Welcome Prospective Student!

Curriculum:

The MPH-PHP is interdisciplinary in its scope. Included are courses in epidemiology, biostatistics, environmental health, social and behavioral sciences, and health policy and management. As a student you will be required to complete courses in all of these areas.

There are 3 types of courses in the program, core, required, and elective. Core and required courses are offered every semester. Elective courses are offered once every 3-4 semesters. New courses are considered and developed based on student requests and availability of instructors.

Each course is worth 3 credits. You will need to complete 14 courses for a total of 42 credits.

As of the fall 2015, each course will reside in a specific department. HPP= the Department of Health Promotion and Policy, Biostat/EPI= the department of Biostatistics and Epidemiology, or EHS= the department of Environmental Health Sciences.

These are the 5 required core courses (15 credits)*core courses are not offered during the summer*:

1. Biostat 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. This is an elective in the Global Health Certificate program.
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. 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.

These are the 3 other required courses (9 credits):

1. 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. Even though it is not required pre-requisite we strongly recommend students take Biostats 540 Biostatistics before taking HPP 624 Research Methods.

2. **HPP 698P** - Practicum experience (see below for description)
3. **HPP 691S** - Capstone-Final Project: The accrediting committee of the schools of public health requires that students complete a capstone, or culminating experience, prior to graduation. A capstone experience is defined as one that "requires a student to synthesize and integrate knowledge acquired in course work and to his/her learning experiences and to apply theory and principles in a situation that approximates some aspect of professional practice." This course provides an opportunity to study a practical and current public health problem selected by the students. Students will apply critical thinking, analytical abilities, and communication skills that integrate the core academic areas of public health including biostatistics, epidemiology, health education, health policy, and environmental health. The final course report acts as the official written comprehensive examination, the fulfillment of the culminating experience requirement and is expected to meet specific publishing guidelines.

**Prerequisites:** Biostats 540, EHS 565, HPP 601, HPP 620, EPI 630, a research methods course (usually HPP 624), and a minimum of 36 credits.

**Elective Courses-(6 courses or 18 credits):** These are a sample of the elective courses. This list is not all inclusive and may not reflect new courses added. If the department offers a course that is not on this list it will still count as an elective and may be used toward the completion of the degree. (As long as the course is numbered 500 or above. Any course with a number less than 500 is undergraduate level and may not be used as credit for a graduate degree.) This is where you can personalize the MPH-PHP to your specific interests.

1. **HPP 524** - Introduction to Health Politics and Policy-The determinants of health 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. The social and cultural development of American medicine, historical efforts to pass national health insurance legislation, growth of government's involvement in health care, and recent failure of health care reform.
2. **HPP 525** - Ethical Issues in Public Health-Problems in resource allocation, health research, adoption of technology, and related issues in the context of basic ethical principles. Group discussion emphasized.
3. **EHS 567** Environmental Regulation and Compliance: 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.
4. **HPP 580** Comparative Health Care Systems: The health care organizations of various countries; an analysis of their qualities to highlight advantages to the public policy makers. This is also a core course for the Global Health Certificate program.
5. **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. This is the second core course for the Global Health Certificate Program.

6. **HPP 590D 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. International organizations play a central role in human development and ultimately impact the livelihood of citizens of various countries the world over. In recent years, there has been a proliferation of international organizations ranging from regional governmental organizations such as the Organization of American States (OAS); the European Union (EU); the Caribbean Community (CARICOM); among others. Some organizations are based on issues such as trade and finance between countries for example: the World Trade Organization; the North American Free Trade Area (NAFTA); the International Monetary Fund (IMF) and the World Bank etc. Most of the organizations listed above have members who are represented by countries. Today, there are more international organizations that are non-state actors in the international arena. These include organizations such as Medecin Sans Frontieres (Doctors without Borders); Save the Children, the International Red Cross and Red Crescent Movement; Greenpeace among others. Such organizations play a role in impacting population health and will also be examined. Topics of discussion will include the operation, goals and policies of select international organizations, their programs, as well as analyses of their effectiveness. This is an elective in the Global Health Certificate program.

7. **HPP 590E Emerging Diseases Elective Course**

   *Course Description:* 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. This is an elective in the Global Health Certificate program.

8. **HPP 590Q - Globalization and Health**- This seminar will identify the linkages between globalization and health and examine the positive and negative impacts which globalization poses for the safety and security of the world's population. This is an elective in the Global Health Certificate program.

9. **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.

10. **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.

11. **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. This is an elective in the Global Health Certificate program.

12. **HPP 621 Health Care Organization 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.
13. **HPP 622 - Program Evaluation of health and human service organizations** - Concepts of program evaluation and their application to the health field. Emphasis on theoretical concepts and their application to development of practical skills in program evaluation. This is an elective in the Global Health Certificate program.

14. **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.

15. **EPI 632 - Applied Epidemiology** - Applied Epidemiology is an intermediate-level course that reinforces the basic concepts and principles of epidemiology. The major focus of the course is to understand and assess the application of epidemiologic methods to a variety of public health issues, including research in disease etiology, disease prevention and health service assessment. A systematic assessment technique will be used to critically evaluate and guide the discussion of published studies.

16. **EPI 633 - Communicable Disease Epidemiology** - Review of selected infectious diseases; emphasis on current theories of distribution, transmission, and control. This is an elective in the Global Health Certificate program.

17. **EPI 634** - Nutrition 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.

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

19. **EHS 666 - Environmental and Occupational Toxicology I** - 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.

20. **HPP 690AA - Population Aging and Public Health** - The demographic shift that doubled average life expectancy in the United States during the previous century has affected every aspect of public health, including delivery and cost of health care, types of diseases that predominate as causes of mortality, morbidity and disability, and quality of life in old age. This class explores in depth the causes and effects of these changes, and provides students with the opportunity both for working in teams and for as conducting independent research, with individualized faculty guidance, in an area of interest pertaining to population aging and public health.

21. **HPP 690DS - 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.

22. **HPP 690E - Evidence-Based Policy: An Evaluative Scientist's Tool Box** - 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. *Prerequisites:* PUBHLTH 540 and PUBHLTH 630.

23. **HPP 690L Leadership in Public Health Systems**: Public Health Leadership Public Health Leadership is an experiential, practice-based class designed to help public health and health care professionals identify, develop and apply the specific skills they need to grow as leaders. Each person’s path to leadership is unique, therefore learning and practicing leadership skills needs to be just as unique as each individual. Using assignments, exercises and instructor guidance, class members assess their own personality trait-based leadership styles, conduct a leadership skills' needs-assessment, and establish a leadership goal for this class and for their future as leaders. With individualized feedback and support from Dr. Kathryn Tracy, class members strengthen teamwork and team-leading skills, develop a bibliography for independent scholarship specific to their personal style and objectives, and identify a key leadership skill important to advancing the leadership goal they selected earlier in the semester. During the last four weeks of the semester, class members select a method and approach for the applied praxis, and practice that leadership skill, reflecting on the experience in a final paper.

24. **HPP 690MC 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.

25. **HPP 690PF/Patient Protection and Affordable Care Act**

26. **HPP 690SJ 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. The course is roughly divided into three sections. 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, 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.

27. **Biostat 691F Data Management and Statistical Computation**: An introduction to data management for research projects in the biomedical sciences using microcomputers. Topics include design of data collection forms, data entry, computer managed documentation and statistical computing using SAS. *Please note that this is not an introductory course. This course is most appropriate for students who have already completed Biostats 540, "Introductory Biostatistics," and HPP 624, "Research Methods in Public Health," or who have a strong background in these areas. Please contact the instructor before enrolling if you have not yet completed those two courses.*

28. **HPP 690W 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.
29. **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 multidisciplinary approach integrating the use of theory and practice.

30. **HPP 726 Health Economics and Reimbursement**: Concepts, vocabulary, and theoretical basis for economic analysis of the health field. Application of these concepts to health administration.

31. **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. Prerequisite: EHS 565, HPP 620 and EPI 630.

32. **HPP 757 Public Health Informatics**: Includes informatics content applicable to administrative and clinical systems used in public health. Learners analyze the application of information science and technology to public health practice.

33. **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.

**HPP 698P: Guidelines for the Practicum course for MPH-PHP & Global Health Certificate program:**

All new MPH-PHP students are required to complete a practicum as part of their degree requirement, and will receive three credits for the practicum. Online students must complete all 5 core courses prior to signing up for the practicum. The minimum time for a practice experience is 200 hours. However, individuals with evidence of 3 years of experience and currently employed fulltime in a public health or health care setting practice would be given 80 hours credit toward the practicum. This credit would reduce the minimum practice requirement to 120 hours. Practice experiences may be paid or unpaid. Placements are found by the student and approved by the practicum instructor. You need to sign up for HPP 698P PHP Practicum for 3 credits. Please note that the practicum will be graded as pass/fail. The following guidelines will provide you with more information regarding your practicum.

For students admitted to the Global Health Certificate program, HPP 698P-practium is an elective. Students can choose to do the practicum in their local area with an organization that focuses on global health or complete the practicum as part of travel to another country with an approved Non-Governmental Organization (NGO) or an organization like WHO, USAID, CDC or other international organization. Please contact the Academic Director for more information on this.

**Site Selection and Site Supervisor:**

For your practicum, you need to identify a site and a site supervisor. As Online MPH Public Health Practice students you have the options of implementing your Practicum at the organization you work for as long as the following guidelines are followed:

- A practicum at an organization where you are already employed usually means you will implement a public health project within this organization. You can do this by working on a
public health project that already exists or design your own small project and implement it. The major learning theme for the practicum is to receive practical work experience in public health and utilize your classroom knowledge.

- The practicum cannot be part of your job description at present. It has to be something new that will help you achieve the goals you identified.
- It can be accomplished during your normal working hours but again it has to be something new.
- You will need to find someone in the organization to supervise (or more likely) advise you.

For those of you planning to conduct a practicum outside your place of work, the following practicum site criteria should be met.

- The Practicum site is an organization, agency, or community that provides planning or services relevant to public health.
- The Practicum site enables you to further develop and apply specific skills or competencies learned in your PHP Online program.
- The Practicum site provides a Practicum Site Supervisor as described above.
- The Practicum site exhibits a willingness to provide support, including a workspace, if appropriate for your practicum needs.
- The Practicum site is a good match with your needs and interests.

Please be advised that some organizations will require a contract between the specified organization and our department and/or the University of Massachusetts Amherst. As of this time, our department does not have any protocol in place to accommodate such contracts. Thus, you are encouraged to find organizations which do not require such formal agreements or negotiate with the organization to volunteer without a contract. Some students have been successful with this approach by making a statement such as “Are you willing to let me volunteer/work without the contract? Are there other options we could consider?”

The Site Supervisor you select should have substantial experience with your organization, a working knowledge and practical experience in the project areas assigned to you, and an interest in and commitment to helping you. Additionally, the site supervisor assists you in establishing and achieving the goals set forth for the practicum, provides regular feedback and completes the Site Supervisor Evaluation for Public Health Practice form at the conclusion of the practicum.

**Practicum Topics:**

Once you have identified your site and your site supervisor, you need to choose a topic for your practicum. It’s important to choose one that is of interest to you and will be valuable to your organization. Some examples of previous practicum topics include: developing a smoking cessation
program and/or wellness program at the place of work, designing a comic book to inform children about the hazards of handling bats or the swine flu, implementing an emergency preparedness plan, assessing interventions in pulmonary rehabilitation for COPD patients, etc. As you can see, it’s a diverse and interesting list and virtually limitless in what can be achieved.