Department of Population Health

The Department of Population Health was formed on July 1, 2019, upon the merger of the Department of Preventive Medicine and Public Health and the Department of Health Policy and Management. Our department, with faculty on all three campuses of the Kansas University Medical Center (Kansas City, Wichita and Salina), is focused on improving health and reducing health inequities for all people in Kansas. We think that the health of our communities is best served by integrating our efforts to improve public health with efforts to improve health systems, health policies, and health care delivery. We seek to understand the complex interplay of behavioral health and social determinants of health and identify the way these underlying determinants influence the delivery of health care services. We try to find ways in which health systems and health policies can better respond to the needs of the communities they serve.

TEACHING

Faculty and staff in the Department of Population Health are dedicated to offering degree programs to future public health practitioners, health service leaders and clinical researchers. The department provides the following degree programs:

- Master of Health Services Administration (http://www.kumc.edu/school-of-medicine/population-health/education/master-of-health-services-administration-(mhsa).html)
- Master of Public Health (http://www.kumc.edu/school-of-medicine/population-health/education/master-of-public-health.html)
- Master of Science in Clinical Research (http://www.kumc.edu/school-of-medicine/population-health/education/master-of-science-in-clinical-research.html)
- Ph.D. in Health Policy Management (http://www.kumc.edu/school-of-medicine/population-health/education/phd-in-health-policy-and-management.html)
- Graduate Certificate Programs (https://edwardscampus.ku.edu/public-health/)
- Community Health Center Executive Fellowship (http://www.chcexecfellow.com/)

RESEARCH

Department of Population Health faculty reflect the multidisciplinary scope of health practices and represent a variety of academic disciplines. Current research includes:

- Tobacco Control
- Cancer Screening and Prevention
- Obesity
- Health Services Research
- Epidemiology

SERVICE

Through strong partnerships with community organizations, government agencies, health care systems and other stakeholders, our more than 90 faculty and staff seek to address some of the most critical threats to the health of our communities, including tobacco, obesity, cancer, and diabetes. Our diverse faculty bring expertise in psychology, sociology, epidemiology, economics, statistics, demography, anthropology, implementation science, public health, and health care delivery, allowing us to apply a multi-disciplinary approach to tackling health concerns, particularly those concerns that disproportionately affect rural, incarcerated, Native American, African American, and Latino communities. Learn more. (https://www.kumc.edu/school-of-medicine/academics/departments/population-health.html)

Courses

HP&M 610. The Health Care System. 4 Credits.
This course introduces students to the health care system of the United States. The course stresses the system's historical development, distinguishing features, financing, management, resources, and politics. Requirements include position papers, class discussions, examinations, and site visits to health care facilities

HP&M 620. Women and Health Care. 3 Credits.
A gender analysis of the organization of health care in the United States, using sociohistorical and sociological perspectives. Considers the health status and health care problems of women in relation to cultural aspects of medicine and health care; the roles of both informal and professional health care providers; the political economy of health care systems; and the relationship between gender and the state. (Same as SOC 617.) Prerequisite: HP&M 601 or permission of instructor.

HP&M 810. The Health Care System. 3 Credits.
The structure and function of the components of the U.S. healthcare system are introduced in the context of the history, values and social forces that influenced its development and evolution. Students gain exposure to the concepts and vocabulary associated with aspects of the system, including delivery (providers, institutions, services), resources (finance, payment, insurance), population and public health, and outcomes (cost, access, quality). Healthcare outcomes from consumer, clinical, and societal perspectives are explored. LEC

HP&M 819. Research for Health Care Leaders. 3 Credits.
Introduces epidemiology, survey research, and evaluation research. Examines quantitative and qualitative methods. Focuses on role of research in health policy and health management. Incorporates lecture, discussion, papers and presentations.

HP&M 822. Health Care Economics. 3 Credits.
This course introduces the core concepts from economics to healthcare with a focus on helping healthcare managers use economic tools in making sound decisions. The demand for healthcare products, the structure of insurance, and the supply of healthcare products are examined. Students will apply a variety of economic analyses to health policy and health system issues. LEC

HP&M 825. Financial Concepts in Healthcare Management. 3 Credits.
Introduces the financial and managerial accounting concepts used in health care. This includes financial statement analysis; cost accounting; budgeting; and capital project analysis. LEC

HP&M 827. Financial Applications in Healthcare Management. 3 Credits.
Applies economic and financial concepts to health care management, integrating operational, strategic, and financial planning. Students will analyze financial statement ratios; forecast revenue and expense; develop budgets; credit worthiness determination; break-even analysis and working capital management in a variety of healthcare settings including long-term care and public health. LEC Prerequisite: HP&M 825, Financial Concepts in Healthcare Management or permission of instructor.

HP&M 830. Health Care Management. 3 Credits.

This course introduces key concepts and skills for health care managers. Emphasizing self-discovery and professional development, the course examines how to become an informed employee, an effective team member, and a successful manager. Course topics include interpersonal skills, delegation, leadership, performance management, and organizational change. Learning methods include lectures, case analyses, experiential exercises, and discussion. Prerequisite: HP&M 810 or permission of instructor.

HP&M 831. Reimbursement and Fiscal Policy. 2 Credits.
Reimbursement and fiscal policy practices impact the success and the economic well-being of healthcare institutions, payers and patients. This course develops the student's understanding of complex reimbursement methodologies from the perspective of providers and payers. Students will explore the strengths and weaknesses of the major methods of third party reimbursement, the types of managed care organizations and the payment methodologies employed. Students are also prepared to approach reimbursement policy issues both from the payer and the provider viewpoint. LEC

HP&M 832. Governance and Health Law. 2 Credits.
A survey course of the law as it affects governance, health care administration and health care generally. This course will develop the student's understanding of health law and its impact on many aspects of health care governance and administration. The student should be able to identify and understand various legal issues they may encounter and when to engage legal counsel's advice. Prerequisite: HP&M 810.

HP&M 833. Ethics. 2 Credits.
An introduction to the principles and concepts in the ethics of health services administration. The course will help students further develop their skills to recognize and analyze ethical dilemmas, and to explain, justify and evaluate the decisions they make in response to such dilemmas.

HP&M 837. Health Policy. 3 Credits.
This course examines the development, implementation, and evaluation of federal, state, and local health policy in the United States. Particular attention will be given to (1) the development of public institutions and policy goals; and (2) current policy problems such as cost controls, reimbursement, health services utilization, program assessment and evaluation, public health, and public/private investment and resource planning. Students will be expected to synthesize and integrate knowledge to apply theory and principles in ways consistent with professional practice as a health policy analyst. LEC

HP&M 838. Rural Health Care. 3 Credits.
Provides students with (a) an understanding of major issues in rural health and the rural environment in which health care providers and administrators provide service; (b) an understanding of the demographics, economics, services and challenges associated with the health care delivery systems in rural America and (c) an overview of federal and state health policy and its effect on rural health systems. Special emphasis will be placed on identifying, understanding, and addressing rural health challenges from administrative and policy perspectives. Prerequisite: None.

HP&M 840. Organizational Foundations for Leading Change. 3 Credits.
Self-discovery as a foundation for professional development while exploring the concepts of leader, manager, and follower is emphasized. Analysis and prediction of an organization's stages of development and its capacity for linear and social change are introduced through the lens of complexity science. Political, legal, ethical, and other issues that constrain and destabilize organizations and strategies to restore equilibrium are explored. (Same as NRSG 880). LEC

HP&M 842. Roles, Functions and Care Models. 2 Credits.
This course examines the nature and characteristics of the healthcare workforce needed to deliver direct, indirect, and support services. Healthcare worker roles are analyzed through the lens of key organizational functions and care delivery modalities. Common care delivery models, such as primary, team, and patient-centered care approaches to organizing care delivery are explored in various clinical settings, including acute and long-term care and community and public health entities. Administrative challenges and opportunities for managing a diverse workforce are presented. LEC.

HP&M 844. Communication for the Healthcare Executive. 2 Credits.

This course focuses on attaining proficient communication skills to deliver high impact messages to stakeholders ranging from board members, to diverse communities of interest, to policymakers and regulators. Verbal and written skill development addresses executive presence to perform communication functions such as conducting an 'ask' from a policymaker or potential benefactor, using storytelling and data to shape critical messages to the media, and communicating value-driven memoranda to internal audiences. The use of emerging technologies to aid in communication effectiveness will also be presented. LEC.

HP&M 846. Health Information Technology Management. 3 Credits.

This course covers fundamental concepts of health information technologies including information management, health care delivery and remote monitoring systems of interest to administrators in health services organizations. Types of systems, alignment with organizational strategy, selection and adoption, return on investment, security and privacy, and uses of healthcare information for clinical and strategic analysis and decision support will be covered. The course will also cover current U.S. health technology infrastructure, policy, organizations and issues regarding the latest technology applications. An introduction to health care analytics is also provided.

HP&M 847. Business Intelligence in Healthcare. 2 Credits.
An introduction into the data sources, technologies and processes leveraged by healthcare organizations to make more timely, informed and actionable business decisions. Students will learn fundamental terms and practices of data analytics and analysis, study real world examples of how data can inform decision making in healthcare and participate in case studies and in class presentations. Prerequisite: Permission of instructor.

HP&M 848. Designing Health Care Organizations. 2 Credits.
This class examines how design affects a broad range of health care organizations. It considers designs for jobs, processes, equipment, buildings, and organizations, and explores implications for safety, customer satisfaction, worker satisfaction, productivity, effectiveness, and profitability. Students analyze varied cases that approach design as a management decision-making process.

HP&M 850. Introduction to Operations. 3 Credits.
Examines performance of health care organizations, sources of variation, methods of measurement, and strategies for improving performance. Considers several approaches to performance improvement and examines tools widely used in operations management. Incorporates lecture, discussion, and fieldwork. (Same as NRSG 882.)

HP&M 852. Strategic Marketing. 2 Credits.
Provides students with a framework for executive-level, strategic market planning and analysis. Topics covered include: the strategic marketing organization; the impact of organizational culture on strategy development; environmental assignments and competitor analysis;

market research; and the impact of the marketing fours (price, positioning, promotion, and product) in health care.

HP&M 853. Strategic Management. 2 Credits.
Explores internal and external analysis for health care organizations. Examines development, analysis, execution, and monitoring of strategies. Application of critical thinking skills to strategy. Lecture and discussion. Prerequisite: Completion of HP&M Level I courses or permission of instructor.

HP&M 854. Human Resources and Workforce Development. 3 Credits.
The focus of this course is to understand the leadership functions of human resource management in organizations to create a competitive edge through employee empowerment. Core human resource concepts are introduced and applied to optimize human capital within a variety of healthcare settings, including compensation and benefits, employee recognition, and employee/labor relations. National, regional and local strategies and workforce trends are discussed related to best practices for the selection, retention, and management as a healthcare employer of choice. (Same as NRSG 891). LEC

HP&M 857. Evaluating Outcomes of Healthcare. 3 Credits.
This course will trace the development of the outcomes research movement and provide examples of methodologies, assessment instruments and issues that guide outcomes research. It will also review the methods for linking research findings with clinical practice (i.e., clinical practice guidelines). Obstacles to acceptance of practice guidelines will be discussed. Finally, the translation of outcomes research methodology into programs to improve health quality will be presented. Prerequisite: Permission of instructor.

HP&M 858. Organizational Behavior in Healthcare. 3 Credits.
Healthcare as a cultural and socio-behavioral system is presented. Using research and theory, students explore alternative perspectives on the nature of medicine and healing within comparative health systems, both U.S. and abroad. Students examine at an advanced level how healthcare organizational structures contribute to patient health outcomes and influence employee behaviors. The course reinforces the nature and characteristics of the health professions, particularly medicine and nursing perceptions, and the complex behavioral dynamics of health professionals with organizational leaders. LEC

HP&M 859. Professional Development. 2 Credits.
Prepares students for an initial professional job search, long term career planning and professional development. Explores personal assessment, professional networking, mentoring, resume' construction, job searches and interviewing. Reviews professional communication and other professionalism domains. Introduces foundational concepts of leadership and leadership development. Lectures, papers, interactive activities and discussion. Prerequisite: Permission of instructor.

HP&M 860. Graduate Internship in Healthcare Services Administration. 1-3 Credits.
Novice and experienced health services administrators function in applied settings. The internship is designed to meet the needs of individual students to advance their career functioning and set in motion a professional development plan. The inexperienced administrator will use the internship as a mid-curriculum opportunity to apply and synthesize in the practice setting knowledge, skills, and abilities. Students who come to the program with mid-level to advanced experience use the practicum to advance their career through exposure to additional experiences that extends their knowledge, skills, and abilities and demonstrates synthesis of program competencies. FLD

HP&M 861. Capstone Seminar. 2 Credits.
The knowledge, skills, and abilities learned throughout the program are validated in capstone experience. A case study approach will be used to synthesize and apply principles including, but not limited to, change theory and quality improvement, research and information technologies, strategy and communication tools, human resource management, financial and economic analysis, and advanced decision-making and management of organizational behavior. Students will present their cases to peers, faculty, and external reviewers for dialogue, critique, and a plan for professional skills development. IND.

HP&M 862. Research Practicum in Health Services Administration. 1-3 Credits.
A course to conduct a research project related to health services delivery, management or policy and to explore topics related to the research project. RSH Prerequisite: HP&M 819.

HP&M 863. Independent Study. 1-3 Credits.
This course is designed to meet the needs of students who have a special interest that cannot be met by existing courses. IND

HP&M 870. Research Inquiry: Defining and Supporting the Research Problem; Research Design and Analysis. 3 Credits.
Students select a problem area, critically review and analyze the research literature related to it and develop a research question(s) and working hypotheses. The analysis of the problem integrates field experiences with relevant literature, and translates ideas from the practice and/or policy setting into the context of scholarly inquiry. Students then build on a problem area of interest with potential benefit to the health care field and examine methodologies that would support a hypothesis or significant research question. The course guides students in translating their questions into a research design, using specific data sources, including overall strategy, measurement, study population and/or sample and analysis plan. Focus will be placed on critical analysis of design trade-offs and limitations. Prerequisite: Permission of the instructor.

HP&M 873. Statistical Applications Using Large Data Bases. 3 Credits.
The management of large data sets is a critical analytic skill for health policy and management research. This course exposes students to the various types and configurations of large data sets and provides hands-on analytic experience using an array of statistical techniques and procedures. Attention is placed on the criteria for designing and evaluating, including the trade-offs in selecting one plan over another. Students actually carry out an analysis plan for a variety of data types. Prerequisite: HP&M 819, or permission of the instructor.

HP&M 874. Statistics for Decision Making. 3 Credits.
Elementary statistical techniques to include descriptive statistics, probability, sampling, and statistical inference of means and proportions; advanced statistical techniques include multivariate analysis of qualitative and quantitative variables using multiple linear and logistic regression.

HP&M 875. Modeling in Health Services Research. 3 Credits.
Provides an opportunity for students to use a number of common analysis models in health services research. Emphasizes a conceptual understanding of appropriate modeling techniques and use of statistical software packages. The course focuses on application of methods to health services research questions, with emphasis on regression design and interpretation. Prerequisite: HP&M 874 or permission of the instructor.

HP&M 876. Medicare and Medicaid. 3 Credits.
Provides students with an in-depth understanding of the three publicly financed health programs that impact virtually all aspects of the American healthcare system - Medicare, Medicaid and Children's Health Insurance Programs (CHIP). Explores history and evolution of each program, plus specific operational issues such as eligibility, financing, management

reporting, state/federal coordination, quality of care and outcomes management and influence of recent legislation. Prerequisite: Permission of the instructor.

HP&M 877. Women and Healthcare. 3 Credits.
A gender analysis of the organization of healthcare in the United States, using sociohistorical and sociological perspectives. Considers the health status and healthcare problems of women in relation to cultural aspects of medicine and healthcare; the roles of both informal and professional healthcare providers; the political economy of healthcare systems; and the relationship between gender and state. Prerequisite: HP&M 810, or permission of instructor.

HP&M 878. Grant Writing. 3 Credits.
The course is designed to take the principles and mechanics learned in introductory epidemiology and biostatistics and apply them in the design of epidemiologic studies. The strategy and data collection for studies will be emphasized rather than the methods of statistical analysis. The student will learn how to develop a proposal/grant that addresses the entire array of concerns regarding such studies and propose a realistic, scientifically justified study. (Same as ANAT 869 and NRSG 889.) Prerequisite: HP&M 819 or HP&M 821, and NRSG 886.

HP&M 879. Comparative Healthcare Systems. 3 Credits.
Critical examination of the structure and function of healthcare systems in major, advanced, capitalist countries (e.g., Canada, Japan, United Kingdom, France, Germany, and Sweden) in comparison to each other and to the healthcare system of the United States. Patterns in control and financing will be studied in relation to issues of cost, quality, access, and in relation to cultural values. Special attention will be placed on comparative analysis of reform efforts. Prerequisite: HP&M 810 or permission of instructor.

HP&M 880. Health Care and Social Policies in Sweden. 3 Credits.
Sweden leads the world in major health outcomes despite spending significantly less than the U.S. This course provides students the opportunity to visit Sweden and see the operation of its health care and social welfare system firsthand. Learn about Swedish history and culture as you re-examine many commonly held assumptions about both the U.S. and Sweden. An intensive schedule of site visits and lectures in the Stockholm-Uppsala area, assigned readings, and a major paper.

HP&M 882. Health Services Research Using Public Payer Data. 3 Credits.
Several contemporary health reforms have rendered analyses of public payer data more feasible and valuable for population health, health services research, and quality improvement. The addition of an outpatient drug benefit to standard inpatient and outpatient service coverage for Medicare, for example, has stimulated a growth industry in comparative effectiveness research and expanded policy research across the health care system. Pending expansion of States' Medicaid programs under the Affordable Care Act will undoubtedly create the largest public health care insurance program in the United States. The Centers for Medicare & Medicaid Services (CMS) have streamlined researchers' access to national Medicare and Medicaid populations for health srevices and quality improvement projects through contracts with the Research Data Center at the University of Minnesota and the Chronic Condition Warehouse. In addition, Kansas Medicaid has invested in a Data Analytic Interface that offers ready access to our state's employees, Medicaid beneficiaries, and private health insurance claims data for enterprising researchers including tremendous opportunities for state of the art, contemporary policy analyses. This is indeed an exciting and opportune time for students embarking on careers in health services, policy, and population health research. This course is designed to prepare students for real world analyses using standard public payer claims data.

HP&M 883. Cost-Effectiveness and Decision Analysis. 3 Credits.
This course examines techniques that are used in making clinical and management decisions when outcomes are uncertain. The course begins with a review of probabilistic decision making, then explores methods of analyzing choices with uncertain outcomes, stressing the use of decision trees and sensitivity analysis. The course examines cost minimization analysis, cost effectiveness analysis, and cost benefit analysis. (SAME as PRVM 878).

HP&M 884. Clinical and Administrative Data Analysis. 3 Credits.
This course presents advanced techniques in statistical analysis and information management to help understand, process, and use health services data. The three broad areas of health services data will be used: clinical, program, and population-based. Ways in which these data can be used as both management and research tools will be discussed. Implications for improving patient care and delivery of health services will be emphasized. Labs will stress the use of both manipulative techniques such as merging, matching, sorting, and file construction, as well as focus on analysis, using univariate, bivariate, and multivariate techniques. Recent methodology related to outcomes, case-mix, and performance assessment will be presented, and their application to health services administration demonstrated.

HP&M 885. Instructional Methods in Health Services Education. 1 Credits.
An overview of pedagogical approaches and learning strategies for higher education courses in health policy and management. Content will include course organization, syllabus design, techniques for teaching in the classroom and online, learning styles, strategies for classroom management, and evaluation/grading methods. Prerequisite: HP&M 868 or permission of the instructor.

HP&M 886. Applied Health Services Research. 3 Credits.
Students in this course apply the full spectrum of the research process to a specific hypothesis or research question, drawn from practical health systems observations and/or supported by critical analysis of the health services research literature. Moving step by step through the research process, students work to develop a complete research plan and proposal suitable to investigate their chosen question. Group discussion and guest researchers provide elaboration for each stage of research plan development. Prerequisite: HP&M 872 and HP&M 873 or permission of the instructor.

HP&M 887. Practicum in Health Services Education. 2 Credits.
Application of the approaches and methods described in HP&M 885. Students will serve as a teaching assistant for one semester, working with a teaching mentor. In addition to assisting with the class, students will meet regularly with the mentor to critique and analyze content and classroom processes, plan and develop teaching activities, and evaluate learning and performance in the classroom. Prerequisite: HP&M 868 or permission of the instructor. HP&M 887 may be taken concurrently with HP&M 885.

HP&M 890. Topics in Health Policy and Management. 1-3 Credits.
This course allows exploration of special topics that are not routinely a part of the curriculum. Prerequisite: Consent of the instructor. IND

HP&M 901. Doctoral Seminar in Health Policy. 3 Credits.
Students will investigate, review, and critically analyze major concepts, theoretical and methodological approaches and sub-areas in the field of health policy research. The course will cover comparative health policy analyses as well as both micro and macro system perspectives. Prerequisite: Permission of the instructor.

HP&M 903. Doctoral Seminar in Quality and Safety. 3 Credits.

Students will critically review selected publications that address quality and safety in health care. Identification of major research questions and approaches to them will be stressed, and students will develop an interesting and tractable research question. Prerequisite: Admission to the PhD Program or permission of the instructor.

HP&M 904. Doctoral Seminar in Health Care Occupations and Culture. 3 Credits.
Examines the social, historical, and cultural forces shaping the organization and delivery of health care. Students will critically analyze concepts surrounding health, illness and wellness, healing, professional authority, and interprofessional and intraprofessional relationships. Explores the impact of organizational cultures on the health care system. Prerequisite: Admission to the PhD Program or permission of instructor.

HP&M 905. Doctoral Seminar in Social Determinants of Health. 3 Credits.
An advanced survey of theory and research in social determinants of health, giving primary attention to health differences by education, income, race/ethnicity, gender, and sexual orientation. Demographic, cross-cultural, social-psychological, and physiological aspects of physical and mental health will be considered. Prerequisite: Admission to PhD program or permission of instructor.

HP&M 906. Doctoral Seminar in Comparative Health Systems. 3 Credits.
Critical examination of the structure and function of health care systems in major, advanced, capitalist countries (e.g., Canada, United Kingdom, France, Germany, Netherlands, Sweden) in comparison to each other and to the health care system of the United States. Patterns in control and financing will be studied in relation to issues of cost, quality, access, and in relation to cultural values. Special attention will be placed on comparative analysis of strategies for reform and the results of recent reform efforts in the focal countries. Prerequisite: Admission to PhD program or permission of instructor.

HP&M 910. Health Services Research Methods. 3 Credits.
Examines the research process and the primary methodologies used in health services research. Explores basic methods in survey research, epidemiology, and evaluation. Focuses on quantitative methods and introduces qualitative methods. Lecture Prerequisite: Graduate level statistics; Acceptance to the PhD program or permission of instructor.

HP&M 912. Qualitative Health Research. 3 Credits.
Examines qualitative approaches to research, specifically in health care settings. Content includes qualitative research methodologies, including ethnography, interviews, focus groups, and content analysis through examples in the literature and hands-on exercises. Discusses when qualitative methods are appropriate to use, and how they can complement other research methods. Prerequisite: Permission of Instructor.

HP&M 990. Advanced Topics in Health Policy and Management. 1-3 Credits.
This course allows exploration of special topics that are not routinely a part of the curriculum. Prerequisite: Admission to a PhD program and consent of the instructor. IND.

HP&M 991. Individual Doctoral Readings. 1-3 Credits.
Individual study of special topics or problems by students working on a doctorate. Prerequisite: Admission to a PHD program and consent of the instructor.

HP&M 999. Dissertation. 1-12 Credits.

Courses

PRVM 429. Interdisciplinary Approaches to Neurodevelopmental Disabilities, Including Autism Spectrum Disorders. 3 Credits.
Topics in this course include an introduction to the Maternal and Child Health Bureau and related organizations, the history of neurodevelopmental disabilities (NDD), the genetics, identification, and prevention of developmental disabilities. Trainees obtain information about and participate in experiences related to neurodevelopmental and related disabilities and conditions individuals experience across the life course. The Life Course Perspective is defined by MCHB as the multidisciplinary approach to understanding the mental, physical, and social health of individuals, incorporating both life span and life stage concepts that determine an individual's health trajectory. Significant emphasis is on autism and related issues. Participants learn the different roles of interdisciplinary team members, their unique contributions, and the team process in screening, evaluation and planning intervention. Prerequisite: Permission of Instructor.

PRVM 431. Interdisc Leadership Approaches to Systems & Services for Indv with Autism, Neuro & Dev Disabilities. 3 Credits.
Topics in this course include information about the history and development of service systems in the United States including Maternal and Child Health and Title V programs. An overview of program administration, business planning, budget development and various grant sources provides participants with an understanding of service systems operations and funding streams. Program oversight, standards of care and evaluation, including needs assessment and government mandates for outcomes (GPRA), provide participants with information that enables them to explore agency director perspectives about barriers to providing effective services as well as systems barriers presented from a parent point of view. Discussions include how to make systems changes through consultation and technical assistance and information about adult learning styles and consumer empowerment. Other topics include the scientist/practitioner models of research, empirical validation of practices and community participatory action research. As an adjunct to the core course there are other didactic experiences required of all trainees including Center and community committee work, campus interdisciplinary forums, family immersion experiences and research presentations. These didactic experiences give faculty and trainees an opportunity to meet as a group, hear presentations, and discuss a variety of topics, including ethics, standards of care, and empirically validated practices. Prerequisite: Permission of Instructor.

PRVM 800. Principles of Epidemiology. 3 Credits.
Basic concepts of epidemiology and methods for identification of factors influencing health and disease in human populations. Considerations are centered on physical, biological, environmental, psycho-social and cultural factors in relation to infectious and non-infectious diseases; interactions between agent, host, and environmental factors as determinants of health and disease; the application of epidemiological approaches to health services; retrospective and prospective analysis of morbidity and mortality data.

PRVM 803. Introduction to Clinical Research. 3 Credits.
The course will provide a basic and broad overview to clinical research, as well as support tailored to each student's specific project. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations; the recruitment of study participants; regulatory issues; defining measures and instruments; data collection, management, and analysis; and reporting of results via abstract, presentation, and/or manuscript. It is required that students have a research idea and mentor

before enrolling. Faculty support and collaboration will be available up to 6 months after completion of the course for ongoing efforts to complete the project. Prerequisite: Consent of Instructor. No prior coursework is required. Students must have, or plan to begin, a quality improvement or retrospective research project.

PRVM 804. Community Health Assessment, Intervention, and Advocacy. 3 Credits.
To impact community health, students must be able to: define the problem(s) experienced by specific populations, identify stakeholders and building partnerships, co-design an intervention to address the problem(s), incorporate cultural values of the affected stakeholders in the intervention, and advocate for various programs and policies to improve health. This course guides students through each element of the community health interventions process - from defining the problem to advocating for policy.

PRVM 805. Public Health Seminar. 1 Credits.
This course will focus on public health practice. Guest lectures from national, state, and local public health agencies will present problems and how these problems are being addressed. Topics are expected to vary somewhat from year to year, depending on the priorities of the agencies. However, topics might include such issues as smoking prevention, automobile accidents, foodborne outbreaks, cryptosporidum outbreaks, lead poisoning in children, asthma in children, sexuality transmitted diseases, diabetes, cancer control, nutrition, cardiovascular diseases, bioterrorism, legal issues and administration of public health. This course is the same as Public Health Grand Rounds.

PRVM 806. Special Topics:. 1-4 Credits.
In-depth, individualized investigation of special problems in community health. Designed especially for students with limited background in community health. Prerequisite: Permission of instructor.

PRVM 808. Clinical and Translational Research Seminar. 1 Credits.

This seminar will present locally and nationally recognized clinicians and researchers to discuss various areas of clinical research. The course is designed to expose students to a variety of ongoing research and features speakers from a variety of disciplines including physicians, epidemiologists, biostatisticians behavioral scientists, nursing faculty, nursing students, medical students, allied health faculty and others. Prerequisite: Permission of instructor.

PRVM 809. Introduction to Public Health. 3 Credits.
This course provides an introduction to the basic principles of public health practice, including an overview of the history, philosophy, and scope of public health in the United States and globally. It will provide an overview of the primary disciplines within public health: biostatistics, demography, environmental health sciences, epidemiology, global health, health policy and management, social and behavioral health, and the analytical tools employed to measure public health indicators. Prerequisite: None.

PRVM 810. Cardiovascular Disease Epidemiology. 3 Credits.
This will be a study of Cardiovascular Disease risk factors, expression, treatment, and prevention from a population-based standpoint. Participants will gain knowledge of cardiovascular disease prevalence, incidence, risk factors, outcomes, and prevention strategies. The goal of this course is to understand major aspects of cardiovascular epidemiology and current strategies for primary and secondary prevention of major cardiovascular diseases. Attention will be given to physiologic mechanisms leading to atherosclerosis; traditional and novel coronary heart disease risk factors; prevention methodologies for cardiovascular disease, and the role of lifestyle, dietary, and genetic factors in the development of cardiac and vascular diseases. The course will be evidence- and outcomes-based, with reference to landmark studies and major publications. Relevant historical breakthroughs and current controversies in CVD will be discussed using recent publications from the lay press and peer-reviewed journals. Emphasis will be placed on coronary artery disease and its clinical manifestations. Participants will learn to critically assess public health measures undertaken to recognize, manage, and treat atherosclerotic disease processes.

PRVM 811. Intro to Pharmaceutical Outcomes Research. 3 Credits.

Medications are involved in the treatment of nearly every chronic and acute disease. Pharmaceutical outcomes research is a broad field of research that strives to inform policies and interventions that optimize the safety, effectiveness, accessibility, and utilization of medications to improve patient outcomes. Pharmaceutical outcomes research spans pharmacoepidemiology, pharmacovigilance, pharmaceutical policy evaluation, pharmacoeconomics, and other medication-focused health services research disciplines. This course provides an overview of pharmaceutical outcomes research applications, with an emphasis on measuring medication use and outcomes; designing pharmaceutical outcomes research studies; and interpreting the pharmaceutical outcomes research literature. Prerequisite: PRVM 800 or permission of instructor.

PRVM 813. Chronic Disease Epidemiology. 3 Credits.
This course is required for students on the epidemiology concentration, but is open to other MPH students as well. It extends the methods and concepts of basic epidemiology to the prevention and control of major chronic diseases, as well as evaluating epidemiologic study designs and results from individual and multiple studies. Topics will include surveillance, risk factors, high risk populations, pathophysiology, and consequences. Students will also gain experience developing a proposal to conduct a screening, etiologic, or prevention study of selected chronic diseases. Prerequisite: PRVM 800 Principles of Epidemiology.

PRVM 814. Health Literacy. 3 Credits.
This is a graduate-level course designed to teach students about literacy and its implications on public health practice and research in the United States, with a focus on health literacy. Students will be introduced to the different types of literacy, including health, prose, quantitative, document, and computer, and how to evaluate them. In addition, students will learn how to lower literacy levels of health education materials for practical application. Cultural competency in literacy will also be discussed, with a focus on culturally competent health communication and education.

PRVM 815. Infectious Disease Epidemiology. 3 Credits.
This course emphasizes the underlying concepts of the epidemiologic approach as it relates to infectious diseases. Students will be introduced to principles and methods of disease surveillance and outbreak investigations using case studies. Essential concepts relating to vaccine efficacy and effectiveness in preventing infectious diseases, barriers to achieving adequate vaccine coverage, and how ongoing vaccine controversies relate to the scientific literature base will be covered. The evolving public health concerns of bioterrorism, antibiotic resistance, as well as new emerging pandemics such a novel coronavirus (COVID-19) will also be addressed. Characteristics of the agent, host, and environment that influence disease transmission will be examined in the context of control strategy identification. Instruction is primarily by online learning tools, with limited short lectures. Prerequisite: PRVM 800 Principles of Epidemiology.

PRVM 816. International Health. 3 Credits.
This course is divided into seven sections: 1) Global health introduction, 2) Health inequalities and the socio-economic context of disease, 3) Maternal and child health, the health of special populations, 4) The spread of infectious diseases, and HIV/AIDS, malaria, TB, 5) Globalizations and

emerging infectious diseases, and nutrition, 6) Environmental health ,and the health of effects of environmental change, 7) Global health payers and players, and global health priorities. Prerequisite: PRVM 800 Principles of Epidemiology or permission of the department/instructor.

PRVM 818. Social and Behavioral Aspects of Public Health. 3 Credits.
The course provides an overview of social and behavioral aspects of public health including the relevance of psychological and social factors for health, the principles of health behavior change, the application of these principles in various health domains, and an introduction to health behavior and health promotion interventions. The course begins with the rationale for studying social and behavioral aspects of health and examines select social and behavioral factors (e.g. gender, socioeconomic status, race/ethnicity) as they relate to physical well-being. The course also focuses on well-established theories of health behavior and examines the role of psychological and social factors in specific health topics (e.g. obesity, cancer, cardiovascular disease, smoking). Prerequisite: None.

PRVM 819. An Introduction to Geographic Information Systems (GIS) for Health. 2 Credits.
This course will provide students with an overview of Geographical Information Systems (GIS) applied in the context of health (public health, allied health and health care). Students will be introduced to GIS and health applications used locally, nationally and internationally. They will learn about pertinent data, how to visualize the data, how to design maps that represent the data, how to use spatial data, how to geocode data, and how to prepare and analyze data. Real-life examples will be used throughout the course and students will gain hands-on experience using a GIS application. Students will also be kept abreast of any new GIS resources and trends or developments in GIS as relates to health. Prerequisite: Basic computer skills.

PRVM 821. Research Methods in Public Health. 3 Credits.
This is an introductory behavioral research methods, course. Students will learn about research designs, hypothesis formation, measurement, sampling, ethical issues in research, and pragmatic and research issues with evaluating behavioral interventions. Students will also learn how to critically evaluate and develop behavioral randomized clinical trials. Prerequisite: None. Social and Behavioral Aspects of Health and an Introductory statistics course are recommended but not required.

PRVM 825. Child and Family Health. 3 Credits.
Family, maternal, and child health problems will be addressed. Topics will include prenatal care (maternal health and habits); fetal growth factors, well baby care (immunizations, nutrition, growth, development, behavior); developmental disabilities; adoption; adolescence; child abuse; family as a support system; long-term medical and social outcomes of chronic illness/disability in children. Subjects are covered through lecture, discussion and field visits under the supervision of a pediatrician. Prerequisite: Permission of instructor.

PRVM 826. Epidemiology for Advanced Nursing Practice. 3 Credits.

Epidemiology for Advanced Nursing Practice is a graduate level course designed to synthesize basic epidemiology with clinical nursing concepts. The course is a core course required for the Doctor of Nursing Practice degree in which basic concepts of epidemiology and methods for identification of factors influencing health and disease in human populations are discussed. Considerations are centered on: 1) Physical, biological psychosocial and cultural factors in relation to infectious and non-infectious diseases; 2) Interactions between agent, host, and environmental factors as determinants of health and disease; 3) Application of the epidemiologic approach to clinical nursing; and 4) Measures of disease occurrence and risk. Prerequisite: None.

PRVM 827. Public Health Administration. 3 Credits.
This course provides students with an overview of the core functions of public health: assessment, policy development, and assurance together with an introduction to the leadership and management skills necessary to provide leadership in public health. It uses both theoretical and practical material to develop basic administrative competencies necessary for practice in community and public health. Assignments are designed to provide practice in applying course materials.

PRVM 828. Designing Public Health Interventions. 3 Credits.
Framed within the context of the core public health functions, assessment, policy development, and assurance, this course provides students with an overview of the planning process within a community setting. This course will use both theoretical and practical material to develop basic competencies in planning, implementing, and evaluating health programs; however, the predominant focus will involve the planning process and operations of a public health program. Assignments are designed to provide practice in applying course materials.

PRVM 829. Interdisciplinary Approaches to Neurodevelopmental Disabilities, Including Autism Spectrum Disorders. 3 Credits.
Topics in this course include an introduction to the Maternal and Child Health Bureau and related organizations, the history of neurodevelopmental disabilities (NDD), the genetics, identification, and prevention of developmental disabilities. Trainees obtain information about and participate in experiences related to neurodevelopmental and related disabilities and conditions individuals experience across the life course. The Life Course Perspective is defined by MCHB as the multidisciplinary approach to understanding the mental, physical, and social health of individuals, incorporating both life span and life stage concepts that determine an individual's health trajectory. Significant emphasis is on autism and related issues. Participants learn the different roles of interdisciplinary team members, their unique contributions, and the team process in screening, evaluation and planning intervention. Prerequisite: Permission of Instructor.

PRVM 830. Environmental Health. 3 Credits.
This course will include discussion of some exposures and health effects of environmental contaminants and principles of prevention. Topics include outdoor and indoor air pollution, water and wastewater pollution, solid waste disposal, insect and rodent control, food protection, chemical and physical carcinogens, ionizing radiation, injury prevention, environmental epidemiology, active transportation, disasters, and occupational safety and health. A number of guest lecturers and field trips will be utilized.

PRVM 831. Interdisc Leadership Approaches to Systems & Services for Indv with Autism, Neuro & Dev Disabilities. 3 Credits.
Topics in this course include information about the history and development of service systems in the United States including Maternal and Child Health and Title V programs. An overview of program administration, business planning, budget development and various grant sources provides participants with an understanding of service systems operations and funding streams. Program oversight, standards of care and evaluation, including needs assessment and government mandates for outcomes (GPRA), provide participants with information that enables them to explore agency director perspectives about barriers to providing effective services as well as systems barriers presented from a parent point of view. Discussions include how to make systems changes through consultation and technical assistance and information about adult learning styles and consumer empowerment. Other topics include the scientist/practitioner models of research, empirical validation of practices and

community participatory action research. As an adjunct to the core course there are other didactic experiences required of all trainees including Center and community committee work, campus interdisciplinary forums, family immersion experiences and research presentations. These didactic experiences give faculty and trainees an opportunity to meet as a group, hear presentations, and discuss a variety of topics, including ethics, standards of care, and empirically validated practices. Prerequisite: Permission of Instructor.

PRVM 835. Evaluation Methods in Public Health. 3 Credits.
Principles and procedures to evaluate health promotion and disease prevention programs. Includes data collection methods, instrument scale development, measurement, and evaluation designs. Case studies of disease prevention literature on evaluation will be analyzed. Prerequisite: Permission of instructor.

PRVM 836. Epidemiology in Aging. 3 Credits.
An overview of the aging process, review of current knowledge of epidemiology of selected diseases, such as dementia and osteoporosis, and falls that primarily affect aging individuals. Emphasis on epidemiologic designs, methods, and issues (e.g., low response rate and measurements) that are pertinent to research on aging individuals. Prerequisite: PRVM 800, BMTR 811/PRVM 804, or permission of instructor.

PRVM 841. Advanced Epidemiology I: Methods in Cross-Sectional and Case-Control Studies. 3 Credits.
This course will concentrate on concepts and application of various statistical techniques in the analysis of epidemiological data. Students will be oriented toward application of SAS in data analysis and interpretation of data from cross-sectional and case-control studies. Prerequisite: Principles of Epidemiology (PRVM 800), Fundamentals of Biostatistics I (BIOS 714), and Management of Public Health Data (PRVM 875) or BIOS 715 Introduction to Data Management using RedCap and SAS.

PRVM 842. Advanced Epidemiology II: Methods in Longitudinal Studies. 3 Credits.
This course will concentrate on concepts and application of various statistical techniques in the analysis of epidemiological data. Students will be oriented toward application of SAS in data analysis and interpretation of data from longitudinal studies and controlled clinical trials. Prerequisite: Principles of Epidemiology (PRVM 800), Fundamentals of Biostatistics I (BIOS 714), Advanced Epidemiology (PRVM 841), and Management of Public Health Data (PRVM 875) or Introduction to Data Management using RedCap and SAS (BIOS 715).

PRVM 845. Health, Society, and Culture. 3 Credits.
This three-credit graduate course will help prepare students to work effectively with diverse populations, enhance-cross cultural competence, and identify and use social and culturally-competent strategies in public health research and practice. Students in this course will become competent and versed in how culture intersects with health, social determinants of health, patient education and communication, and society. Key models for understanding how health, society, and culture relate will be discussed and linked to health communication and public health practice. In addition social issues that include racism, classism, gender discrimination, and poverty will be an integral part of the course.

PRVM 847. Seminar in American Indian Health Disparities. 1 Credits.
This is a graduate-level course designed to teach students about current research being done around the country to address health disparities faced by American Indian communities. Students will attend a weekly one-hour seminar on-line and will be given readings to accompany each lecture. Lectures will be done by faculty at various universities, as well as members of community organizations and/or tribes who are conducting research. Students may take the course multiple times; each seminar will be unique in terms of topics and accompanying readings, as well as lecturers. Some semesters may focus on a particular health topic for the full semester, e.g. - cancer or diabetes. This course is designed to be a seminar series that changes each time it is taught. Prerequisite: Permission of instructor.

PRVM 849. Qualitative Methods in Public Health. 3 Credits.
Qualitative research has diverged from its anthropology roots to become commonplace in marketing, business, clinical and public health settings. This course is designed to teach the basics of rigorous qualitative methodology as applied to research in public health, health services research, and health behavior. The course will equip students with a foundational understanding of theoretical underpinnings of qualitative research as well as hands-on experience with skills in study design, several methods of data collection, data analysis, and presenting results.

PRVM 851. Public Health Policy and Law. 3 Credits.
Public Health Policy and Law is about the legal and social justice framework for urgent public health issues. This course is designed to prepare public health leaders to live and work in a world of laws, and to play an active and effective role in policy making and analysis. Students will understand the source of national, state, and local statutes and regulations and understand the role of common law. Students will understand the policy process at the national, state, and local level, and develop skills analyzing legislation and influencing policy decisions. Students will understand the rule making process at the national and state level.

PRVM 853. Responsible Conduct of Research. 1 Credits.
The purpose of this course is to engage research trainees in reading about, considering, and discussing the responsible conduct of science. The course is designed as an option for meeting current federal regulations, which require that all NIH training grants provide training in the responsible conduct of research. This course provides a concise overview of key subject areas in the responsible conduct of research. It is designed to make students aware of relevant guidelines, policies and codes relating to ethical research, as well as to provide the skills for identifying and resolving ethical conflicts that may arise in research.

PRVM 855. Seminar in Women's Health. 3 Credits.
Seminar in Women's Health is a 3 credit elective, graduate level course focusing on gender issues that are relevant in treatment approaches to various health issues, the differing health status of minority women, the evolvement of women's health to include the entire life span and areas other than reproduction, the changing implications of health care and policy and men in women's health. No prerequisite.

PRVM 856. Community-Based Participatory Research. 3 Credits.
This is a graduate-level course designed to teach students the basic methods of conducting and evaluating community-based participatory research (CBPR). Students will be introduced to the five phases of CBPR, including partnership formation and maintenance, community assessment and diagnosis, defining the issue, documentation and evaluation of partnerships, and feedback, interpretation, and evaluation of partnerships. In addition, students will learn how to find funding mechanisms and journals that are appropriate for CBPR, as well as some of the key factors in writing about CBPR. Students will be introduced to a variety of examples of well-done CBPR and will learn what makes it different from other types of research done in community settings. Prerequisite: Social and Behavioral Aspects of Public Health or permission of instructor.

PRVM 859. Tobacco and Public Health. 3 Credits.
This course will provide an overview of tobacco as a public health problem and tobacco politics. Students will learn about the pharmacology of nicotine, the mechanisms leading to tobacco addiction and biologic factors

that affect pharmacology and tobacco use such as the menstrual cycle and comorbid illnesses such as depression and others. Public health approaches to preventing tobacco use initiation will be studied, including which initiatives are most effective. State-of-the-art methods to assist smokers to quit will be reviewed, including pharmacologic interventions, counseling by health professionals and education/motivation support. Barriers to obtaining services will be explored, such as educational needs among various types of helth professionals, and access to care in rural areas or among clients with certain types of health insurance.

PRVM 861. Leadership in Public Health. 3 Credits.
This course is designed to enhance and develop leadership knowledge and skills vital to readying students for public health 3.0 and the role of chief health strategist for their organization, community, region, or state. Competency in principles of leadership, governance, management, collaboration, decision making, and negotiation will be achieved through leadership assessments, journal entries, case studies, and writing of a leadership self-reflection and action plan.

PRVM 862. Terrorism, Emergency Preparedness and Response. 3 Credits.
Through lectures, tabletop exercises, and invited speakers, the course content will include the following topics: terminology and core competencies, public health infrastructure, collaboration and communication, roles and responsibilities, psychological effects of terrorism, agricultural and zoonotic bioterrorism, law enforcements and public health, epidemiology of BT diseases (including agent specific lectures), burn injuries, risk communication, Strategic National Stockpile (SNS), National Incident Management System (NIMS), public health law as related to bioterrorism, and public health laboratory response related to bioterrorism.

PRVM 863. Health Disparities in Public Health. 3 Credits.
This course is designed to enhance students' understanding of the biopsychosocial factors that contribute to disparities in health and health care. This course will also review strategies developed to reduce health disparities. Prerequisite: PRVM 818 Social and Behavioral Aspects of Public Health is recommended.

PRVM 864. Global Public Health Impact of HIV/AIDS. 3 Credits.
Historically reviews the HIV pandemic to evaluate lessons learned in prevention and treatment of the disease and successes and failures of public policies to reduce the impact of HIV in various countries. Critically analyzes HIV prevention interventions (voluntary counseling and testing, prevention of mother-to-child transmission, promotion of safer sex practices, clean needle exchange, methadone or buprenorphine programs, treatment with antiretroviral therapy, pre- and post-exposure prophylaxis, vaccine and microbicide development) and challenges with their implementation.

PRVM 867. Ethical Issues in Public Health. 3 Credits.
Lectures and small group discussions explore public health ethics, social justice and autonomy as they relate to public health practice and health policy. Current issues in health policy are discussed including: the right to health and health care, bioterrorism, and health inequalities, poverty and power. Weekly small group discussions include cases on MCHP, obesity and "fat taxes," resource allocation, and disparities in infant mortality. Student evaluation is based on class participation, a small group project, and a final paper based upon a case study addressing ethical issues relevant to the student's area of public health specialization.

PRVM 868. Biomedical Informatics Driven Clinical Research. 3 Credits.
This course introduces students to biomedical informatics, clinical and administrative information systems and workflows, data warehousing and hypothesis generation using HERON and the i2b2 web client, programming using Structured Query Language (SQL), and developing a computable phenotype and research cohort for observational research or prospective trial eligibility based on secondary data sources centered on electronic health records. Students will also gain experience developing their cohort, an analytic ready database and files using SQLite and REDCap, conduct preliminary analysis, and prepare an abstract for submission to a clinical or informatics forum/conference. Prerequisite: PRVM 800 Principles of Epidemiology or BIOS 714 Fundamentals of Biostatistics I.

PRVM 869. Systematic Review. 3 Credits.
This course covers the methods of comprehensive syntheses of research evidence. Rigorous review methods will be highlighted, such as searching for potentially relevant articles; selecting primary articles using explicit, reproducible criteria; appraisal of studies; quantitative data synthesis; and, interpretation. The course uses the framework provided by the GRADE Working Group to evaluate certainty of estimates and present and interpret evidence. The focus of the course is on systematic reviews of interventions, which typically include randomized trials and non-randomized studies that evaluate therapeutic interventions and outcomes. This focus is to ensure that students understand and apply the fundamental processes to conduct a systematic review. The process can be applied to other review topics and study designs, which may be mentioned but not covered in the course. Students are required to conduct a systematic review of an intervention during the course. Students who wish to conduct reviews of other types of question will need to ensure they have methodological support in addition to what is provided within the course. Prerequisite: PRVM 800 Principles of Epidemiology; graduate level statistics course or permission of instructor.

PRVM 872. Grant Writing. 3 Credits.
This course combines instruction and practical exercises to move the participant step-by-step through all stages of planning research, identifying funding sources, and writing grant applications primarily to the National Institutes of Health (NIH). Upon completion of the course, the student will have developed a quality proposal and be able to demonstrate skills in preparing applications. These will include: developing fundable research ideas, identifying appropriate funding opportunities from the NIH, finding information on the Internet regarding applying for funds, developing application sections and crafting a quality grant application, complying with certification and assurances required on NIH applications, providing feedback to other class participants in small groups to act as internal grant reviewers, responding to reviewers, and building a budget.

PRVM 873. Scientific Writing. 2 Credits.
Includes the mechanics of how to write clearly, focusing on mechanics, structure, and style. Students will practice specific strategies for writing effectively, with in depth attention paid to how ideas are distributed through well written sentences and paragraphs. Also includes editing and revision of writing for publication and grant submission.

PRVM 875. Management of Public Health Data. 3 Credits.
A 3 credit hour graduate level course concerning basic computing skills necessary for any advanced epidemiologic or quantitative methods. This course covers basics of variable and dataset creation, building, maintenance and basic descriptive (not interpretive) analysis. The course is designed to be of use to students entering a variety of research, administrative and public health settings in public health, clinical and other fields. Software covered will include SAS, SPSS, Epi Info, REDCap, Microsoft-EXCEL and ACCESS. The course can stand alone, or prepare students for Biostatistics and Epidemiology courses. Public data presentations will be stressed to prepare students to communicate about data with the lay public.

PRVM 876. Health Services Research Using Public Payer Data. 3 Credits.
Several contemporary health reforms have rendered analyses of public payer data more feasible and valuable for population health, health services research, and quality improvement. The addition of an outpatient drug benefit to standard inpatient and outpatient service coverage for Medicare, for example, has stimulated a growth industry in comparative effectiveness research and expanded policy research across the health care system. Pending expansion of States' Medicaid programs under the Affordable Care Act will undoubtedly create the largest public health care insurance program in the United States. The Centers for Medicare & Medicaid Services (CMS) have streamlined researchers' access to national Medicare and Medicaid populations for health srevices and quality improvement projects through contracts with the Research Data Center at the University of Minnesota and the Chronic Condition Warehouse. In addition, Kansas Medicaid has invested in a Data Analytic Interface that offers ready access to our state's employees, Medicaid beneficiaries, and private health insurance claims data for enterprising researchers including tremendous opportunities for state of the art, contemporary policy analyses. This is indeed an exciting and opportune time for students embarking on careers in health services, policy, and population health research. This course is designed to prepare students for real world analyses using standard public payer claims data.

PRVM 877. Health Communication. 3 Credits.
This course is focused on health education and promotion, especially designing and evaluating health communication programs for populations with shared risks, exposures or behaviors. Health communication theories and principles will be applied to selecting appropriate communication strategies and developing health communication plans. Students will develop an appreciation of the role of cultural context in designing health communication. Emphasis will be placed on written communication and oral presentation.

PRVM 878. Cost-effectiveness and Decision Analysis. 3 Credits.
This course examines techniques that are used in making clinical and management decisions when outcomes are uncertain. The course begins with a review of probabilistic decision making, then explores methods of analyzing choices with uncertain outcomes. stressing the use of decision trees and sensitivity analysis. The course examines cost minimization analysis, cost effectiveness analysis, and cost benefit analysis. (Same as HP&M 872)

PRVM 879. Budgeting and Human Resource Management. 3 Credits.
This graduate-level course covers principles and skills for budgeting and human resource management within public health organizations. It focuses on non-profit and public settings. Budgeting topics include the principles and purposes of accounting, concepts related to finance, and financial strategic planning. Human resource management topics include job design and hiring, performance management, retention, compensation/benefits, legal issues, and termination. The focus of the course is twofold: 1) understanding the concepts behind budgeting and in gaining skills in interpreting and using financial information; 2) gaining skills in human resources management and resource development. The course is designed for people who are interested in public health administration, but should be useful to anyone with an interest in public health leadership in any setting.

PRVM 880. Seminar in American Indian Health. 3 Credits.
This is a graduate-level course designed to teach students about current issues in American Indian health, as well as provide a basic historic context for understanding these issues. Students will read current literature from the academic journals and will be exposed to research being done today in American Indian communities, some of which has not yet been published. In addition, students will gain an understanding of what health disparities exist in American Indian communities and some of the reasons why they exist, including access issues and other barriers to care, from both Western and Native points of view. Students will be exposed to some of the difficulties in conducting health research in Native communities and some of the more successful techniques to overcome barriers. Prerequisite: None.

PRVM 891. Public Health Internship. 1-3 Credits.
Students will complete a 192 hour internship in a community setting (12 hours/week for the 16 week semester) during PRVM 891 Public Health Internship. The internship is a service-learning experience for which students should consider the contribution their activities will make to the internship setting as well as activities that will be undertaken to meet the student's learning objectives. Prerequisite: Students may enroll in PRVM 891 Public Health Internship if they are within 2 semesters of graduation and have the permission of the KU-MPH program.

PRVM 893. Public Health Capstone. 1-3 Credits.
The public health capstone is a 192 hour (12 hours/week for the 16 week semester) culminating experience that requires students to synthesize and integrate knowledge and/or apply theories and principles learned to an area of public health. The capstone is meant to be taken at the end of the student's degree program, and is designed to give the student an opportunity to apply their skills to a variety of problems or issues in public health. The capstone should be primarily focused on addressing concentration specific competencies. While the exact activities and outcomes of the capstone will differ across concentrations all capstones, regardless of concentration, must include a written report and an oral defense. Prerequisite: PRVM 891 Public Health Internship; previous attendance at two MPH capstone defenses; last semester of enrollment and be within 12 credits of graduation; must be in good academic standing.

PRVM 899. Thesis. 1-3 Credits.
Preparation of a formal thesis based on the research conducted on a community health problem. After the thesis has been completed, the student will be given an oral examination on the research methods and content. Prerequisite: All MS-CR core and required courses completed or in progress in the student's final semester.