Elective courses allow students to individualize their programs and develop specialty skills in one or more areas. They may also be taken to improve knowledge gaps and deficits. The courses below have been approved based on their ability to address the core and cross-cutting public health competencies. Students who wish to take a course for elective credit that does not appear on this list should seek individual approval from the MPH Program. For complete up-to-date course information please check the University’s Schedule of Classes and Course Guide.

**Biostatistics.** Biostatistics is the development and application of statistical reasoning and methods in addressing, analyzing and solving problems in public health; health care; and biomedical, clinical and population-based research.

**Environmental Health.** Environmental health sciences represent the study of environmental factors including biological, physical and chemical factors that affect the health of a community.

**Epidemiology.** Epidemiology is the study of patterns of disease and injury in human populations and the application of this study to the control of health problems.

**Health Policy & Management.** Health policy and management is a multidisciplinary field of inquiry and practice concerned with the delivery, quality and costs of health care for individuals and populations. This definition assumes both a managerial and a policy concern with the structure, process and outcomes of health services including the costs, financing, organization, outcomes and accessibility of care.

**Social & Behavioral Sciences.** The social and behavioral sciences in public health address the behavioral, social and cultural factors related to individual and population health and health disparities over the life course. Research and practice in this area contributes to the development, administration and evaluation of programs and policies in public health and health services to promote and sustain healthy environments and healthy lives for individuals and populations.

**Communication & Informatics.** The ability to collect, manage and organize data to produce information and meaning that is exchanged by use of signs and symbols; to gather, process, and present information to different audiences in-person, through information technologies, or through media channels; and to strategically design the information and knowledge exchange process to achieve specific objectives.

**Diversity & Culture.** The ability to interact with both diverse individuals and communities to produce or impact an intended public health outcome.

**Leadership.** The ability to create and communicate a shared vision for a changing future; champion solutions to organizational and community challenges; and energize commitment to goals.

**Public Health Biology.** The ability to incorporate public health biology – the biological and molecular context of public health – into public health practice.

**Professionalism.** The ability to demonstrate ethical choices, values and professional practices implicit in public health decisions; consider the effect of choices on community stewardship, equity, social justice and accountability; and to commit to personal and institutional development.

**Program Planning.** The ability to plan for the design, development, implementation, and evaluation of strategies to improve individual and community health.

**Systems Thinking.** The ability to recognize system level properties that result from dynamic interactions among human and social systems and how they affect the relationships among individuals, groups, organizations, communities, and environments.
BIOSTATISTICS

**POP HLTH 451 Introduction to SAS Programming for Population Health**
Credits: 1  
Offered: Fall  
Prerequisites: Instructor consent  
The course provides graduate students in the Population Health Sciences programs with a basic understanding of the use of the SAS programming language for the management and analysis of biomedical data. The following topics are covered: importing data into SAS, creating and redefining variables, printing and summarizing data, exporting data from SAS, use of the Output Delivery System (ODS), basic graphics and statistical analyses and the SAS macro facility.

**STAT 542 Fundamentals of Clinical Trials**
Credits: 3  
Offered: Spring  
Prerequisites: Stat 541 or equivalent or consent of instructor  
Cross lists: BMI  
This course is intended for biomedical researchers interested in the design and analysis of clinical trials. Topics include definition of hypotheses, measures of effectiveness, sample size, randomization, data collection and monitoring, and issues in statistical analysis.

**BMI 544 Introduction to Clinical Trials II**
Credits: 3  
Offered: Fall  
Prerequisites: BMI 541 or equiv & BMI 542 & cons inst.  
Intended for biomedical researchers, focuses on design, implementation, and conduct of clinical trials. Topics include: regulatory requirements; data collection; data quality and management; budgets; federal, institutional, and sponsor-defined requirements; establishment of research infrastructures; preparation of investigator-INDs; investigator responsibilities.

**POP HLTH 552 Regression Methods for Population Health**
Credits: 3  
Offered: Spring  
Cross lists: Biostatistics, Medical Informatics  
Prerequisites: PHS/BMI 451 and PHS/BMI 551; or cons inst.  
Introduction to the primary statistical tools used in epidemiology and health services research; multiple linear regression, logistic regression, and survival analysis.

**STAT 641 Statistical Methods for Clinical Trials**
Credits: 3  
Offered: Fall  
Prerequisites: Math/Stat 310 or equivalent or consent of instructor  
Statistical issues in the design of clinical trials, basic survival analysis, data collection and sequential monitoring. Intended for statistics graduate students; those with medical backgrounds should take Stat 542.

**STAT 642 Statistical Methods for Epidemiology**
Credits: 3  
Offered: Spring  
Prerequisites: Stat 310 or equivalent or consent of instructor  
Methods for analysis of case-control, cross sectional, and cohort studies. Covers epidemiologic study design, measures of association, rates, classical contingency table methods, and logistic and Poisson regression.
ENVIRONMENTAL HEALTH

POP HLTH 502 Air Pollution and Human Health
Credits: 3
Offered: Fall
Prerequisites: A course in biology; junior standing
Cross lists: ENVIR ST
Toxicologic, controlled and epidemiologic studies on major air pollutants. Overview of study methods, lung physiology and pathology; air pollution sources, types, meteorology, sampling methods, controls and regulations.

M&ENVTOX 625 Toxicology I
Credits: 3
Offered: Fall
Prerequisites: Biochem 501 & Physiol 335 or cons inst. Path 401 & Phmcol 401 or equiv recommended
Cross lists: AHABS, MEDICINE, M&ENVTOX, ONCOLOGY, PATH, PHM SCI, PHMCOL-M, POP HLTH
Basic principles of toxicology and biochemical mechanisms of toxicity in mammalian species and man. Correlation between morphological and functional changes caused by toxicants in different organs of the body.

M&ENVTOX 626 Toxicology II
Credits: 3
Offered: Spring
Prerequisites: Env Tox 625 or cons inst
Cross lists: AHABS, MEDICINE, M&ENVTOX, PATH, PHM SCI, PHMCOL-M, POP HLTH
A course surveying the basic methods and fundamental biochemical mechanisms of toxicity. Toxicity in mammalian organ systems, techniques for evaluating toxicity, as well as mechanisms of species specificity, and environmental interactions (with toxicant examples) are presented.

CIV ENGR 631 Toxicants in the Environment: Sources, Distribution, Fate & Effects
Credits: 3
Prerequisites: Chem 343 & 345 or equiv; Chem 561 or equiv; Physics 103 & 104 or equiv; Math 211; or cons inst
Offered: Spring
Cross lists: CIV ENGR, M&ENVTOX, SOIL SCI
Nature, sources, distribution, and fate of contaminants in air, water, soil, and food and potential for harmful exposure.

PHS 740 Health Impact Assessment of Global Environmental Change.
Credits: 3
Prerequisite: Graduate student; Population Health 797 or 471; or cons inst. syllabus
Cross lists: Environmental Studies
Covers contemporary methods of impact assessment in a framework to address global environmental health threats (e.g., global climate change, deforestation and biodiversity loss, and urban sprawl).

EPIDEMIOLOGY

POP HLTH 621 Introduction to Nutritional Epidemiology
Credits: 1
Offered: Fall
Prerequisites: Stat 301 or equiv & Nutr Sci 332 or cons inst
Cross lists: NUTR SCI, POP HLTH
Techniques used to evaluate relationships of diet to health and disease in human populations; integration of knowledge gained with results of animal and clinical studies toward understanding dietary risk or protective factors for disease. Includes advanced diet assessment and basic epidemiologic approaches.

**POP HLTH 791 Physical Activity Epidemiology**  
Credits: 1  
Offered: Occasionally  
Prerequisites: Graduate student or consent of instructor  
Cross lists: KINES, POP HLTH  
Recommendations for and surveillance of physical activity in the U.S., and associations with health and disease at the population level. Emphasis on measurement techniques, study design and research considerations.

**POP HLTH 798 Epidemiologic Methodology**  
Credits: 3  
Offered: Spring  
Prerequisites: Pop Hlth 797; or cons inst  
The main emphasis is the design and interpretation of epidemiologic studies. Includes hands-on experience in the evaluation of epidemiologic evidence, the analysis of epidemiologic data, and the discussion of strategies aimed to improve study validity and efficiency.

**POP HLTH 801 Infectious Disease Epidemiology**  
Credits: 3  
Offered: Spring  
Prerequisites: Pop Hlth 797; or cons inst  
Introduces basic methods to studying the epidemiology of infectious diseases and reviews infectious diseases of major public health importance. Covers the basics of microbiology, immunology, and laboratory-based methods and the principles of disease surveillance, outbreak investigation, mathematical models of disease transmission, and prevention strategies. The etiology, epidemiology, prevention, and treatment of ancient, modern, and emerging infectious diseases will be examined.

**POP HLTH 802 Advanced Epidemiology: Etiology and Prevention**  
Credits: 3  
Offered: Fall  
Prerequisites: Grad st, Pop Hlth 797 & 798; or cons inst  
The course addresses the epidemiological basis for understanding the etiology and prevention of major diseases. Students integrate information about disease patterns, epidemiological methods, and published studies to identify research questions and design a project.

**POP HLTH 904 (Section 002) Special Topics in Epidemiology: Genetic Epidemiology**  
Credits: 2  
Offered: Fall  
Prerequisites: Varies  
This course will provide an introduction to genetic epidemiology, particularly genetic association studies. Topics will include a general overview of genetics and Mendelian and complex inheritance. Discussion will include the various elements of study design, including definition of study population, participant ascertainment, phenotype definition, selection of genetic markers, determination of the type of biologic sample to be collected for extraction of the DNA, data collection and management, and choice of analytic methods.

**POP HLTH 904 (Section 003) Analytic Methods in Genetic Epidemiology**  
Credits: 2  
Offered: Summer  
Prerequisites: Varies  
This course offers a unique opportunity to take part in the international Genetic Analysis Workshop (http://www.gaworkshop.org/). The purpose of the GAW is to provide an opportunity for statisticians,
epidemiologists, geneticists, and other scientists to interact to address methodological issues in genetic analysis.

**POP HLTH 904 (Section 004) Special Topics in Epidemiology: Global Health**

Credits: 2  
Offered: Fall  
Prerequisites: Varies  
The purposes of this course is to explore the relationship between globalization and health and provide students with an understanding of: a) major indicators and determinants of health and health disparities across populations, from less to more developed countries; b) the role of epidemiology in developing proven and potential interventions to improve global health and reduce health disparities; and c) methodological and ethical considerations in international health research.

**POP HLTH 904 (Section 005) Special Topics in Epidemiology: Cardiovascular Diseases**

Credits: 2  
Offered: Fall or spring  
Prerequisites: Varies  
This course is directed to graduate and undergraduate students interested in the epidemiology of cardiovascular diseases. The main emphasis of POP HLTH 904 is the discussion of the population distribution, health impact, risk factors, treatment, and prevention of cardiovascular diseases.

**POP HLTH 904 (Section 006) Special Topics in Epidemiology: HIV/AIDS**

Credits: 1  
Offered: Summer  
Prerequisites: Varies  
This course is designed to provide an introduction to the principles and practice of infectious disease epidemiology– specifically HIV/AIDS. It will focus on the etiology, distribution and determinants of HIV/AIDS and describe prevention and public health control efforts undertaken locally, nationally and internationally.

**HEALTH POLICY & MANAGEMENT**

**NUTRI SCI 540 Community Nutrition Programs and Policy Issues**

Credits: 1  
Offered: Spring  
Prerequisites: Nutr Sci 431 or cons inst  
Students will increase their understanding of community-based nutrition needs, intervention programs and policy issues in the U.S. Written assignments will demonstrate students’ positions on related issues.

**POP HLTH 661 State-Level Health System and Coverage Reform**

Credits: 1  
Offered: Summer  
Prerequisites: Varies  
This one week course focuses on the state's role in health care coverage, trends in public and private insurance coverage, and current issues and debates about reform nationally and in Wisconsin.

**NURSING 703 Health Care and Public Policy in the US**

Credits: 3  
Offered: Occasionally  
Prerequisites: Graduate student  
An overview of the development and implementation of health policy in the US includes legislative process, influences on these processes and nursing role. Analysis of health policies, impact of policies on health care systems and health of populations.
POP HLTH 703 Quality of Health Care: Evaluation and Assurance  
Credits: 1-3  
Offered: Occasionally  
Prerequisites: Major or minor in population health, or cons inst  
Cross lists: I SY E, POP HLTH  
Implementation, oversight, and management of quality-oriented activities in health care settings. Overview of current and historical activities, approaches, and issues confronting health care related to quality assessment, assurance, and improvement.

LAW 768 Consumer Health Advocacy and Patient Centered Care Clinical  
Credits: 1-7  
Offered: Fall, Spring, Summer  
Prerequisites: Grad or Professional st or acceptance in Capstone Certificate in Consumer Health Advocacy  
Cross lists: LAW, MED SC-M, NURSING  
Interdisciplinary health advocacy clinical supervised by diverse professional staff. Provide broad advocacy to patients with life-threatening and serious chronic illnesses. Advocacy topics include: medical decision-making, insurance, medical debt, disability issues. Weekly discussions of patient cases and related guest lectures.

LAW 769 Consumer Issues in Health Care  
Credits: 1-3  
Offered: Fall, Spring, Summer  
Prerequisites: Grad st  
Cross lists: LAW, MED SC-M, NURSING  
Explores consumer issues in health care delivery in interdisciplinary discussion-based format. Covers current delivery system, expenditures/finance, managed care/insurance, barriers to access, reform, and other select topics. Ideal for future healthcare providers and others interested in patients' experiences.

POP HLTH 848 Health Economics  
Credits: 1-3  
Offered: Occasionally  
Prerequisites: Graduate student  
Cross lists: ECON, POP HLTH  
Health economics issues including demand, supply and pricing, market structure, medical malpractice, technological change, value of life, role of insurance, and other aspects of uncertainty.

PUB AFFR 864 Health Policy & Policy Design  
Credits: 3  
Offered: Occasionally  
Prerequisites: Grad st  
A survey course on health care policy in the United States, including examination of the design of health policy and the politics of health care reform.

PUB AFFR 874 Policy Making Process  
Credits: 3  
Offered: Occasionally  
Prerequisites: Grad st  
Crosslists: PUB AFFR, POLI SCI, URB R PL  
An intensive study of policy-making processes involved in the formulation of public policies.

POP HLTH 875 Assessment of Medical Technologies  
Credits: 3  
Offered: Occasionally  
Prerequisites: Pop Hlth 797 & 800; or cons inst  
Cross lists: I SY E, POP HLTH
MASTER OF PUBLIC HEALTH PROGRAM

APPROVED ELECTIVES

Basic ideas and tools of cost effectiveness analysis as applied in evaluating medical technologies. Addresses special problems and methods in assessing diagnostic technologies, including ROC analysis, and in measuring health for technology assessment. Uses "classical" and current journal literature.

**PUB AFFR 881 Cost-Benefit Analysis**
Credits: 3  
Offered: Fall  
Prerequisites: Grad st, Pub Affr 818 & 880 or Pop Hlth 875 & at least one crse in econ or cons inst  
Crosslists: A A E, ENVIR ST, PUB AFFR, POP HLTH  
This course will present the welfare economics underpinnings for evaluating the social benefits and costs of government activities. Issues such as uncertainty, the social discount rate, and welfare weights will be discussed; case studies from the environmental, social policy, and agricultural areas will be studied.

**PUB AFFR 974 International Development Policy**
Credits: 3  
Offered: Spring  
Prerequisites: Grad student or instructor consent  
Current issues in the formulation, implementation, and analysis of public policy. The primary policy question in international development is: “How effective are efforts to enhance well-being in developing countries?” This question is relevant at the aggregate level, as countries decide how much of their GDP to direct toward foreign aid, but also for individual projects, as organizations allocate scarce resources across projects. This course examines this question, and provides an overview of international development policy in the process.

**SOCIAL & BEHAVIORAL SCIENCES**

**KINES 521 Physical Activity and Health**
Credits: 3  
Offered: Fall  
Prerequisites: Kines 314 or cons inst  
Research evidence regarding how physical activity and fitness are related to health (e.g., during pregnancy and aging) and disease, especially cardiovascular diseases, obesity, diabetes, osteoporosis, and cancer. Application and communication of knowledge in practical situations.

**PSYCH 528 Introduction to Cultural Psychology**
Credits: 3  
Offered: Spring  
Prerequisites: Psych 201 or 202 or 281  
Cultural underpinning of psychological processes. The course will cover cultural influences on a wide range of psychological processes, including self-perception, motivation, relationship, cognition and perception, and will also deal with acculturation, within-cultural differences and cultural stability and change.

**Sociology 531 Sociology of Medicine**
Credits: 3  
Offered: Fall, Spring  
Prerequisites: Jr st and intro course in soc or cons inst  
Cultural, social, and social psychological factors in disease processes, distribution of disease, social definitions of illness, and organization of the health professions and health facilities.

**C&E SOC 533 Public Health in Rural and Urban Communities**
Credits: 3  
Offered: Spring  
Prerequisites: Junior st  
Cross lists: C&E SOC, SOC
Sociological perspective on health or rural residents and delivery of rural health care. Demographic organization, rural social and community organization, farm and nonfarm environmental influences, and technological advances.

**C&E SOC 541: Environmental Stewardship and Social Justice**

Credits: 3  
Offered: Occasionally  
Prerequisites:  
Cross lists: C&E SOC, SOC  
Application of sociological theory and analysis to environmental issues. Course examines the ways in which environmental stewardship and conflict are embedded within broader cultural, social, and political contexts.

**SOC 575 Sociological Perspectives on the Life Course and Aging**

Credits: 3  
Offered: Fall  
Prerequisites: Junior standing  
Age as a basis of societal differentiation in modern and premodern societies; social psychological, demographic, sociobiological, socioeconomic, and sociohistorical views of age-graded events and behaviors; examination of the life course and aging as sociological variables.

**POP HLTH 650 (Section 049) Prevention of Overweight and Obesity**

Credits: 2  
Offered: Fall  
Prerequisites: Varies  
In this course, students focus on overweight and obesity prevention, with a strong focus on pediatric obesity.

**COUNSELING 719 Intro Qualitative Research**

Credits: 3  
Offered: Fall  
Prerequisites: Graduate student  
Provides an overview of qualitative inquiry, examining assumptions, standards, and methods for generating and communicating interpretations. Methodological and theoretical works illustrate case study, ethnography, narrative, and action research. This course does not include a field method component.

**NURSING 735 Health Promotion and Disease Prevention for Women Across the Lifespan**

Credits: 3  
Offered: Occasionally  
Prerequisites: Grad st and a course in research design or cons inst  
Cross lists: GEN&WS, NURSING  
Identification of health concerns for women, recognizing differences among age, socioeconomic, and ethnic groups; synthesis of biophysiological, psychosocial, and cultural influences of such health concerns; analysis and proposal of interventions to promote overall health and to prevent problems among women.

**NURSING 746 Interdisciplinary, Coordinated Care of the Child with Chronic Illness**

Credits: 3  
Offered: Occasionally  
Prerequisites: Grad st and/or cons inst  
Cross lists: NURSING, PEDIAT, PHM PRAC, SOC WORK  
Concepts of teamwork, transitions, family perspective, death and dying, cultural competence, adherence, legislative advocacy and public policy are explored within the context of caring for children with chronic illness. Course taught by an interdisciplinary pediatric team.
HDFS 872 Bridging the Gap between Research and Action
Credits: 3
Offered: Occasionally
Prerequisites: Grad st
Addresses the critical skills and methods needed to gather and apply research-based knowledge and theory to human development and family studies. Strategies for conducting research relevant to social policy, programs, and the general public will be discussed as well as techniques for communicating research.

SOC 875 Population and Development
Credits: 3
Offered: Spring
Prerequisites: Grad student; instructor consent
Issues addressed include theories of social and human development, theories and concerns about population growth, and how these paradigms guide population and health policy in less developed countries.

NURSING 880 Prevention Science
Credits: 3
Offered: Occasionally
Prerequisites: 2nd yr Grad st or cons inst
Cross lists: SOC WORK, ED PSYCH, HDFS
This course provides a theoretical, empirical and practical foundation for prevention science as it relates to the prevention of human social problems. Research and evaluation methods, program design strategies, best practices and policy as they relate to the field of prevention are also examined.

COMMUNICATION & INFORMATICS

POP HLTH 451 Introduction to SAS Programming for Population Health
Credits: 1
Offered: Fall
Prerequisites: Instructor consent
The course provides graduate students in the Population Health Sciences programs with a basic understanding of the use of the SAS programming language for the management and analysis of biomedical data. The following topics are covered: importing data into SAS, creating and redefining variables, printing and summarizing data, exporting data from SAS, use of the Output Delivery System (ODS), basic graphics and statistical analyses and the SAS macro facility.

JOURN 617 Health Communication in the Information Age
Credits: 3
Offered: Occasionally
Prerequisites: Journ 565 or equiv
Cross lists: COM ARTS, FAM COM, JOURN, L SC COM
This course will examine the role of communication in health, how the revolution in information technology has affected health communication, and the assumptions about health information and communication that drive current efforts to use technologies.

POP HLTH 660 Communicating Public Health Information Effectively
Credits: 1
Offered: Summer
Prerequisites: MPH or graduate student
This one week course is designed to help students improve their ability to communicate with different audiences. From the news media to legislators, and from written to oral communication, students will learn strategies for health communication based on scientific and practical recommendations.

POP HLTH 662 Introduction to Social Marketing in Public Health
Credits: 1
Offered: Summer
Prerequisites: Varies
This course is designed to give students an orientation to social marketing and its specific applications in public health. It is appropriate for current and future practitioners in the public health field. Class sessions combine didactic presentations with group discussion and in-class exercises.

JOURN 860 Science and Environment Communication
Credits: 3
Offered: Occasionally
Prerequisites: Grad st
Cross lists: ENVIR ST, JOURN, L SC COM
Course uses available scholarship and commentary to track the evolution of mass media coverage of science and the environment. Emphasis on how journalists utilize evidence, the influence of scientific and journalistic norms on stories, and the effects of mass media on science and environment messages to the public.

LSC 880 Topics in Mass Communication: Theory in Health Communication
Credits: 3
Offered: Spring
Prerequisites: Graduate student, instructor consent
This course pays particular attention to the application and integration of theory in understanding the effects of mass media, with particular attention to health communication campaign messages. The course will examine social and cognitive models relevant in the context of health communication messages. Specifically, this course will address theoretical perspectives that inform health campaign messaging from a variety of perspectives including social determinants of health, individual behavior change, information processing and message effects. Each section will focus on theory and practice as it relates to improving population health. This course will provide students with knowledge of theories relevant to the study of health communication messages, a thorough understanding of the role of theory, and the importance of integrating complimentary theories in understanding persuasive message effects.

DIVERSITY & CULTURE

GEN & WS 533 Gender, Sexuality, and Reproduction: Public Health Perspectives
Credits: 3
Offered: Fall, Spring, Summer
Prerequisites: Women St 103 or cons inst
Examination in depth of specific topics in the area of women's health. Critical reading of scientific literature and exploration of relevant biomedical issues in social, economic and cultural contexts.

POP HLTH 644 (Section 010) Interdisciplinary Perspectives on Global Health and Disease: Latin America
Credits: 2
Offered: Spring
Prerequisites: Grad st or health professional student; or cons inst
This course introduces students to global health challenges and interdisciplinary strategies to address health problems in developing countries with an emphasis on countries in Latin America. The knowledge and skills from these courses will be critical for students who wish to develop a deeper understanding of health problems beyond the boundaries of the United States.

POP HLTH 644 (Section 020) Interdisciplinary Perspectives on Global Health and Disease: South Asia
Credits: 2
Offered: Spring
Prerequisites: Grad st or health professional student; or cons inst
This course introduces students to global health challenges and interdisciplinary strategies to address health problems in developing countries with an emphasis on countries in South Asia. The knowledge and skills from
these courses will be critical for students who wish to develop a deeper understanding of health problems beyond the boundaries of the United States.

**POP HLTH 644 (Section 030) Interdisciplinary Perspectives on Global Health and Disease: Africa**
Credits: 2
Offered: Spring
Prerequisites: Grad st or health professional student; or cons inst
This course introduces students to global health challenges and interdisciplinary strategies to address health problems in developing countries with an emphasis on countries in Africa. The knowledge and skills from these courses will be critical for students who wish to develop a deeper understanding of health problems beyond the boundaries of the United States.

**POP HLTH 644 (Section 040) Interdisciplinary Perspectives on Global Health and Disease: Southeast Asia**
Credits: 2
Offered: Spring
Prerequisites: Grad st or health professional student; or cons inst
This course introduces students to global health challenges and interdisciplinary strategies to address health problems in developing countries with an emphasis on countries in Southeast Asia. The knowledge and skills from these courses will be critical for students who wish to develop a deeper understanding of health problems beyond the boundaries of the United States.

**NURSING 702 Health Promotion and Disease Prevention in Diverse Communities**
Credits: 3
Offered: Occasionally
Prerequisites: Grad st
Multidisciplinary approach for health promotion/disease prevention in diverse communities emphasizing the use of epidemiological psychosocial, and environmental data for aggregate/community assessment to determine shared risks, exposures, behaviors and interventions.

**FAMILY MEDICINE 712 Health Care in Diverse Communities**
Credits: 1
Offered: Occasionally
Prerequisites: Stdt enrolled in a prof degree prgm & cons inst
This elective is an introduction to issues in health care provided in diverse communities. Topics include cultural issues in medicine, health disparities, cross-cultural communication, culture and resiliency, historical background and ethics, civil rights in practice and minority health care professionals.

**POP HLTH 650 (Section 026) Public Health and Human Rights: The Case of AIDS Orphans and Vulnerable Children in Africa**
Credits: 1
Offered: Fall, Spring, Summer
Prerequisites: Varies
This course assist students to understand, apply, and analyze the complex and multi-sectoral, programmatic responses of governments and the private sector and the challenges facing AIDS orphans in Africa.

**ANTRHO 919 Anthropology and International Health**
Credits: 2
Offered: Occasionally
Prerequisites: Grad st
Examination of international health issues from the theoretical and methodological perspectives of anthropology. Course includes case studies of applied medical anthropology work as well as critical analysis of development initiatives in public health.

**PUB AFFR 974 International Development Policy**
Credits: 3
Offered: Spring  
Prerequisites: Grad student or instructor consent  
Current issues in the formulation, implementation, and analysis of public policy. The primary policy question in international development is: “How effective are efforts to enhance well-being in developing countries?” This question is relevant at the aggregate level, as countries decide how much of their GDP to direct toward foreign aid, but also for individual projects, as organizations allocate scarce resources across projects. This course examines this question, and provides an overview of international development policy in the process.

**LEADERSHIP & PROFESSIONALISM**

**MED HIST 505 Justice and Health Care**  
Credits: 3  
Offered: Occasionally  
Prerequisites: Graduate student  
A survey of ethical and social issues in medical ethics and history of medicine. Cooperating faculty may be drawn from philosophy, law, medical ethics, history, political science, public health, economics, education, and communication, as well as medicine and the biological sciences.

**MED HIST 515 Public Health Ethics**  
Credits: 3  
Offered: Occasionally  
Prerequisites: Consent of instructor; enrollment may be limited depending on topic and approach  
A survey of ethical and social issues in medical ethics and history of medicine. Cooperating faculty may be drawn from philosophy, law, medical ethics, history, political science, public health, economics, education, and communication, as well as medicine and the biological sciences.

**MED HIST 559 (Section 003) Health, Disability and Social Justice**  
Credits: 3  
Offered: Occasionally  
Prerequisites: Consent of instructor; enrollment may be limited depending on topic and approach  
A survey of ethical and social issues in medical ethics and history of medicine. Cooperating faculty may be drawn from philosophy, law, medical ethics, history, political science, public health, economics, education, and communication, as well as medicine and the biological sciences.

**NURSING 704 LEADERSHIP – ROLES, ETHICS, AND CARE**  
Credits: 2  
Offered: Occasionally  
Prerequisites: Grad st. Required in 1 of first 2 semesters of stdt’s MS progm in nursing  
Addresses developing and enacting new roles; interpreting legal and professional requirements and regulations; exerting leadership; and examining the ethics, values, beliefs, and norms of decision making in an interdisciplinary, collaborative practice.

**MED HST 730 Ethical Issues in Medicine**  
Credits: 1  
Offered: Spring  
Prerequisites: Open to all 4th yr Med students as an elective  
This course will explore central ethical issues in public health and health policy in eight interactive discussion sessions. Course topics will include: Alternative approaches to rationing health care (triage and policy levels) and their relative merits; the shape of rights to health and health care; measuring health states to determine the effectiveness of public health interventions (QALYs and DALYs); paternalism and personal responsibility for risky health behaviors; determinants of health, including the effects of income inequality and relative social status (“The Status Syndrome”); the role of genetic predisposition in allocating resources; distinctions between positive rights.

**LAW 905 Bioethics and the Law**
Credits: 2-4  
Offered:  Fall  
Prerequisites:  Graduate student  
Introduction to the legal, ethical and public policy dimensions of modern medicine and biomedical research. Informed consent, human experimentation, death and dying, organ transplantation, allocation of scarce resources. May cover reproductive and genetic issues in some years.

**PROGRAM PLANNING**

**Human Ecology 501: Evaluation Research in Practice**  
Credits: 1-3  
Offered:  Fall  
Prerequisites:  Vary by topic  
Introduces students to the design and use of evaluation to understand and assess those places within communities (e.g., groups, organizations, networks, associations) that are critical to civil society. The course combines community-based experiential learning (i.e., collaborative action research and/or descriptive analysis of selected settings) with classroom instruction.

**NURSING 761 Health Program Planning, Evaluation, and Quality Improvement**  
Credits: 3  
Offered:  Spring  
Prerequisites:  Grad st or cons inst  
Provides content in theory, concepts, and methods of program planning and evaluation in the context of health care and community health organizations. Provides basic concept related to designing and implementing health services quality improvement projects.

**POP HLTH 803 Monitoring Population Health**  
Credits: 3  
Offered:  Occasionally  
Prerequisites:  Pop Hlth 797  
Students learn applied techniques for community health assessment—a core function of public health. Actual population health data (including census, natality, mortality, hospital discharge, behavioral risk factor) are retrieved from the Web for analysis and interpretation.

**PUB AFFR 871 Public Program Evaluation**  
Credits: 3  
Offered:  Fall  
Prerequisites:  Grad student & Pub Affr 818 or equiv, or consent of instructor  
Compares the conceptual, statistical, and ethical issues of experimental, quasi-experimental and non-experimental designs for program evaluation. Definitions of outcomes, sample size issues, statistical biases in measuring causal effects of programs, and the reliability of findings will be emphasized using case studies selected from current public programs.

**POP HLTH 876 Measuring Health Outcomes**  
Credits: 3  
Offered:  Spring  
Prerequisites:  Grad stdt in population health & Pop Hlth 795, 797 & 800; or cons inst  
Provides a comprehensive understanding of health outcome measures, including generic health status measures, disease-specific measures, and consumer reports of the quality of care.
PUBLIC HEALTH BIOLOGY

MMI 504 Infectious Disease
Credits: 3
Offered: Fall
Prerequisite: A course in microbiology
Pathogenesis, clinical descriptions, and prevention. Primarily for Physician Assistant, Pharmacy, and Nursing students

FW Ecol 548 Diseases of Wildlife
Credits: 3
Offered: Fall
Prerequisites: Junior standing
Occurrence, principles, concepts and significance of disease in wildlife.

MMI 554 Emerging Infectious Disease & Bioterrorism
Credits: 2
Offered: Fall
Prerequisite: Graduate student
Identification of analysis and solution of emerging infectious disease problems and the problems of bioterrorism.

MMI 555 Vaccines: Practical Issues for a Global Society
Credits: 3
Offered: Spring
Prerequisites: Grad student; MMI 301 & either MMI 341 or MMI 528; or instructor consent
Considers innovative approaches to the development and use of vaccines in the past, today and in the future, including the public health impact and the economic, ethical and safety issues associated with vaccine development, licensing and use.

SOC 575 Sociological Perspectives on the Life Course and Aging
Credits: 3
Offered: Fall
Prerequisites: Junior standing
Age as a basis of societal differentiation in modern and premodern societies; social psychological, demographic, sociobiological, socioeconomic, and sociohistorical views of age-graded events and behaviors; examination of the life course and aging as sociological variables.

POP HLTH 603 Clinical and Public Health Microbiology
Credits: 5
Offered: Spring
Prerequisites: MM&I 301 & 302 or equiv
Cross lists: M M & I, POP HLTH
Lectures describe microorganisms of clinical and public health significance. Seminar sessions discuss issues and controversies of specimen receiving and processing, bacteremia, serodiagnosis of infectious agents, antimicrobial susceptibility testing, laboratory management, and novel approaches

NUTRI SCI 625 Advanced Nutrition: Obesity and Diabetes
Credits: 1
Offered: Spring
Prerequisites: Grad st; Nutr Sci 619 or con reg & Physiol 335 or equiv or cons inst
Physiology, biochemistry and genetics of human obesity and diabetes. Critical review of current research on their etiology and treatment.
MASTER OF PUBLIC HEALTH PROGRAM

APPROVED ELECTIVES

POP HLTH 794 Biological Basis of Population Health
Credits: 2
Offered: Fall
Prerequisites: Pop Hlth Grad st or MPH stdt; or cons inst
This course covers the physiology, biology and biochemistry of selected disease processes deemed to be important to students of Population Health Sciences by virtue of their clinical significance, including incidence, mortality and morbidity.

SYSTEMS THINKING

Med Hist 504 Society and Health Care in American History
Credits: 3
Offered: Fall, Spring
Prerequisites: Jr st & cons inst
Cross lists: HISTORY, HIST SCI, MED HIST
This course is designed to acquaint students with the history of health care in America. Although the focus will be on the past, efforts will be made to relate the past to the present.

MED HIST 509 The Development of Public Health in America
Credits: 3
Offered: Fall, Spring
Prerequisites: Jr st & cons inst
Cross lists: HIST SCI, MED HIST
Health problems in the U.S. from the colonial period to the twentieth century; efforts made toward their solutions.

SOC 532 Health Care Issues for Individuals, Families and Society
Credits: 3
Offered: Spring
Prerequisites: Jr st
Cross lists: C&E SOC, CNSR SCI, SOC
This course covers issues related to health and health care delivery in our society. Topics include social, cultural and ethical influences on consumer definitions of health and use of medical care, and on the health care system's responses.

POP HLTH 553 International Health and Global Society
Credits: 3
Offered: Fall
Prerequisites: Jr or Sr st, or cons inst
Cross lists: HIST SCI, MED HIST, POP HLTH
Major problems in international health from 1750 to the present. Focus on disease epidemiology and ecology; political economy of health; migration; quarantine; race, ethnicity, and health care; international health research; cross-cultural healing; mental and maternal health; growth of international health organizations.

I SYS E 559 Patient Safety and Error Reduction in Health Care
Credits: 3
Offered: Spring
Prerequisites: Jr st or cons inst
Cross lists: I SY E, MED PHYS
Techniques for evaluating and reducing risks in medical procedures, including probabilistic risk assessment methods, failure mode and effects analysis, human factors analysis, and quality management. Discussions of patient safety standards, recommendations from agencies, and continual quality improvement.
I SY E 610 Design of Program Evaluation Systems  
Credits: 3  
Offered: Spring  
Prerequisites: Sr or Grad st in ind engr or cons inst  

I SY E 617 Health Information Systems  
Credits: 3  
Offered: Occasionally  
Prerequisites: Sr or Grad st, or cons inst  
Cross lists: I SY E, L I S  
Provides grounding in core concepts of health information systems. Major applications include clinical information systems, language and standards, decision support, image technology and digital libraries. Evaluation of IE tools and perspectives designed to improve the quality, efficiency and effectiveness of health information.

POP HLTH 650 (Section 024) Public Health Preparedness  
Credits: 1  
Offered: Summer  
Prerequisites: MPH or Grad st  
This course is designed for health care professionals, MPH students and graduate students aspiring to hold positions responsible for medical emergency management activities in order for them to prepare and implement emergency response plans. It will discuss domestic and foreign emergencies and disasters and planning for their efficient medical response. Although the course’s primary focus will be on human populations, this course will also cover animal issues in the context of zoonotic disease outbreaks, human evacuation planning, and animal epidemics and their impact on public health perception and the safety of the food supply.

POP HLTH 718 International Health Systems  
Credits: 2  
Offered: Fall  
Prerequisites: Grad st or cons inst  
This course addresses and analyzes differences in health status and methods of organizing and providing health services in countries with varying levels of development and types of socio-political systems. Students develop an understanding of the various avenues of international cooperation in health.

POP HLTH 796 Introduction to Health Services Research  
Credits: 3  
Offered: Spring  
Prerequisites: Pop Hlth 795; or cons inst  
Introduces students to a variety of perspectives, substantive areas and methodological approaches to health services research that provide the foundation for understanding the structure, process and outcomes of the U.S. health care system.