

HPO - Health Policy and Organization

Courses

HPO 600. Management and Policy in Public Health Systems and Services. 3 Hours.

The course focuses on the policy and organizational levels related to public health and the overall improvement of population health. This course content examines models of public health policy and the political context of policy making; the organization, financing, and delivery of public health systems and programs; and planning, management, and leadership concepts needed to improve the public's health.

HPO 601. Health Economics. 3 Hours.

Economics is a systematic way of thinking about the use of resources. Health economics applies the tools of economics to issues of the organization, delivery and financing of health care. The objectives of this course are to: (1) develop a basic understanding of economic concepts and their relevance to the health care sector, (2) develop familiarity with the system of health care financing and delivery arrangements in the U.S., (3) develop a framework for analyzing health management and policy options using economic tools and perspectives.

HPO 602. MCH Evidence-Based Strategies Seminar. 1 Hour.

Building on the focus of the MPH core curriculum, this course will focus on using evidence-based and informed strategies in addressing maternal and child health issues in both domestic and global settings. Topics will include basic research principles, stages of research development, and practical issues of reviewing the literature and preparing and presenting at professional meetings. Students will use evidence to develop a policy memo around an MCH issue.

HPO 603. Public Health Policy. 3 Hours.

This course examines the role of government in health policy in the United States. The class is intended to provide students with a greater awareness of current health policy issues and the analytical skills necessary to evaluate policy options. We will begin the semester with a discussion of the rationales for health policy, followed by a discussion of the policy process and policy analysis. The second part of the semester will be devoted to U.S. health system reform- namely expanding insurance coverage and improving the value of health spending.

HPO 604. Health Economics and Public Health Policy. 3 Hours.

Economics is the study of choices in a world of scarcity. This course applies basic microeconomic principles to the study of the US health care system and public health policy. The first goal of the course is to provide students with an understanding of the core economic concepts (scarcity, economic welfare and market failures) which shape health care and public health policy. Next, students will be introduced to two competing theories of government – public interest theory and the economic theory of regulation – which will serve as a foundation for thinking about the role of government in health policy. Finally, the remainder the semester will provide students with a comprehensive overview of the US health care system including public and private health insurance, hospitals, physicians, the pharmaceutical industry and current issues in health care reform.

HPO 605. Foundations of Maternal and Child Health: Programs and Policies for Women, Children, and Families. 3 Hours.

The purpose of this course is to provide students with knowledge about current major Maternal and Child Health (MCH) issues (health, social, economic, and environmental) and programs and policies designed to address these issues among women of reproductive age, infants, and children. This course will focus primarily on public health problems and solutions of MCH populations in the United States. In addition to introductory information on specific health issues related to children and families, the evolution, status, and future performance of selected federal, state, and community programs will be analyzed. Course work also includes a review of factors that influence policy development and program implementation, including: 1) research, 2) data issues, 3) current public policy reform movements, and 4) advocacy.

HPO 607. Public Health Law. 3 Hours.

An introductory course in public health law designed for graduate students in public health. There are no prerequisites for this course. The purpose of the course is to introduce non-lawyers to the United States legal system and to the basic principles of law relevant to public health practitioners. It is intended to provide students with basic legal knowledge to assist them in communicating with attorneys about potential legal issues that may arise in formulating policy and exercising managerial authority. An overarching theme of the course is the tension between community interests and individual rights.

HPO 608. Reproductive Health. 3 Hours.

This course is intended to provide students with a foundation in reproductive health. It examines reproductive health issues, problems, policies, programs and services primarily in low-to-middle income countries.

HPO 609. Public Health Program Planning, Implementation and Evaluation. 3 Hours.

The purposes of this course is (1) to introduce the needs assessment and program planning, implementation, and evaluation processes specifically related to public health; and (2) to provide practical educational experiences to develop skills in applying rigorous methods and essential skills needed to conduct needs assessments and use the information gathered to plan, direct, and evaluate public health programs and impact public health policies. This course is required for all HPO students.

HPO 612. Strategic Management in Health Programs. 3 Hours.

The overall goal of the course is to provide a framework for strategic management and an opportunity to think strategically through a case study. In addition, the course provides an opportunity to integrate the knowledge and experience students have acquired in previous courses and health care organizational settings into a broad theory of management.

HPO 613. Health Information in Technology and Policy. 3 Hours.

The overall purpose of this course is to familiarize students with current issues associated with health information technology and their impact on the U.S. healthcare system.

HPO 615. Finance for Health Professionals. 3 Hours.

The goal of this class is to teach the principles necessary for effective financial management in healthcare to individuals who are not experienced financial executives. The focus of the class is on tools and techniques that assist managers in creating information to support managerial decision making. The course uses the case method of instruction, case analysis, and lectures.

HPO 618. Management Concepts in Public Health Programs. 3 Hours.

Management Concepts in Public Health Programs is an overview of management concepts applied to public health agencies and programs. In recognition of public and private managements' responsibility for organizational success the course approaches management by examining recurring themes in management thought. Selected readings are provided for each class session that apply the concepts examined to the health care, not-for-profit, and/or public sectors. Some of the articles relate to domestic (USA) organizations while others relate to management in the international context.

HPO 620. Health Insurance and Managed Care. 3 Hours.

This course provides an overview of health insurance, health insurance regulation, state healthcare reform efforts, and the Affordable Care Act. It begins with a history of the development of health insurance and its theoretical basis. It then turns to the problems of moral hazard and adverse selection. The role of managed care and employer sponsored health insurance are discussed. Regulation of private insurance and the Medicare and Medicaid programs are also reviewed. A significant part of the course will focus on the impact of the Affordable Care Act on private health insurance markets.

HPO 621. Clinical Decision Making and Cost-Effectiveness Analysis. 3 Hours.

Difficult choices must be made in areas such as patient care, clinical guideline development, and public health policy. These decisions often must be made in the face of great uncertainty. Decision analysis aims to formally evaluate those decisions and to make decisions from an informed perspective regarding expected outcomes. Cost-effectiveness analysis applies decision analysis to circumstances where both costs and outcomes are important criteria for making choices. This course will give students an understanding of the methods and uses of decision analysis and cost-effectiveness analysis, but should have basic familiarity with probability and statistics. The course will provide a thorough grounding in the fundamentals of decision analysis and cost-effectiveness analysis, and will introduce several intermediate-to-advanced topics. This course is open to Master's and Doctoral students from the School of Medicine, Nursing, and Health Professions as well as the School of Public Health.

Prerequisites: [BST 611](#) [Min Grade: C](Can be taken Concurrently) and [BST 612](#) [Min Grade: C](Can be taken Concurrently)

HPO 622. Design and Conduct of Cost-Effectiveness Research. 3 Hours.

The purpose of this course is to familiarize students with the design and implementation of cost-effectiveness and cost-benefit analysis.

Prerequisites: [HPO 621](#) [Min Grade: C]

HPO 623. Pharmacoeconomics and Regulation. 3 Hours.

This course covers the principles of Pharmacoeconomics, defines the terminology used in pharmacoeconomic research, focuses on different types and measurement of pharmaceutical costs and outcomes, and investigates how they are analyzed in pharmacoeconomic techniques such as Cost-Benefit Analysis, Cost-Effective Analysis, Cost-Utility Analysis, Cost-Minimization Analysis, and Cost-Consequence Analysis. In addition, this course introduces the regulatory role of the FDA and some basic economic theories to understand the market of pharmaceutical products. Prerequisite [BST 611](#) or Permission of Instructor.

Prerequisites: [BST 611](#) [Min Grade: C]

HPO 625. Advanced Leadership and Practice in MCH Part I – Introduction to Leadership. 1 Hour.

The purpose of the course is to introduce students to leadership skills that are important for designing, advocating for, and leading community, state, and regional programs. The course is required for all MPH and DrPH students in the HPO/Maternal and Child Health Policy and Leadership track and is open to students from other tracks and departments. It is offered as three, one-hour courses that provide theory, skills, and practice with each subsequent course building upon previous courses. The courses will include lectures, group discussions, individual projects, and service-learning field-based activities.

HPO 626. Adv Leadership and Practice in MCH Module II – Collaborative Leadership and Advocacy. 1 Hour.

This is the second of a three-course sequence designed to equip students with the knowledge and skills needed to provide leadership in the development and delivery of needed programs and policies to promote the health and well-being of MCH populations.

Prerequisites: [HPO 625](#) [Min Grade: C](Can be taken Concurrently)

HPO 627. ADV Leadership and Practice in MCH Module III – Into the Streets: Lead/Field Experience. 1 Hour.

The purpose of this course sequence is to provide students with the leadership skills necessary to work effectively at a community, state or regional level in the capacity of designing and advocating for programs and policies necessary to promote the health of women, children and families.

Prerequisites: [HPO 625](#) [Min Grade: C] and [HPO 626](#) [Min Grade: C]

HPO 628. Qualitative and Mixed Methods Research in Public Health. 3 Hours.

The purpose of this course is 1) to familiarize students with basic qualitative research methods used by public health researchers and practitioners, with a specific focus on their use in the health sciences; 2) to provide practical educational experiences to develop skills in the planning of qualitative studies and in the collection and analysis of qualitative data; and 3) to introduce students to the concept of mixed methods research and applications in public health. This course is designed to familiarize students who have little or no experience in conducting qualitative research with the perspectives, methods, and techniques of a vast tradition of research. The course will cover some of the methods of data collection used in the conduct of qualitative inquiries, the analysis of textual data, the write-up of findings from qualitative studies, and the development of a qualitative research proposals and reports.

HPO 630. Health and Development: Life Course Approach. 2 Hours.

In developing, implementing, and evaluating effective maternal and child health programs and policies, it is critical to incorporate principles of development. Also critical is an understanding of how health trajectories of populations are influenced by broad social, economic, and environmental factors, a conceptual framework known as the life course perspective. This course covers 1) fundamental principles of human development; 2) how the central components of the life course perspective influence health and development; 3) how these stages of development are examined with research methodologies, using noted examples of data bases and studies; and 4) how these concepts can be incorporated into MCH programs and policies.

HPO 631. Public Health Demography. 3 Hours.

Demography (the study of population) has become more important across a range of academic disciplines. There is a growing call on demographers outside academia, such as for policy-making, health care planning and analysis, or business administration. Demographic changes play a critical, though often poorly understood role in influencing the social, economic, and health fabric of our lives. This course introduces the core concepts and methods used in demographic analysis. It also provides a basic understanding of population dynamics and its health and socio-economic implications. Students will gain a firm foundation in how to measure fertility, mortality and migration; how to analyze population change and project population growth; and how to interpret demographic trends, their determinants and consequences.

HPO 632. Leadership in Maternal and Child Health. 3 Hours.

The health of women, children, youth, and families is influenced by many factors, including health practices, availability of public health and health care resources, and the social determinants of health. To promote health and positively affect these factors at the individual, community, and policy levels, specific knowledge, skills, personal characteristics, and values are needed. The purpose of the course is to engage students in the development of their own leadership skills and the application of these skills in the design, delivery, and evaluation of MCH programs and policies.

HPO 633. Policy and Women's Health. 3 Hours.

Across the lifespan, women face unique challenges related to their own health and wellbeing and are exposed to other historical and social influences that also affect their families and society. The purpose of this course is to examine women's health from multidisciplinary and multidimensional perspectives, with specific focus on public health policies, programs, and prevention strategies that address women's reproductive health and broader health and well-being within a life course framework that integrates biological determinants of health and the social, cultural, and economic contexts of women's lives.

HPO 634. Health Care Innovation. 3 Hours.

This course focuses on sustainable and socially responsible health care innovations. Students will be introduced to the realities of problem identification and will provide a how-to framework and case studies of healthcare ventures.

HPO 636. Public Health and Healthcare Delivery Systems. 1 Hour.

The public health system is comprised of federal, state, and local organizations and agencies. These organizations work with other entities, public and private, such as health care systems, non-profits, and pharmaceutical companies to address and combat public health issues. In this course, students will examine the functions of governmental public health, systems collaboration between public health and health care delivery, and the role of government in public health. Students will apply previous knowledge of systems thinking to examine the contributions and challenges of the public health and health care delivery related to past and current public health events. By the end of this course, students will gain skills in distinguishing organizations and components of public health and health care delivery systems.

HPO 637. Design and Management of Complex Public Health Systems. 1 Hour.

Designing solutions or responses to complex public health issues require management and leadership skills to navigate within and across multiple sectors. The purpose of this course is to equip students with management and leadership techniques to engage appropriate partners in the design of a solution to a public health issue. Building on work in [HPO 636](#), students will engage in case studies that provide insight into how public health leaders historically approached complex, multi-factorial issues that required a collaborative and coordinated response across multiple sectors. The culminating project will be developing a plan to address a public health issue that incorporates multiple agencies. Students also will identify associated leadership and management skills needed for this response.

HPO 638. Current Issues in Public Health Policy. 1 Hour.

With global public health events such as the Ebola outbreak and more recent COVID-19 pandemic, public health students' benefit from understanding how social and health policy influence health; physical, mental, and social well-being. As the political landscape changes, domestically and globally, public health students should critically analyze the effect of policy on determinants that impact health outcomes among populations. Policy decisions, both locally and nationally, can shape public health practice and organization dynamics, progress the achievement of health equity, increase or decrease health disparities, and more. This course will allow students to consider current public health issues and evaluate how policies or the lack thereof influence population health. This course is an in-depth opportunity for students to explore controversial public health topics and assess the effectiveness of policy implementation. By the end of this course, students will have developed the skills of analyzing and evaluating public health policy. Prerequisite: [HPO 604](#) (Health Economics & Health Policy) is recommended.

HPO 640. Disaster and Emergency Management. 3 Hours.

The course will provide a concerted look into the realm of disaster and emergency management. Discussions in this course will concentrate on how disaster and emergency management has changed since 9/11 including new legislation and governmental structures. The course will culminate with a look at the roles and responsibilities of the public health system in preparing for and responding to both natural and man-initiated disasters. This course is intended for advanced MPH or doctoral students with an interest in preparedness policy, emergency management, or public health preparedness.

HPO 641. Health Preparedness and Response Policy. 3 Hours.

Preparedness policy can be defined as the sum of national and subnational governmental activities with the intent to protect the public's health and security. Discussions in this course will focus on policy and policy making in the U.S. and more particularly on preparedness policy and its evolution since 9/11. The purpose of this course will be to develop a skill set that will allow students to frame issues into social, cultural, regional, and ethical norms, consider historical and political influence policy choices. Courses is for advanced MPH or doctoral students with an interest in preparedness policy, emergency, management, or public health preparedness.

HPO 642. Preparedness and Agriculture. 3 Hours.

This course presents the potential effects of an animal disease outbreak, whether natural, accidental or deliberate, on the affected communities. Topics covering the prevention and diagnosis of and the response to an animal disease outbreak will be presented. Examples of the interaction of public health with other disciplines will be provided. This course is designed for MPH students with an interest in preparedness policy, emergency management, or public health preparedness.

HPO 643. Emergency Preparedness Exercises, Evaluation and Communication. 3 Hours.

This course will provide participants with an understanding of the psychological processes that occur during crises, how those processes impact human functioning, and how communication plays a critical role in the psychological outcomes of crisis situations.

HPO 645. Comparative Health Systems and Policy. 3 Hours.

This course provides a comprehensive survey of a number of healthcare systems from low-, middle-, and high-income countries, situating the U.S. and other national experiences in a comparative cross-national frame. The course provides frameworks for students to analyze in diverse settings the different ways that health policy is developed and implemented, given the resources, capacities, and systems of each country. The course will also examine the ways in which health care is organized and delivered, along with underlying global public health principles and impacts. By comparing health systems and policies, globally, students will reflect on how a country's social-historical context and values, geography, polity and economy influence the way that health care is provided and its relationship with population health, as well as how health policies influence the quality of life.

HPO 670. Social and Ethical Issues in Public Health. 3 Hours.

This class examines ethical issues related to public health research and practice, and explores the social issues that complicate ethical decision-making. There are no pre-requisites. This class is open to all students with graduate standing.

HPO 672. Perinatal Health: Issues, Data, and Policies. 3 Hours.

The purpose of this course is to provide students with knowledge related to perinatal health issues and policies. In addition, the course will allow students to gain basic skills in analysis of population-based data sets using SAS. This course at the 600 and 700 level is an elective for students seeking the Master of Public Health (MPH) degree and the Doctor of Public Health (DrPH). Other students interested in this area are encouraged to register. An introductory SAS course is recommended but not required.

HPO 677. Patient-Based Outcomes Measurement. 3 Hours.

This course will provide an in-depth overview of the concepts, methods, and instruments used to evaluate health from the perspective of the individual. The overall objective of this course is to provide a detailed examination of patient-based/centered outcomes measurement in the context of health care delivery systems and health care policy.

Prerequisites: [BST 611](#) [Min Grade: C](Can be taken Concurrently)

HPO 687. Empirical Methods for Health Research. 3 Hours.

The course aims to provide a thorough treatment of simple and multivariate regression models, simple binary dependent variable models, simple panel data models, and instrumental variables methods. Particular emphasis is placed on methods used to address omitted variable bias, such as difference-in-difference. The course is structured to provide students with ample opportunity to acquire hands-on experience in working with data by performing empirical analysis using the statistical software STATA.

Prerequisites: [BST 611](#) [Min Grade: C](Can be taken Concurrently)

HPO 689. HPO Integrative Learning Experience. 2 Hours.

The HPO ILE or capstone course represents a culminating experience that allows students to demonstrate synthesis of MPH foundational and concentration competencies. The HPO ILE, using a case-based educational methodology, will allow students to work in teams to create a comprehensive strategic plan for a public health program while developing a program plans and evaluation plans to address a specific health issues. Students will also address the policy implications associated with the health issue through a policy analysis. Students in the HPO-MCH concentration will focus specifically on an MCH-relevant issue in the ILE. MPH students should complete the ILE in the final term of the MPH program, after all core courses and the MPH internship experience are completed.

Prerequisites: [PUH 688](#) [Min Grade: C]

HPO 691. Policy Analysis: Modeling and Simulation. 3 Hours.

This course shows how models are built and used for public policy making and clinical decision analysis. The goal is for you to develop basic skills with building various types of models. Models include the optimization method of linear programming, spreadsheets with various types of randomness, bootstrapping data to estimate how much a model's results may vary, discrete event modeling, queuing, Markov models, and an introduction to some advanced models using Netlogo and Python programming.

Prerequisites: [BST 611](#) [Min Grade: C] and [BST 612](#) [Min Grade: C]

HPO 692. Health Equity and Inclusion in Public Health Programs and Policies. 3 Hours.

The aim of this course is to engage students in critical thinking about the current paradigms for health disparities and equity research and public health practice and policies. As a part of this process, students will be challenged to think about the social, political, and economic determinants of health disparities for diverse health care consumers, to identify substantive trends and gaps in the health disparities literature, and to develop an innovative research or policy oriented strategy for reducing health disparities. We will discuss health and health care disparities according to race/ethnicity, sex, orientation, health status, and geographic location.

HPO 695. Seminar in Health Policy and Organization. 1-3 Hour.

Factors currently influencing finance and administration of public and private health programs; availability, accessibility, and utilization by selected population groups.

HPO 698. Master's Level Directed Research Health Policy and Organization. 1-9 Hour.

Independent study with guidance of appropriate faculty.

HPO 699. Master's Level Project Research Health Policy and Organization. 1-9 Hour.

Research for project under direction of appropriate faculty and/or research project committee.

HPO 701. Health Economics. 3 Hours.

Economics is a systematic way of thinking about the use of resources. Health economics applies the tools of economics to issues of the organization, delivery and financing of health care. The objectives of this course are to: (1) develop a basic understanding of economic concepts and their relevance to the health care sector, (2) develop familiarity with the system of health care financing and delivery arrangements in the U.S., (3) develop a framework for analyzing health management and policy options using economic tools and perspectives.

HPO 703. Public Health Policy - Doctoral Level. 3 Hours.

This course examines the role of government in health policy in the United States. The class is intended to provide students with a greater awareness of current health policy issues and the analytical skills necessary to evaluate policy options. We will begin the semester with a discussion of the rationales for health policy, followed by a discussion of the policy process and policy analysis. The second part of the semester will be devoted to U.S. health system reform- namely expanding insurance coverage and improving the value of health spending.

HPO 704. Health Economics and Public Health Policy. 3 Hours.

Economics is the study of choices in a world of scarcity. This course applies basic microeconomic principles to the study of the US health care system and public health policy. The first goal of the course is to provide students with an understanding of the core economic concepts (scarcity, economic welfare and market failures) which shape health care and public health policy. Next, students will be introduced to two competing theories of government – public interest theory and the economic theory of regulation – which will serve as a foundation for thinking about the role of government in health policy. Finally, the remainder the semester will provide students with a comprehensive overview of the US health care system including public and private health insurance, hospitals, physicians, the pharmaceutical industry and current issues in health care reform. Ideally, students will come away from the course with a better understanding of the role of economics in the US health care system, and an improved ability to analyze the motivations and consequences of government intervention in markets.

HPO 706. Strategic Management Theory/Research. 3 Hours.

The vision for the course is to develop highly competitive strategic management major graduates at that doctoral level. Strategic Management Theory and Research is to provide a forum for the introduction of the concepts and issues of strategic management in order to facilitate their understanding and communications.

HPO 708. Reproductive Health. 3 Hours.

This course is intended to provide students with a foundation in reproductive health. It examines reproductive health issues, problems, policies, programs and services, primarily in low-to-middle income countries.

HPO 714. Life Course Seminar. 3 Hours.

The purpose of this course is to expand knowledge and research skills around MCH life course issues. As guided by faculty, students will review and critique the literature in given areas around life course science and specific life span issues. Students will work with the library liaison to conduct extensive literature reviews and move toward writing a manuscript for submission to a peer-reviewed journal. It will serve as a foundation for skills needed in other courses as well as foundational knowledge related to maternal and child health science. The course is required for all HPO-MCH doctoral students. Other doctoral or higher level Masters' students interested in a research path may register with the approval of the instructor. Prerequisites: Ideally, students will have taken all course work prior to taking this course. However, the DrPH director and course instructors may make exceptions.

HPO 715. Finance for Health Professionals. 3 Hours.

Financial management of public health care organizations. Emphasis on time value on money, capital raising methods, cost of capital, capital budgeting methods and working capital policy. Problem-solving orientation with applications to public health issues.

HPO 716. Advanced Leadership and Practice Seminar. 3 Hours.

This seminar provides a foundation for all doctoral students in the concepts and application of leadership and management in public health practice. Part I of the course will explore and discuss the nature and processes of doctoral education and academic teaching, scholarship, service, and other duties related to a traditional academic research or scholarly practice setting. Part II of the course allows doctoral students to enhance their leadership skills, through personal development activities as well as through interaction with public health leaders. In Part 111, students will gain a deeper understanding of how research is applied in public health practice through the completion an interdisciplinary project that draws upon management and organizational skills. The course will be co-led by faculty members with across the department. Prerequisites: Ideally, students will have taken all course work prior to taking this course. However, the DrPH director and course instructors may make exceptions.

HPO 717. Seminar in Public Health Policy. 3 Hours.

The purpose of this course is to enhance doctoral students' understanding of public health policy, including the policy making process and the role of various components of the public health system in the design and implementation of policy. The course will focus on the linkages between public health research and practice. The course will engage students in the discussion of contemporary public health issues and will focus heavily on the critical task of assessing these issues from multiple stakeholder and ideological perspectives. The course will also focus heavily on writing and the tools necessary for policy development, advocacy and implementation.

HPO 718. Management Concepts in Public Health Programs. 3 Hours.

Management Concepts in Public Health Programs is an overview of management concepts applied to public health agencies and programs. In recognition of public and private managements' responsibility for organizational success the course approaches management by examining recurring themes in management thought. Selected readings are provided for each class session that apply the concepts examined to the health care, not-for-profit, and/or public sectors.

HPO 720. Health Insurance and Managed Care. 3 Hours.

This course provides an overview of health insurance, health insurance regulation, state healthcare reform efforts, and the Affordable Care Act. It begins with a history of the development of health insurance and its theoretical basis. It then turns to the problems of moral hazard and adverse selection. The role of managed care and employer sponsored health insurance are discussed. Regulation of private insurance and the Medicare and Medicaid programs are also reviewed. A significant part of the course will focus on the impact of the Affordable Care Act on private health insurance markets.

HPO 721. Clinical Decision Making and Cost Effectiveness Analysis. 3 Hours.

Difficult choices must be made in areas such as patient care, clinical guideline development, and public health policy. These decisions often must be made in the face of great uncertainty. Decision analysis aims to formally evaluate those decisions and to make decisions from an informed perspective regarding expected outcomes. Cost-effectiveness analysis applies decision analysis to circumstances where both costs and outcomes are important criteria for making choices. This course will give students an understanding of the methods and uses of decision analysis and cost-effectiveness analysis, but should have basic familiarity with probability and statistics. The course will provide a thorough grounding in the fundamentals of decision analysis and cost-effectiveness analysis, and will introduce several intermediate-to-advanced topics. This course is open to Master's and Doctoral students from the School of Medicine, Nursing, and Health Professions as well as the School of Public Health.

Prerequisites: BST 611 [Min Grade: C] and BST 612 [Min Grade: C]

HPO 722. Design and Conduct of Cost-Effectiveness Research. 3 Hours.

The objective of this course is to familiarize students with the design and implementation of cost-effectiveness and cost-benefit analysis.

Prerequisites: HPO 721 [Min Grade: C]

HPO 723. Management of Complex Health Organizations. 3 Hours.

Complexity as related to management of health organizations. Academic health centers as models of complex organization. Incentive systems, organizational politics, and ownership and control within context of high complex health organizations.

HPO 728. Qualitative and Mixed Methods Research in Public Health. 3 Hours.

The purpose of this course is 1) to familiarize students with basic qualitative research methods used by public health researchers and practitioners, with a specific focus on their use in the health sciences; 2) to provide practical educational experiences to develop skills in the planning of qualitative studies and in the collection and analysis of qualitative data; and 3) to introduce students to the concept of mixed methods research and applications in public health. This course is designed to familiarize students who have little or no experience in conducting qualitative research with the perspectives, methods, and techniques of a vast tradition of research. The course will cover some of the methods of data collection used in the conduct of qualitative inquiries, the analysis of textual data, the write-up of findings from qualitative studies, and the development of a qualitative research proposals and reports.

HPO 730. Health and Development: Life Course Approach. 2 Hours.

In developing, implementing, and evaluating effective maternal and child health programs and policies, it is critical to incorporate principles of development. Also critical is an understanding of how health trajectories of populations are influenced by broad social, economic, and environmental factors, a conceptual framework known as the life course perspective. This course covers 1) fundamental principles of human development; 2) how the central components of the life course perspective influence health and development; 3) how these stages of development are examined with research methodologies, using noted examples of data bases and studies; and 4) how these concepts can be incorporated into MCH programs and policies.

HPO 740. Disaster and Emergency Management. 3 Hours.

The course will provide a concerted look into the realm of disaster and emergency management. Discussions in this course will concentrate on how disaster and emergency management has changed since 9/11 including new legislation and governmental structures. The course will culminate with a look at the roles and responsibilities of the public health system in preparing for and responding to both natural and man-initiated disasters. This course is intended for advanced MPH or doctoral students with an interest in preparedness policy, emergency management, or public health preparedness.

HPO 741. Health Preparedness and Response Policy. 3 Hours.

Preparedness policy can be defined as the sum of national and subnational governmental activities with the intent to protect the public's health and security. Discussions in this course will focus on policy and policy making in the U.S. and more particularly on preparedness policy and its evolution since 9/11. The purpose of this course will be to develop a skill set that will allow students to frame issues into social, cultural, regional, and ethical norms, consider historical and political influence policy choices. Courses is for advanced MPH or doctoral students with an interest in preparedness policy, emergency, management, or public health preparedness.

HPO 742. Preparedness and Agriculture. 3 Hours.

This course presents the potential effects of an animal disease outbreak, whether natural, accidental or deliberate, on the affected communities. Topics covering the prevention and diagnosis of and the response to an animal disease outbreak will be presented. Examples of the interaction of public health with other disciplines will be provided. This course is designed for MPH students with an interest in preparedness policy, emergency management, or public health preparedness.

HPO 743. Emergency Preparedness Exercise, Evaluation & Communication. 3 Hours.

This course will provide participants with an understanding of the psychological processes that occur during crises, how those processes impact human functioning, and how communication plays a critical role in the psychological outcomes of crisis situations.

HPO 772. Perinatal Health: Issues, Data, and Policies. 3 Hours.

The purpose of this course is to provide students with knowledge related to perinatal health issues and policies. In addition, the course will allow students to gain basic skills in analysis of population-based data sets using SAS. This course at the 600 and 700 level is an elective for students seeking the Master of Public Health (MPH) degree and the Doctor of Public Health (DrPH). Other students interested in this area are encouraged to register. An introductory SAS course is recommended but not required.

HPO 777. Patient-Based Outcomes Measurement. 3 Hours.

This course will provide an in-depth overview of the concepts, methods, and instruments used to evaluate health from the perspective of the individual. The overall objective of this course is to provide a detailed examination of patient-based/centered outcomes measurement in the context of health care delivery systems and health care policy.

HPO 781. Research Methods and Study Design. 3 Hours.

This course examines empirical methods utilized in health economics, policy and management research. The course supplements the material covered in [HPO 787](#), with a focus on the application of econometric methods to contemporary topics in health research. The course begins with an overview of experimental and non-experimental research and the critical distinction between associative and causal relationships. The remainder of the course will focus on the difficulty of identifying causal relationships in non-experimental contexts, and the methods that are commonly used to overcome these challenges. At the end of the semester, students should come away with an improved grasp of the interdisciplinary language of health research and a deeper appreciation of the importance of research design in quantitative work.

HPO 787. Empirical Methods for Health Research. 3 Hours.

The objectives of the course are to provide thorough treatment of simple and multivariate regression models, simple binary dependent variable models, instrumental variables estimators, sample selection and two-part models, and simple panel data models. Course provides students with an opportunity to acquire hands-on software. This course is designed for students who have had limited experience with regression analysis but a working knowledge of simple statistics, probability distributions, and basic calculus. Students must have upper level undergraduate or graduate coursework in statistics and probability; basic calculus. Prerequisites: Senior Undergraduate or Graduate Course in Statistics & Probability Distributions.

HPO 791. Policy Analysis: Modeling & Simulation. 3 Hours.

This course shows how models are built and used for public policy making and clinical decision analysis. The goal is for you to develop basic skills with building various types of models. Models include the optimization method of linear programming, spreadsheets with various types of randomness, bootstrapping data to estimate how much a model's results may vary, discrete event modeling, queuing, Markov models, and an introduction to some advanced models using Netlogo and Python programming.

Prerequisites: [BST 611](#) [Min Grade: C] and [BST 612](#) [Min Grade: C]

HPO 792. Health Equity and Inclusion in Public Health Programs and Policies. 3 Hours.

The aim of this course is to engage students in critical thinking about the current paradigms for health disparities and equity research and public health practice and policies. As a part of this process, students will be challenged to think about the social, political, and economic determinants of health disparities for diverse health care consumers, to identify substantive trends and gaps in the health disparities literature, and to develop an innovative research or policy oriented strategy for reducing health disparities. We will discuss health and health care disparities according to race/ethnicity, sex, orientation, health status, and geographic location.

HPO 793. DrPH Practicum. 3-6 Hours.

All DrPH students will complete an applied practice experience (Practicum) in which the student will complete at least one project that is meaningful for a public health organization and to advanced public health practice. In addition to self-reflection on the applied practice experience, the student will produce a final product that addresses the competencies listed below. This may take the form of a written report, portfolio, or other deliverable as determined by the student, advisor, and/or Practicum preceptor, according to departmental guidelines.

HPO 795. Directed Readings. 1-6 Hour.

The purpose of this course is to assist students in preparing literature reviews, manuscripts, or to complete other activities as deemed appropriate by the faculty member. Final objectives will be based upon the work between the student and advisor.

HPO 796. Doctoral Seminar in Health Policy and Organization. 1 Hour.

Doctoral students will be introduced to advanced topics in public health policy and practice, health services research methods and management research. In addition, topics directly related to doctoral studies (article critiques, literature reviews, manuscript preparation, dissertation protocol development, etc.) will be discussed.

HPO 797. Directed Readings for DrPH Comprehensive Examination. 3 Hours.

The Directed Readings for DrPH Comprehensive Examination in HPO is required for HPO DrPH students as part of their training. The primary aim of this course is to assist students in preparing for their comprehensive exams. Doctoral students may register for this course in the term in which they prepare for and take their comprehensive examination.

HPO 798. Doctoral Level Directed Research Health Policy and Organization. 3-9 Hours.

The purpose of this course is for students to develop dissertation research protocols that will be presented to their dissertation committee for final approval. Final objectives will be based upon the work between the student and advisor.

HPO 799. Dissertation Research HPO. 3-9 Hours.

Research for dissertation under direction of dissertation committee. Must be advanced to candidacy.