



CNYMPH Elective Course Descriptions

Advanced Biostatistics, MPHP 661, (3) Cibula, Spring, UPSTATE

This course focuses on applying general principles and methods of regression modeling to the analysis of continuous, categorical and survival data. Topics include simple and multiple regression, analysis of variance (ANOVA), logistic and log-linear regression, and analysis of survival data. Data analysis using SPSS software, interpretation and presentation of results in graphic, oral and narrative formats are integral components of this course.

Advanced Epidemiology, MPHP 655, (3), Murphy, Spring, UPSTATE

This course will apply advanced principles and methods in epidemiologic research. The focus of this course will be on the design, conduct, analysis and interpretation of epidemiologic studies. Topics will include the development of research questions and hypotheses, selection of an appropriate study design, sampling methodologies, sample size calculations, data collection and measurement techniques, reliability and validity, selection of appropriate statistical tools, evaluation of bias, confounding and effect modification, human subjects research procedures, and the role of the Institutional Review Board.

Advanced Research Methods, MPHP 657, (3), Murphy, Spring, UPSTATE

Students will acquire practical skills to be applied in the planning, execution, evaluation, and reporting of research. Topics will include hypothesis and problem formulation, sampling, instrument design, types of qualitative and quantitative methods, database development, evaluation of data, and manuscript preparation. Survey research methodologies will be emphasized. Students will learn how to develop and validate a survey instrument, examine an existing research data set and conduct appropriate data analysis, and prepare a research report for publication in a peer-reviewed journal.

***Aging and Society (3), MPHP 663 Harrington Meyer, Periodic, SU**

This course explores current policy issues in an aging society, health care, end-of-life, social security, productive aging, and generational equity, special problems facing elderly women and minorities. Additional work required of graduate students.

****Bioethics, MPHP 664 (3) Wallwork, Fall/Spring, UPSTATE**

This course examines the use of ethical theories and standards by health care professionals. Specific issues presented in the context of case studies illuminate different types of ethical dilemmas and alternative ways of handling them morally. Issues include euthanasia, assisted suicide, truth-telling, confidentiality, research ethics, abortion, genetic counseling, surrogate motherhood, the uses of new reproductive technologies, and justice with respect to care.

****Bioethics and the Law, MPHP 665 (3) Faber-Langendoen, Bender, Spring, UPSTATE**

This course studies the challenging questions that occur at the intersection of law, medicine, and ethics. A focus of the course will be on examining key cases which reflect or have shaped the ethical, legal and often societal consensus, as well as instances in which the law falls short of ethical norms. Basic introductory sessions on the law (for medical and law students) and clinical medicine (for law students) will start the course, as well as joint presentations on ethical theory. Topics include ethical issues surrounding pregnancy, assisted-reproductive technologies, genetics, organ transplants, refusal of treatment based on religious or cross-

cultural differences, clinical research, futile treatment, medical decisions at the end-of-life, and physician assisted dying.

***Changing American Health Care System, MPHP 666 (3) Dennison, Fall, SU**

The objective of this course is to introduce the components of the health system in the United States in the context of the structural change the system is now undergoing. The evolution of the organizations (hospitals, nursing home agencies, etc.) and the people (physicians, nurses, social workers, administrators, etc.) making up the system and their relationships will be examined. How these organizations and people and their relationships are changing in response to an environment of integrated delivery systems, managed care and fundamental restructuring of the financing systems that have supported the development of the system as we know it will be explored. Public policy implications of these changes to the public health system and social services system will be examined.

Chronic Disease Epidemiology, MPHP 653 (3), Murphy New, Rotating, UPSTATE

This course will apply the methods and principles of epidemiology and biostatistics to the study of chronic diseases, including: coronary heart disease, cancer, stroke, diabetes, chronic obstructive pulmonary disease, obesity, and neuropsychiatric outcomes. Students will also develop skills needed to carry out the essential functions of a chronic disease epidemiologist or practitioner.

***Demography, Aging and Public Policy, MPHP 667 (3), New, Periodic, SU**

This course is intended to provide students with an understanding of the basic tools of demographic analysis; to acquaint them with key facts about demographic trends in the United States and elsewhere, and with the connections among fundamental demographic forces and population aging; to survey a series of topics in "social demography" and "social gerontology" of particular importance in aging societies; and to consider some of the policy issues that arise in connection with population aging.

***Disability Law, MPHP 668 (3) Kanter, Fall, SU**

This course is a general survey course of federal disability law and policy, including a review of Section 504 of the Rehabilitation Act, the Americans with Disabilities Act, the Individuals with Disabilities in Education Act, and related cases, primarily recent United States Supreme Court cases.

***Disease and Human Evolution, MPHP 669 (3) Novak, Rotating, SU**

Interaction of human populations with major diseases: plague, typhus, smallpox, measles, AIDS, biological and cultural effects. Human variation: mutations, blood types, race, and disabilities and various aspect of human microevolution.

***Economics of Health and Medical Care, MPHP 670 (3), Freund, Spring, SU**

This course provides the student with the elements necessary to apply basic economic principles to the health care field. Emphasis is placed on economic tools of particular relevance to health care, pertinent and systematic insights into the workings of the health care system and the evaluation of health care policies

***Elder Law, Law, MPHP 671 (3) Kohn, Spring, Fall, SU**

This course surveys significant issues in elder law. It is designed to explore both the professional issues involved in representing elderly clients, as well as key statutes, regulations, and legal doctrines of particular importance to seniors. Topics of study are expected to include, among other things, ethical issues in representing elders; age discrimination; income

maintenance and the social security system; access to health care and the role of Medicare and Medicaid; senior housing, with emphasis on assisted living and nursing home settings; and elder autonomy and decision-making in the face of dementia and physical decline, including the use of advance directives and guardianship.

***Environmental Law, MPHP 672 (3) Driesen, Fall and Spring, SU**

Goals for the course: To familiarize students with the principal concepts and issues in environmental law; help students learn to critically analyze cases; help students learn to understand and apply written rules; develop student's analytical skills; and introduce students to some of the complexity of environmental law.

****Genetics, Disability and the Law, MPHP 673 (3) Rotating, Olick, UPSTATE**

This course studies the challenging questions that arise at the intersection of genetics, ethics, disability and law. A focus of the course will be to explore how genetic diagnosis and information influences our understanding of disability; the ethical and social issues raised; and the legal rules that may apply to particular situations. Basic introductory sessions on the law and on genomic medicine will start the course. Topics include ethical, legal and social issues surrounding genetics in reproductive medicine, prenatal diagnosis, pre-implantation diagnosis; deciding for disabled newborns; nonvoluntary sterilization; genetic privacy; genetic discrimination in employment and health insurance; and genetic research such as with stored tissues.

****Global Health Policy, MPHP 676 (3) Dye, Spring, SU**

This course will examine how countries in the developing world are facing a number of health and population related challenges, including controlling population growth, enhancing the reproductive health of women and men, combating the AIDS pandemic, stopping the spread of infectious diseases, reducing the incidence of maternal death in childbirth, gaining access to patent-protected pharmaceuticals, and reforming national health systems. You will also examine how you as an actor in the health and population sector can intervene to improve health conditions of the poor.

Grant Writing in Public Health, MPHP 654, (3) Morley, Spring, UPSTATE

This course is hands-on course in how to prepare successful grant applications. The course will cover related topical areas, such as grant administration (rules, overhead etc.), funding source identification and relationship building, literature review, IRB and other regulatory issues, peer review and funding decisions, and research "culture." Students who have specific funding opportunities they would like to pursue can use this course to create a draft of this proposal. Students will be familiar with the planning, writing, and managing requests for funding in a research context, and how to manage research projects once funded.

***Health Law, MPHP 674 (3) Ellison, Fall and Spring, SU**

This course addresses the law as it affects the professionals and institutions that deliver health care in the United States. Will primarily address four major concerns: quality of health care, cost of health care, equitable access to health care, and respect for the patient. addressing health problems of vulnerable, at-risk populations will be explored in light of major changes in both health policy and social welfare policy. Inequalities in health care status and health care access will be highlighted and alternative policy approaches considered.

Health Services/Outcomes Research, MPHP 656, (3) Wojtowycz, Fall, UPSTATE

This course is an introduction to health services and outcomes research. Health services research can be defined as scientific inquiry to produce knowledge about the resources, provisions, organizing, financing and policies of health services at the population level (While, Frenk, IOM). This course will provide the student with a broad foundation in health services and outcomes research. The course will focus on monitoring of health status and quality of life in populations and clinical settings. Survey and secondary data base methodologies will be addressed. The class will provide an understanding of the concepts, meaning, science, and practical applications of these outcome surveys.

****The History of Public Health in America, MPHP 678 (3) Kay, Fall, UPSTATE**

This course will analyze the changes, and crises, in public health in the United States in the 19th and 20th centuries. After establishing the realities of medicine in the 19th century, we will examine episodes that helped shape our national sensibility about public health. From the treatment of Bubonic plague in San Francisco (1906) to scientific study in Tuskegee, Macon County, Alabama (1932-1972), from germ theory to AIDS, students will learn about successes and failures in public health. Mistakes and accomplishments in the past can serve as useful tools for those who will shape the future of our health and health care.

***Human Resource Management for the Public Sector, MPHP 679 (3) Kim, Fall, SU**

This course is a graduate level introduction to human resources management in the public sector. The course will focus on the intricacies of human resources management, examining the controversies associated with human resources management in the public sector, and evaluate methods to achieve public purposes through the effective utilization of diverse human resources. The course has three overall objectives. One is to provide an understanding of current human resources management policies, problems and practices. A second is to provide some introductory skills in doing what personnel administrators do. A third is to enhance your understanding of human behavior in the workplace.

Infectious Disease Epidemiology, MPHP 652, (3) Endy, Rotating, UPSTATE

Infectious diseases have historically and are currently a cause of considerable morbidity and mortality in both the developing and developed world. We have come to appreciate the role of developing countries in providing the environment for infectious diseases to emerge and the proximity of the global community and its vulnerability for global pandemics. Infectious disease epidemiology is the study of the causes, distribution, and control of infectious diseases in a population. This course will explore the epidemiology of globally important infectious diseases and will cover basic epidemiologic methods, pathogenesis of selected infectious diseases, and case-studies on performing outbreak investigations and developing population studies to understand the spread, transmission and prevention of infectious diseases. Particular emphasis will be placed on understanding laboratory techniques for the identification and quantification of infectious agents and its use during outbreak investigations. This course is designed to provide an introduction to infectious disease epidemiology and will focus on the tools of basic epidemiology in identifying, preventing and controlling infectious disease problems.

****Interdisciplinary Approaches to Aging Issues, MPHP 680 (3), Kohn, Spring, SU**

This course will bring together students, faculty, and guests from multiple disciplines to explore interdisciplinary approaches to serving the needs of older adults. Each class will be devoted to a discrete topic ranging from end-of-life care, to driving cessation, to surrogate decision-making, to elder abuse. Students will be offered readings from multiple disciplines relating to the topic of the week and one or two case studies to consider in advance of class. Class time will be devoted in large part to an interactive discussion of the case study or studies of the week. The

aim of the course is for students to learn how other disciplines might approach problems they encounter in their work with seniors, what other resources are available to assist them in their work with seniors, and how to work in a truly interdisciplinary manner with professionals from multiple disciplines.

***Managerial Economics for Public Administration, MPHP 681(3) Yinger, Spring, SU**

The course addresses the economics of individuals and firms. Topics include demand, supply, competition, monopoly, welfare analysis, strategic behavior, market failure, decision-making under certainty, cost-benefit analysis.

Maternal and Child Health Epidemiology, MPHP 659, (3) Dye, Spring, UPSTATE

This course focuses on the biological, demographic, epidemiological, economic, behavioral, social, cultural and environmental aspects of maternal and child health. Current research, controversial issues and methodological problems in the epidemiology of reproductive and perinatal health will be explored. Lectures and analyses of research papers present reproductive health issues such as conception and infertility, contraception and hormone supplementation, and reproductive related cancers, complications of pregnancy, infections in pregnancy, maternal mortality, adverse pregnancy outcomes, and birth defects. The course also involves an exploration of maternal and child health policy in the U.S., with a particular emphasis on the role of personal and public health services for women, children, youth and their families in the context of health and human services system change. The course will build knowledge in the process of public policy development at the national, state and local level in the area of maternal and child health and will build on the methods of policy analysis, including problem identification, the development of policy overview and synthesis documents, and the preparation of policy options papers.

Population Health Across the Life Span in Developing Countries, MPHP 651, (3), Dye, Fall, UPSTATE

This course aims to improve students' understanding of how contemporary health varies across the life span in developing countries. Namely, the course takes a longitudinal perspective toward health and will center around the epidemiology, determinants, and interventions addressing common health issues across major life phases and special populations in developing country contexts: Maternal and child, adolescent, adult, health and gender, income inequality, worker health, aging, end-of-life. Students will focus upon current themes and issues, and priorities of international organizations, and how health issues can be addressed through population-based global health programs and clinical interventions.

Principles of GIS for Public Health Research and Practice, MPHP 688, (3) Cibula, Spring, UPSTATE

Geographic Information Systems (GIS) are used to collect, store, integrate and analyze data that have a geographic reference. GIS has enormous potential to facilitate public health research and inform practice; John Snow's famous map of the residences of cholera patients in relation to the location of public water wells in London is but one example of its utility. Nevertheless, application of GIS to public health problems is underutilized, particularly in the study of social and environmental determinates of health. This course is designed to introduce the basic principles and methods of GIS and enable the student to apply these skills and knowledge to investigate public health problems. Students develop and carry out a GIS project throughout the semester; the course culminates with the students' presentations of their methods and findings in a variety of formats.

***Processes of Aging, MPHP 682, (3) Monahan, Spring, SU**

The course is a multidisciplinary analysis of intrinsic aging processes, changing needs and characteristics of aging populations, and the impact of age related forces in American society, with special attention to aged groups disadvantaged by virtue of race, ethnicity, gender, sexual orientation, disability and poverty.

Program Evaluation, MPHP 660, (3) Sutphen, Spring, UPSTATE

This course introduces the basic principles, standards and concepts of program evaluation including needs assessment, research design, evaluation methods, sources of data and threats to validity.

***Public Budgeting, MPHP 683 (3) SU Faculty, Fall & Summer, SU**

This course provides an overview of budgeting and financial management in the public sector. Fundamental concepts and practices of budgeting, financial management and public finance are introduced for all levels of government with special emphasis on state and local government budgeting and financial management in the United States.

***Public Health Administration, MPHP 607, (3) Dennison, Fall SU**

This course provides an introduction to major health policy and management competencies. The student will be conversant in issues related to planning, organization, administration, management, evaluation and policy analysis of public health programs and will be required to demonstrate their knowledge of health management and policy through written memoranda and research papers.

Public Health Independent Study, MPHP 697 (1-4), UPSTATE Faculty, All, UPSTATE

This is an independent study elective open to all matriculated MPH students. Students who have successfully completed Principles of Epidemiology and Biostatistics are eligible to participate in the elective which is offered year-round. This elective is intended to offer students an opportunity to gain research or experiential learning outside the classroom in an area of interest where no formal course work is available or in an area where they have already completed one or more formal courses.

There is no set curriculum; however, each student elective must be approved by the student's advisor and the Chair of the CNYMPH Curriculum Committee prior to enrollment. Students must submit a proposal for their planned project/research project outlining site of planned project, supervisor, subject matter to be studied, possible product to be produced (paper, presentation, pamphlet, etc..) and timeline for completion.

***Public Organizations and Management, MPHP 684 (3) SU Faculty, Fall & Spring, SU**

This course focuses on developing managers and leaders to anticipate and change strategically as opposed to simply reacting to change. My goal is for you to understand the importance of the integrative, interdependent nature of organizations, their environments, and stakeholders and the manner and variation in which management tools, such as strategic planning, performance measurement, and privatization, can be used to manage and lead complex organizations and programs effectively.

***Qualitative Analysis, MPHP 685 (3), SU Faculty, Fall/Spring, SU**

This course introduces qualitative approaches to data collection and analysis in health research. Techniques for designing and conducting qualitative research and for analyzing and reporting qualitative data relevant to program development and implementation, community assessment, and policy analysis will be presented. The application of qualitative methods in the development

of health promotion interventions, evaluations, and research will be demonstrated. Collecting and analyzing qualitative data through participant observation, interviewing, group methods, and case studies will be explored. Methods covered include: participant observation, key-informant interviews, focus groups, innovative data collection strategies, and non-obtrusive measures. Students will use applied projects to develop skills in: qualitative data collection and management, interviewing, transcript analysis using computerized software, triangulation between qualitative and quantitative data, and report preparation for qualitative studies.

***Quantitative Analysis, MPHP 686 (3) SU Faculty, Spring, SU**

The course is designed to provide conceptual and methodological tools for managers, evaluators and analysts charged with formally evaluating program implementation and performance. The goal is to equip students with the skills required to develop and conduct program evaluation research projects, and to be an intelligent consumer of program evaluation research conducted by others.

Statistical Methods for Categorical Data, MPHP 687, (3) Cibula, UPSTATE

Categorical and ordinal data are frequently encountered in public health and biomedical research. This course covers statistical methods for analyzing these data types. The emphases are on practical application of the methods in public health research and on the conceptual basis for them. Topics include discrete probability distributions, contingency table analysis for dichotomous and polychotomous outcomes, Poisson and logistic regression and loglinear models. Data analysis using SPSS software, interpretation and presentation of results in graphic, oral and written formats is integral components of this course.

* SU Course

** CCFM Course