The MPH in Public Health Practice requires 42 credits (14, 3-credit courses)

1. Required Core Courses (18 Credits)
   - BIOSTATS 540 – Introduction to Biostatistics
   - EPI 630 – Principles of Epidemiology
   - HPP 601 – Application of Social and Behavioral Theory
   - HPP 620 – Introduction to the US Health Care System
   - HPP 642 – Public Health Leadership
   - EHS 565 – Environmental Health Practices

2. Required Research Courses (9 Credits)
   - HPP 624 – Research Methods
   - HPP 698P – MPH Practicum
   - HPP 691S – Final Culminating Capstone Project

3. Elective courses (15 Credits)

Required core research courses are offered every spring and fall term. The practicum also runs during the summer. There is no order in which students are required to complete courses. However, it is recommended that you complete the 6 core courses quickly upon matriculation, as these serve as foundation courses for the electives you will take.
Core Classes (18 credits)

1. **BIOSTATS 540 - Introduction to Biostatistics**: Application of statistical methods to problems in public health and medical research. Topics include: descriptive statistics, sampling distributions, confidence interval estimation, hypothesis testing, contingency table analysis, and linear regression analysis. Statistical software packages used extensively. Upon enrollment in the course you will receive instructions on how to obtain and use the software.

2. **EHS 565 - Environmental Health Practices**: Concepts of control methods used by environmental health and engineering practitioners. Topics include water, wastewater, solid wastes, food sanitation, vector control, housing, and accident control measures.

3. **HPP 601 - Application of Social and Behavioral Theories in Public Health Interventions**: Survey of socio-behavioral theories commonly used in public health education interventions at the individual, group, and community levels.

4. **HPP 620 - Introduction to the US Health Care System**: Introduction to the philosophy, nature, and scope of health organizations; administration and organization of governmental health programs, economic and political forces and their effects on health services.

5. **HPP 642 - Leadership in Public Health**: The course and field work focus on leadership theory, development, and competencies, of contemporary public health leaders. Integral to the leadership role is the application of health policy leadership.

6. **EPI 630 - Principles of Epidemiology**: An epidemiological perspective on health. General approaches for describing patterns of disease in groups of people, and elucidating various processes involved in creating differing levels of health in human groups.

Research Classes (9 credits)

- **HPP 624 - Research Methods**: Major methodologies useful in health research. Topics include philosophy of scientific investigation, field research, participant, survey research, experimental design, construction of questionnaires, and attitudes scales; the format for writing a research prospectus. Students are required to complete EPI 650 and Biostats 540 before enrolling in this course.

- **HPP 698P - PHP Practicum**: PHP students have an opportunity for supervised field observation to gain practical experience in selected public health agencies.

- **HPP 691S - Final Culminating Capstone Project**: This course provides an opportunity to study a practical and current public health problem selected by the student. Students will apply critical thinking, analytical abilities, and communication skills that will integrate the core academic areas of public health, including biostatistics, environmental health, epidemiology, health policy, research methods, and social and behavioral theories. The resulting report acts as the official written comprehensive examination, the fulfillment of the culminating experience requirement, and is expected to meet specific publishing guidelines.
Elective courses are offered by various Public Health Departments within the school and are usually offered once per year on a rotational basis. We currently offer about 40 different elective choices and try to run at least 8 choices in spring and fall, and 16-20 choices during the summer. New courses are offered on a regular basis. If you have an idea for a course, please contact the department.

HPP 507 - Violence as a Public Health Issue: This course examines violence from a public health perspective in the United States and globally. It covers topics from interpersonal to structural violence and approaches to violence prevention.

HPP 524 - Introduction to Health Policy and Politics: Examines the determinants of health politics and policy in the U.S., including decisions and non-decisions made by institutional and political actors at all levels of government and by private sector actors.

HPP 525 - Ethical Issues in Public Health: C. Everett Koop, former Surgeon General of the United States famously once said "Anything we can do to stop smoking is good." The course explores the meaning of this "anything" in public health practice. A guiding question will be "what are the ethical limits in protecting the public's health?" While we won't be solving all the ethical issues that confront practitioners, we will raise questions about ethical public health practice. This course explores these questions through the methods and principles of contemporary bioethics and the differences between public health ethics and medical ethics will be stressed. Some issues include the use of the State's police power; the meaning of ethical research; the limits of health promotion, including an ethical analysis of manipulation and coercion in the name of the public's health. We will also address the ethics of public health emergencies; ethical questions in public health genetics; and public health concerns with social justice. A foundation of ethical theory will aid our explorations of ethical public health practice. Critical reading, philosophical analysis and group discussion is emphasized.

HPP 560 - Globalization and Health: This seminar will identify the linkages of globalization and human health and examine the positive and negative impacts globalization may pose for the public health, safety and security of the world's population. We will analyze different theoretical and empirical research methods used in confronting a range of global public health issues and policies today. The analyses of globalization perspectives will purposefully cross disciplines and expand upon the broader context of global public health governance and the interconnectedness of human health to world affairs. Topics of discussion will include opportunities and threats of globalization associated with public funding limits, new technologies and health sector reform; demographic and health transitions; transportation and trade (associated with such things as food, pharmaceuticals, and tobacco); travel and tourism; and the emergence and re-emergence of infectious diseases.

HPP 580 - Comparative Healthcare Systems: Overview of the characteristics of main health care systems and policies in selected countries. Topics of study include financing, insurance and delivery, access, and cost of health care services.
HPP 583 - Global Health in the Developing World: Introduction to major health issues in developing world, factors which affect health status, models for tackling these problems, and the role of industrialized countries in improving global health. Students explore major causes of morbidity and mortality and explore strategies to improve health.

HPP 602 - Community Development and Health Education: Latest approaches in community development and community organizing strategies. Exploratory readings, field assignments; emphasis on leadership development, capacity building, and coordinated community action.

HPP 608 - Communication Theory: Review of communication sources, channels, messages, reception, and effects, diffusion of health information, adoption of preventive health behavior, and mass media and social change patterns.

HPP 614 - International Health, Population, and Development: The course will examine current global health issues particularly within the context of development and international health policy. Questions covered include: How do developing countries grapple with forces such as globalization, debt and inequality? What roles do governments, international organizations and multi-national corporations play in development? How are community and participatory development promoted? Other topics include: international trade, political development, inequality, poverty, culture and social change, gender, and international cooperation.

HPP 621 - Health Care Organizations and Administration: The theory of internal organization and management applied to health care organizations. Analysis of management functions. Interrelationship between health institutions, their surrounding communities, and government.

HPP 622 - Program Evaluation in Health and Human Service Organizations: Concepts of program evaluation and their application to the health field. Emphasis on theoretical concepts and application to development of practical skills in program evaluation.

HPP 627 - Long Term Care Policy and Management: The impact of aging, chronic disease, disability, and dependency on the organization and delivery of long-term care services. Policies which have been developed to deal with quality, cost, and ethical issues. Management issues and current research in long-term care.

HPP 628 - Financial Management of Health Institutions: The fundamental tools for management control and decision making in health care organizations. The budgeting and financial management process. Emphasis on reimbursement for services and reporting requirements to government and third-party payer, and how managers establish budgets and financial controls to cope with them. Prerequisite: PUBHLTH 620

HPP 632 - Social Justice and Public Health: Social justice is an integral part of public health but what exactly is social justice and how can the public health professional bring this concept into daily practice? This course is about the intersection of public health and social justice. We will concentrate on the meaning of social justice and how it is applicable to the public health professional. First, we will look at the philosophical underpinnings of social justice using classical and contemporary theorists. Second, we will see how social injustice affects various populations. Public health is concerned with populations, but different population groups may be affected differently and we look at the elderly, minorities, the poor, and other groups through a social justice perspective. We will also address topic-based areas such as nutrition, violence, and infectious diseases. Third, we will investigate a theory of social justice as a foundation for public health practice. Critical reading, philosophical analysis and group discussion is emphasized.

HPP 634 - Substance Abuse and Public Health: Substance Abuse and limited treatment resources are a major public health issue. Helping people unpack the psychological components to substance use and connecting people to the right services is very crucial to sustained recovery. This course will focus on the biological, psychological, and sociological theories behind drug abuse. We will discuss prescription pain and anxiety medications available on the market, how they work in the body, and prevalence of prescribing, risks for overdose and the misuse and abuse of these medications. We will also discuss illicit drugs and their effect on people and families. Lastly, we will discuss the phenomena known as doctor shopping, non-traditional settings where abuse is taking place, non-pharmacological strategies to help people decrease use of prescription and illicit drugs and how to tailor intervention strategies.
HPP 636 - Global Maternal and Child Health: This course is designed to give students an overview of the issues pertinent to the health of mothers and children globally. Topics will include morbidity and mortality, antenatal care, labor/delivery, family planning, child health, nutrition, and HIV/AIDS. The health status of mothers and children is an important indicator of the health of a nation, so in this course, the major maternal child health indicators of developed countries will be contrasted with those of underdeveloped countries.

HPP 638 - Fundamentals of Women’s Health: This course will provide a comprehensive overview of issues related to health in women, addressing areas including but not limited to biology, psychology, geography, economics, health policy, and social issues.

HPP 639 - Health Disparities: This course is a graduate introduction to social injustice and inequality issues which create conditions that lead to unconscionable health disparities according to race, ethnicity, childhood experiences, gender, income, nationality, and other factors. This course explores the multi-faceted origins of health disparities clearly essential to effective and humane programs, policies, and systems. The course will also continuously examine how to translate theory into practice.

HPP 644 - International Organizations and Population Health: This course will examine international organizations and the role that they play on population health in both developed and developing countries.

HPP 660 - Evidence Based Policy: The rationale, methodologies and frameworks for developing and evaluating evidence that informs healthcare policies will be addressed. The course is designed to bridge epidemiology, policy development, implementation, and evaluation. Currently inactive

HPP 662 - Emerging Infectious Diseases: Etiological agents, epidemiology, and disease characteristics of emerging parasitic, viral, and bacterial diseases and practical approaches to limiting emergence. Microbiology 255 or 310/312 or Biology 101 are not required but highly recommended pre-requisites.

HPP 690B - Aging, Politics, Policy and Law: This course will use a structure-process-outcomes (impact) framework to review how the federal and state (and sometimes local) governmental structures and processes influence aging-related health policy. We will first review the fundamentals of civics and explore how each branch of government operates and intersects with aging health and wellbeing. We will explore how the executive, legislative, and legal branches of government interact with each other and how government processes impact aging-related organizations as well as individual lives. We will use examples of specific federal and state laws, regulations, and judicial opinions to illustrate structures, processes, and impact. We will review current and expected outcomes, debate their benefits, burdens, complexities, and unintended consequences. We will do a deeper dive into a recent federal regulatory enactment in order to see the on-the-ground implementation and impact of regulations. We will also review how states and private businesses are impacted by policy change. We will map the landscape of aging health policy stakeholders and the various ways they participate in or influence processes and outcomes. Finally, we will review aging-related legal issues, primarily focusing on the complexities of end-of-life health planning and decision-making surrounding guardianship, powers of attorney, advance directives, and POLST (Physician Orders for Life-Sustaining Treatment).

HPP 690D - Public Health and Diabetes: According to the American Diabetes Association, in 2012, 29.1 million Americans had Diabetes and 86 million Americans age 20 and older had Pre-Diabetes. This course will focus on the medical challenges related to Diabetes and strategies to engage these issues with clients and medical providers in the community. Information on current pharmacological and non-pharmacological therapies will be discussed and the cost of the disease. We will cover a brief overview of the physiology, epidemiology, and chronic disease implications of Diabetes and discuss topics on disease risks, health implications, societal norms, and prevention strategies.

HPP 690G - Introduction to Aging and Public Health: This course will provide a broad overview of various issues related to aging in the public health context. It will first review the demography of aging and the life course that are responsible for the significant rise in the aged population. The course will introduce the aging network and the complex relationship between the federal, state, and local government in providing the necessary resources for the aging population. In doing so, stakeholders involved in the aging network will be discussed along with the range
of issues that older persons, their families, their providers and society will face in the next decade. The course follows the basic goal of the field of public health and aging, which is to maximize physical, mental, and social function irrespective of the onset of disease and disability.

**HPP 690M - Introduction to the US Mental Health System:** This introductory mental health course provides an overview of mental health disorders and associated disease burden and risk factors, and also describes the current configuration of the US mental health industry including associated facilities and providers and best practice methods to treat mental health disorders. This course then emphasizes the importance of public health interventions to supplement existing treatment modalities in order to address mental health disease burden and associated risk factors.

**HPP 690R - Health Promotion & Chronic Disease Prevention in an Aging Population:** Human populations are aging at a rapid rate and living longer lives than previous decades. The purpose of this course is to advance medical and public health professionals in the field of aging, specifically in the area of health promotion and chronic disease prevention. Course participants will learn about the heterogeneity of epidemiologic research in the context of age-related disease and disability using federal public health data sets. This interdisciplinary course will examine the processes of human aging as well as the major chronic diseases and comorbidities that affect older adults. The definitions and measurements of chronic disease and health promotion will be emphasized. A public health perspective within an ecologic framework is emphasized to discuss disease prevention that aims to maximize function and increase independence among older adults. Nuanced approaches to chronic disease management will be discussed, including how to apply disease trajectory empirical data to end-of-life policy and procedure.

**HPP 690U - Public Programs:** This course provides an introductory overview of the various public programs available and utilized by seniors. Throughout the course, students will be introduced to a wide variety of public services available to elders in the U.S., will be expected to discuss program impact with their peers, and will be assigned fictional scenarios that ask them to provide guidance to other professionals. Coursework is separated into three Sections: Part I examines Insurance and Income, including Medicare, Medicaid, and Social Security; Part II examines Organizations and Outreach, including housing, transportation, and outreach organizations such as AARP and Ombudsman Programs; and, Part III, which studies Safety and Protection, including abuse, neglect, the role of adult protective agencies and law enforcement.

**HPP 704 - Health Program Planning:** Foundation for program planning in community health education and other public health areas. Provides basic planning principles, processes, and methods. A multi-disciplinary approach integrating the use of theory and practice.

**HPP 726 - Health Economics and Reimbursement:** This course introduces the applications of economics to health and health care. The topics to be covered include: allocation of health care resources with respect to demand and supply of health care; the roles of hospitals physicians, and health insurance; market imperfections and their role in economics of health care.

**HPP 750 - Public Health Emergency Management:** Provides an operational overview of public health management in preparing for and responding to disasters. Since disasters, by definition, cannot be effectively managed by the application of routine procedures or resources, this course provides needed guidance in a variety of newly defined and emerging areas for the field of public health.

**HPP 753 - Current Topics in Public Health Practice:** Ecological approaches frame how prevention, control, health promotion, protection and emergency measures protect the public’s health. Current topics include: health disparity, cultural competence, genomics, workforce planning, credentialing, media communication.

**HPP 780 - Public Health Law:** Constitutional and social bases for public health law. Development of statutes and regulations and their effects on social problems, including review of court decisions and preparation of administrative regulations.
Electives offered by the Department of Biostatistics

**BIOSTATS 640 - Intermediate Biostatistics:** Principles of statistics applied to analysis of biological and health data. Continuation of Bioepi 540 including analysis of variance, regression, nonparametric statistics, sampling, and categorical data analysis.

**BIOSTATS 690F - Introduction to R for Public Health:** Practice R is a free, open source, software program for data manipulation, visualization, and analysis that is broadly used in both academia and industry. BIOSTATS 690F is a 3-credit online introduction to R designed for beginners with no prior experience in programming. The intended audience is non-majors in public health, but students in related fields may find it useful as well. Some background in introductory statistics is required. The goal of this course is to learn how to use R to perform the fundamentals of data management and exploration. Topics include key concepts in writing R code, importing and manipulating data, how to use R for numerical and visual summarization, and how to use R for basic statistical analysis and reporting.

Electives offered by the Department of Environmental Health Sciences

**EHS-567 - Environmental Compliance Regulations:** Principles of environmental compliance obligations, common law, trespass, nuisance, and negligence. The major federal environmental laws affecting companies and agencies, and selected state and local regulations. Civil and criminal penalties and liabilities attached to environmental regulations. Strategies for compliance including proactive and environmental management as a method for reducing legal exposure to environmental issues.

**EHS 666 - Environmental & Occupational Toxicology:** The toxicological activity of toxic substances found in the general environment and in industrial settings. Topics include biochemical mechanisms for absorption, excretion, tissue distribution, metabolic transformations, and conjugations; comparative metabolism of animal species; special applications to the toxicology of heavy metals, pesticides, and other industrial chemicals.

Electives offered by the Department of Epidemiology

**EPI 632 - Applied Epidemiology:** Intermediate level course. Application of epidemiologic methods to study the etiology, control, and impact on society of selected diseases. Prerequisite: EPI 630.

**EPI 633 - Communicable Disease Epidemiology:** Review of selected infectious diseases; emphasis on current theories of distribution, transmission, and control.

**EPI 634 - Nutritional Epidemiology:** Epidemiologic study design problems and issues; major methods of dietary assessment; non-dietary nutritional assessments; and the relative strength of evidence in support of diet-disease relationships.

Electives offered by the Department of Nutrition

**NUTRITN 572 - Community Nutrition:** Skills and techniques needed to effectively carry out community nutrition programs and nutrition education, including knowledge of agencies and programs, community assessment, legislation, nutrition education, and working with people.

**NUTRITN 575 - Culture, Nutrition, and Health:** How culture and ethnicity affect dietary practices and health in the U.S. Influence of food security, acculturation, and politics on food availability, food practices, and health outcomes. Health and health disparities in different cultural/ethnic groups, including overview of epigenetics. Emphasis on cross-cultural communication to address health and nutrition concerns.

**NUTRITN 577 - Nutritional Problems in the U.S.:** Food-related problems and policies. Availability and safety of U.S. food supply. Evaluation of nutritional status of the general population and vulnerable groups. Social, psychological, and economic influences on food intake and alternative food patterns.
**NUTRITN 578 - International Nutrition:** Malnutrition as it exists in developing countries and its socioeconomic background. Protein-energy malnutrition, famine, vitamin and mineral deficiency diseases, synergism between nutrition and infection, and the role of international agencies in fighting malnutrition.

**NUTRITN 640 - Public Health Nutrition:** Practice-based approach to public health nutrition processes through readings, lectures and active participation; assessing community needs, priorities and goals; implementing nutrition interventions; designing nutrition plans; building coalitions; and preparing grant applications. (Prerequisites: NUTRITN 572 and 577, or consent of instructor)

**NUTRITN 697B - Nutrition of Mothers and Children:** Will cover concepts at three levels (biology, epidemiology, and prevention/policies/programs/practices for populations) from a life course and lifecycle perspective specific to 4 core topics: pregnancy/fetal nutrition; infant and toddler nutrition; undernutrition; and overnutrition/obesity. The course consists of a series of lectures, readings, discussions, papers and final exam to provide a content-rich review of nutrition of mothers and children from the public health perspective. Students will be able to effectively synthesize materials and integrate our course with other courses and their experiences into their practice as professionals in public health nutrition.