standing; or permission of instructor
PUBHHBP 7532	Program Evaluation in Public Health	3	Examination of evaluation models for public health programs; exploration of philosophical and scientific issues in evaluation; and skill building in both qualitative and quantitative evaluation methods.	Enrollment in Public Health, and Grad standing; or permission of instructor.
PUBHHBP 7534	Research Methods in Health Behavior and Health Promotion	3	Social science research methods emphasizing methods used to assess the dimensions of health-relevant behaviors and community-based prevention research.	Enrollment in Public Health, and Grad standing; or permission of instructor.
PUBHHBP 7542	Settings and Special Populations in Health Promotion	3	Critical characteristics of principal settings in which health promotion interventions occur and populations to which they apply such as youth, elderly, racial and ethnic minorities.	Enrollment in Public Health, and Grad standing; or permission of instructor. Not open to students with credit for 822
PUBHHBP 7544	Fundamental Determinants of Population Health and Implications for Public Health	3	Presents the ideas that population health is determined by factors outside of health care and individual behavior occurs within a social context.	Enrollment in Public Health, and Grad standing; or permission of instructor. Not open to students with credit for 830.
PUBHHBP 7550	Special Topics in Health Behavior and Health Promotion	1-6	Regular class on topics that are relevant to students enrolled in programs in the Division of Health Behavior and Health Promotion.	Grad standing.
PUBHHBP 7552	Substance Abuse Prevention	2	History of substance abuse prevention efforts; theoretical foundations and elements of successful programs.	Enrollment in Public Health, and Grad standing; or permission of instructor. Not open to students with credit for 826.
PUBHHBP 7554	Cancer Behavioral Science	2	Overview of behavioral issues associated with cancer at the individual and community levels.	Enrollment in Public Health, and Grad standing; or permission of instructor. Not open to students with credit for 828.
PUBHHBP 7558	Social-Ecological Strategies in Prevention	2	Community health promotion strategies using policy, systems, and environmental change perspectives.	Enrollment in Public Health, and Grad standing; or permission of instructor. Not open to students with credit for 858.
PUBHHBP 7562	Theoretical Approaches to Health Behavior Change in Public Health Applications	2	Major theories drawn from social and behavioral science literature, pertinent to understanding and addressing problems in health behavior.	Enrollment in Public Health, and Grad standing; or permission of instructor.
PUBHHBP 7564	A Public Health Approach to Adolescent Health	2	Focuses on the health of adolescents in the United States. Emphasis is on	none
PUBHHBP 7570	Obesity, A Multidisciplinary Approach	2	This course examines the context, causes, and consequences of obesity in the United States today. We will begin with an examination of trends in obesity and a description of the scope of the program. Next, the course will examine physiological, psychological, sociological, and economic factors that contribute to the obesity problem.	Cross listed in HDFS

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PUBHHBP 7899.01	Seminar: Culminating Project I	1	The purpose of the culminating project is to provide students with the opportunity to integrate and synthesize knowledge and experience obtained during their academic course of study. Most culminating projects focus on: (A) Community assessment; (B) Program planning and implementation; (C) Program evaluation or (D) Other projects as approved by your advisor.	Open only to MPH Health Behavior Health Promotion students preparing for their culminating project.
PUBHHBP 7899.02	Seminar: Culminating Project II	1	The purpose of the culminating project is to provide students with the opportunity to integrate and synthesize knowledge and experience obtained during their academic course of study. Most culminating projects focus on: (A) Community assessment; (B) Program planning and implementation; (C) Program evaluation or (D) Other projects as approved by your advisor.	Open only to MPH Health Behavior Health Promotion students preparing for their culminating project.
PUBHHBP 8562	Advanced Theory of Health Behavior Change in Public Health Applications	2	In-depth examination of theories pertinent to health behavior including history and critique of theoretical approaches.	Prereq or concur: 7562.
PUBHHBP 8899.01	First Year Doctoral Seminar in HBHP	1	Seminar concerning academic and professional development topics for Ph.D. students, with a focus on selecting research topics, reviewing research, course development, and other topics.	Enrollment in Health Behavior and Health Promotion Ph.D. Program.
PUBHHBP 8899.02	Second Year Doctoral Seminar in HBHP	1	A seminar for Ph.D. students in Health Behavior and Health Promotion emphasizing the selection and development of research projects including proposing preparation and funding sources.	Enrollment in PUBHHBP Ph.D. Program.
<b>Public Health: Health Services Management and Policy (PUBHHMP)</b>				
PUBHHMP 3650	Health Economics for Health and Policy Students	3	This course is designed to provide an intuitive understanding of health economics and policy for non-economists. It will cover the basics and health markets and apply those concepts to policy applications. Economics 2001.01 recommended but not required	none
PUBHHMP 4650	United States & International Health Care	3	Introduction to the history, organization and politics of the global health care system, critical review of selected issues using different analytic frameworks.	none
PUBHHMP 6609	Health Care Organization for Experienced Professionals	3	Analysis of arrangements for the organization, financing and delivery of health care services.	none
PUBHHMP 6610	Introduction to Health Care Organization	3	Analysis of arrangements for the organization, financing, and delivery of health care services.	
PUBHHMP 6611	Health and Health Care Services in the U.S.	3	This course provides an overview of the U.S. health care system. Topics covered include health and health care disparities, social determinants of health, health care access and utilization, financing of care through public and private health insurance, provider reimbursement, assessment of quality, quality improvement, and new forms of health care delivery and payment.	Enrollment in PUBHHMP major
PUBHHMP 6615	Public Health Leadership and Organizational Behavior	3	This course introduces students to major theories and concepts of organizational behavior and leadership and applies these to challenges facing public health organizations	Grad standing or permission of instructor

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PUBHHMP 6620	Critical Appraisal of Population Health Evidence	3	This course will provide practical experience in examining multiple sources of evidence on population health management and public health interventions and will introduce students to the tools used to perform systematic reviews	Grad standing or permission of instructor
PUBHHMP 6625	Leveraging Healthcare Data for Practice and Policy Change	3	This course will prepare students to develop questions for and utilize results from healthcare database research. Strengths and limitations of healthcare databases commonly used for research will be considered, and special attention will be devoted to nationally representative databases and local electronic medical record data	A grade of C- or higher in PUBHEPI 6410 and PUBHBIO 6210, or permission of instructor
PUBHHMP 6630	Project Management for Health Care and Public Health	3	This course introduces students to the role of project management in executing successful projects. The course focuses on concepts and tools of basic project management, with a special emphasis on managing projects in health care and public health settings. Students will learn fundamental techniques for project planning, scheduling & monitoring through case studies, class exercises, and assignments	Grad standing or permission of instructor
PUBHHMP 7193	Individual Studies in Health Services Management and Policy	1-6	Study of individually designed topics not otherwise available in the curriculum.	none
PUBHHMP 7194	Group Studies in Health Services Management and Policy	1-3	Group studies of special topics within health services management and policy.	none
PUBHHMP 7601	Economic Analysis of Health Services	3	This course will cover applications of microeconomic analysis to the health services industry, with emphasis on the market structure and managerial decisions.	Prereq or concur 6611, or permission of instructor.
PUBHHMP 7602	Health Insurance and Payment Policy	3	This course examines the health insurance mechanisms used to pay for healthcare in the United States. The course will examine the U.S. system's origins, the incentives and policy	Grad standing in PUBHHMP, or permission of instructor. Not open to students with credit for 802.
PUBHHMP 7603	Economic Evaluation of Health Care Programs	3	Intended to give students an overview of the theory and applications of cost-benefit analysis, cost-effectiveness analysis, cost-utility analysis and related forms of economic evaluation of interventions in the health care sector.	7601, 7602, or permission of instructor.
PUBHHMP 7604	Economics of Health Care II	3	Microeconomic principles of supply with applications to the provision of health care services; market place for nurses and physicians; assessment of the competitive model	7602, or permission of instructor.
PUBHHMP 7605	Introduction to Health Policy	3	Introduction to public policy concepts and processes as they apply to the organization, financing, and delivery of health services.	6611, or permission of instructor.
PUBHHMP 7606	Applied Health Policy	3	Introduction to public policy concepts and processes as they apply to the organization, financing, and delivery of health services.	6609, or permission of instructor.
PUBHHMP 7607	Financial Management of Public Health Programs	3	Principles of accounting and finance applied to the management of public health agencies and programs.	An introductory accounting course, and enrollment in MPH Program; or permission of instructor. Not open to students with credit for 823.
PUBHHMP 7608	The Role of Science in Health Policy-Making	3	This course will explore the role that science, including social science, plays in public health & health services policy-making. It will consider the conditions under which scientific research findings do & do not influence policy-making with reference to the nature of scientific inquiry & of public policy; the intellectual, institutional, and practical similarities & differences between them.	none

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PUBHHMP 7610	Public Health Law	3	The course will focus on the use of legal tools to improve the public's health. The course will survey the legal framework in which the government may regulate for the public's health, addressing issues including the origins and scope of public health authority, constitutional limits on public health powers, emergency legal preparedness, and public health tort litigation.	Cross listed in Law 8810
PUBHHMP 7611	Health Care Law for Managers	3	Overview of the U.S. legal system as it applies to the U.S. health care field.	Grad standing in PUBHHMP, or permission of instructor. Not open to students with credit for 811.
PUBHHMP 7612	FDA Law and Policy	3	This course explores legal, policy and public health issues related to products	none
PUBHHMP 7613	Tobacco Regulation & Policy	2	This course examines the regulation of tobacco, with a focus on the role of the US FDA. This course highlights the history, significant provisions, and effects of the 2009 Tobacco Control Act, as well as the vital role that public health researchers and professionals play in influencing how the FDA implements the Act.	none
PUBHHMP 7615	Health Services Organizational Management	3	This course is designed to provide students with a strong foundation in health services management, focusing on human resources management and organizational behavior.	Grad standing in HSMP (MPH-HSMP, MHA, or PhD) or permission of instructor. Not open to students with credit for 815.
PUBHHMP 7617	Health Services Leadership and Organizational Change	3	Overview of leadership and organizational change theories, as well as the application of those theories to case studies in health sector organizations.	7615 and Grad standing in the HSMP-MHA program, or permission of instructor. Not open to students with credit for 817.
PUBHHMP 7620	Health Services Finance I	3	Principles of finance and accounting applied to health service organizations.	An introductory course in financial accounting, or permission of instructor. Not open to students with credit for 820.
PUBHHMP 7621	Health Services Finance II	3	Continuation of 7620 emphasizing financial analysis, financial planning, and capital project analysis.	7620, or permission of instructor. Not open to students with credit for 821.
PUBHHMP 7622	Health Services Financial Decision-Making	3	Principles of financial decision-making in health service organizations, with emphasis on applications of decision support systems.	7621, or permission of instructor. Not open to students with credit for 822.
PUBHHMP 7624	Health Economics for Experienced Professionals	3	Designed for public health professionals who wish to enhance their knowledge of the economic principles that drive the health care system. The course will introduce you to the use of economic analysis and economic evaluation for healthcare decision making.	Not open to students with credit for 824.
PUBHHMP 7631	Strategic Management and Program Development	3	Techniques and methods for strategic management and project planning in health care organizations and settings.	Enrollment in MHA program, or permission of instructor. Not open to students with credit for 831.
PUBHHMP 7632	Strategic Change for Public Health and Population Health Management	3	This course will provide students a foundation in the theories, concepts & methods of strategic planning and the management of organizational change as applied to public health & population health management endeavors.	none
PUBHHMP 7640	Mental Health & Disability Policy	3	Investigation of public policy in the area of mental health and disability and the politics that are the origin and result of these policies.	Not open to students with credit for 840.
PUBHHMP 7650	Advanced Topics in Health Services Management and Policy	1-3	Seminar on issues and methods of inquiry in health services management and policy.	Enrollment in PhD program in Public Health, or permission of instructor. Not open to students with credit for 900.
PUBHHMP 7671	Comparative Health Care Systems	3	Examination of the process of health policy formulation and implementation from an international perspective.	Not open to students with credit for 870.01.
PUBHHMP 7672	Clinical Rotations	1.5	Individual assignments within health care organizations to observe operations.	Grad standing in PUBHHMP, or permission of instructor. Not open to students with credit for 870.02
PUBHHMP 7673	Understanding Health Care Organization Data	1.5	Application of data from various sources to inform decision making in health services settings and in health policy	PUBHBIO 6210, or permission of instructor.

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PUBHHMP 7674	Ethical Cases in Health Care	1.5	Examination of ethical frameworks and their application to health services organizations and health policy.	Grad standing in PUBHHMP, or permission of instructor. Not open to students with credit for 870.04.
PUBHHMP 7675	Human Resources Management in Health Care	1.5	Overview of human resources and its strategic importance to health care organizations.	Not open to students with credit for 870.05.
PUBHHMP 7676	Health Care Marketing	1.5	Overview of topics in marketing and communications and how they apply to health care delivery.	Not open to students with credit for 870.06.
PUBHHMP 7678	Approaches to Health Services Research	1.5	Overview of the field of health services research and the role of health services research in improving health care delivery.	PUBHBIO 6210 and PUBHEPI 6410, or permission of instructor. Not open to students with credit for 871.
PUBHHMP 7679	Quality & Patient Safety	1.5	Examination of quality management and quality measurement in health care with emphasis on patient safety.	none
PUBHHMP 7680	Operations Management for Health Service Organizations	3	Concepts and techniques for managing operation in health service organizations; emphasis on management perspective and decision-making.	Grad standing in PUBHHMP, or permission of instructor. Not open to students with credit for 880.
PUBHHMP 7681	Advanced Health Services Operations Management	3	Selected topics in health services operations management, such as operations strategy, quality management, process design, materials management, and facility location.	7680, or permission of instructor. Not open to students with credit for 881.
PUBHHMP 7682	Information Systems for Health Services Organizations	1.5	This course is designed to provide students with an understanding of issues in the management of information and information technology in health care organizations, the role of information technologies in improving organizational performance, and the application of information technologies in health service organizations.	7680, or permission of instructor. Not open to students with credit for 882.
PUBHHMP 7683	Operations Management and System Design	3	This course is designed to introduce students to fundamental theories, principles and practices for designing and managing operations. The course is structured to emphasize the unique aspects of process and system design in the health care organizations and in the community health system, including processes that cross organizational boundaries and include diverse stakeholders.	none
PUBHHMP 7684	Health Services Strategy and Marketing	3	Students will learn principles, discipline, & analytic tools that comprise successful strategic management in healthcare organizations, including: strategic assessment, strategy development, implementation planning, & marketing. Emphasis will be placed on exploring strategic issues related to transitioning from volume to value-based models of care, impacts of ACA & population & community health.	Grad standing in Public Health - Health Services Management and Policy Master of Health Administration program, or permission of instructor. Not open to students with credit for 7631.
PUBHHMP 7699	Seminar in Health Services Management and Policy	1-3	Small group seminar with focus on integrative projects in health services management and policy.	Grad standing in PUBHHMP, or permission of instructor.
PUBHHMP 8671	Health Care Outcomes Measurement	2	Evaluation of specific techniques for measuring outcomes in clinical and health services research studies.	Grad standing in PUBHHMP, or permission of instructor.
PUBHHMP 8672	Advanced Topics in Health Policy	4	Designed for doctoral and advanced masters students in the College of Public Health and other OSU colleges. It will provide students with a solid background of high-level policy scholarship on topics fundamental to the health care system.	7605 or 7640; or permission of instructor.
PUBHHMP 8899	Doctoral Seminar in Health Services Management & Policy	1-2	Doctoral level seminar on topics that are relevant to students enrolled in the PhD program in health services management and policy.	Grad Standing in Public Health, or permission of the instructor.