RECOMMENDATION OF THE SUBCOMMITTEE ON GRADUATE COURSE AND CURRICULUM, AND THE FACULTY OF THE SCHOOL OF PUBLIC HEALTH FOR AUTHORIZATION TO IMPLEMENT THE MASTER OF PUBLIC HEALTH DEGREE PROGRAM

Request for Authorization to Implement a Master’s Degree in Public Health
At the University of Wisconsin-Milwaukee

(As approved by the School of Public Health faculty, October 15th, 2010 and including changes recommended by the UWM Graduate Curriculum Committee January 27th, 2011 and from external reviewers Louis Rowitz, PhD and Patricia W. Wahl, PhD)

1. Program Identification

1.1 Title of Proposed Program: Master of Public Health

1.2 College, School or Functional Equivalent: School of Public Health, University of Wisconsin-Milwaukee (UWM)

1.3 Timetable for Initiation: It is anticipated that this graduate program will be submitted and reviewed by the Board of Regents in February 2011. Recruitment of the first class will proceed soon after approval, with the expectation that the first students will enroll in Fall 2011. For accreditation of the School, the program is required to have five tracks. Two tracks will be launched immediately (Environmental Occupational Health and Community Behavioral Health Promotion) with others to follow as resources become available (Epidemiology, Biostatistics, and Public Health Policy and Administration), and the next track anticipated for development is in the disciplinary field of Epidemiology. Two others will follow as resources become available (Biostatistics, and Public Health Policy and Administration).

1.4 Delivery: On-site classroom and laboratory course delivery and off-site public health practice experiences will be utilized in this degree. Appropriate courses may be available online.

1.5 Mission Statement: The UW-Milwaukee School of Public Health conducts rigorous public health research and scholarship; educates the current and future public health workforce; and influences the development of strategies and policies that promote health among diverse populations. The mission of the MPH program at UWM SPH is to provide students with both the broad and discipline-specific public health knowledge and skills needed so that as graduates they may enter (or continue in) the public health workforce to improve the health of diverse populations and communities in Milwaukee, the state of Wisconsin, and beyond.

2. Context

2.1 History: This Request for Authorization to Implement a Master of Public Health degree arises as part of the coordinated University effort that will result in an accredited School of Public Health at UW-Milwaukee. At the core of such Schools is a professional master degree, the Master of Public Health (MPH), and doctoral degrees in a minimum of 3 of the 5 core areas of public health. This proposal is for the MPH, a critical element in training the public
health workforce to address the complex public health needs of our local, regional, national and international communities.

The goal of public health is to improve the underlying determinants of health, including physical environment, socioeconomic environment, and health behaviors, so that all people have an equal opportunity to be healthy. Prevention of health problems for larger populations is a unique feature of public health—unlike traditional healthcare, which tends to focus on treating individuals, and then usually only after they become sick or injured. As personal health significantly affects quality of life for each of us, population health significantly affects quality of life for a population at large.

The public health workforce is an essential element of the public health infrastructure; an infrastructure upon which the health and well-being of our populations depend. There is a well-substantiated need to upgrade the knowledge and skills of the current public health workforce and, since many in the current workforce will retire in the next 5 to 10 years, new public health workers will be in great need.¹

Understanding the importance of the population health and the public health workforce, in October 2005, the UW Board of Regents charged UWM and the City of Milwaukee with conducting a feasibility study to examine public health initiatives at UWM, including a possible School of Public Health. A planning team, authorized by the Mayor, the UWM Chancellor, and the UW System President, carried out this study in the spring and summer of 2006. One of the key recommendations from this planning team was the establishment of an accredited school of public health. Further, as a fundamental and required element of this school, a recommendation was to build a MPH degree program such as the one outlined in this proposal.

2.2 **Instructional Setting:** The proposed MPH program will be housed in the new School of Public Health. It is anticipated that the School of Public Health will be located in its own building, located on the UWM campus or elsewhere.

The planning for the MPH program has already benefited, and when established, the program will continue to benefit from collaborations with faculty in other academic programs at UWM and at other UW system programs, as well as from the Medical College of Wisconsin and from the University of Illinois at Chicago. Faculty have lent their expertise in helping shape this proposed program. Furthermore, some of the courses listed as part of this proposal will be cross-listed with other academic programs on campus (e.g. health sciences, sociology, social work). Finally, a future goal for this MPH program is the development of joint degree programs with other master-level graduate programs on the UWM campus.

We have adopted an ambitious, yet realistic, schedule for progress to accreditation of the School of Public Health. We anticipate that the accreditation process will begin in 2014 with accreditation expected in 2015. The SPH is required to have a functioning MPH program, with at least one graduating class, prior to beginning the accreditation process.

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2.3 Relation to Mission Statement and Strategic Academic Plan: The mission of the UWM School of Public Health is “to conduct rigorous public health research and scholarship; educate the current and future workforce; and influence the development of strategies and policies that promote health among diverse populations.” This mission will be achieved through the academic programs (i.e., MPH and PhD degrees and the graduate certificate), through the research and public health practice in which the faculty and students are engaged, and through the service provided to communities in need.

As affirmed in UW System Doctoral Cluster mission statement, the university must support activities designed to promote the economic development of the state. The proposed MPH will contribute to the achievement of this mission by preparing students with the foundation necessary to build a career of leadership and excellence in public health practice, and who will directly address costly critical health needs and disparities. In alignment with UWM’s Select Mission to meet the diverse needs of Wisconsin’s largest metropolitan area, the MPH will:

- Engage in academic activities in the recognized core disciplines of public health.
- Develop and enhance a diverse public health workforce through increased educational and professional development opportunities for current and future public health workers.
- Apply experiential learning in various settings to gain a comprehensive understanding of the determinants of health for diverse populations and learn best practices for ameliorating such disparities.
- Collaborate with community, governmental, medical, and academic agencies to identify potential partnerships and research opportunities to promote the public health of Milwaukee and Wisconsin.

The School of Public Health and its component programs, including the MPH, are focused in their research, teaching, and outreach on the major public health problems and health determinants at the local, regional, and national levels. The School is inherently interdisciplinary, embracing broad areas of the natural, health, and social sciences, and facets of the humanities. As such, the participating faculty/staff in the MPH program include representation from the School of Freshwater Sciences, the College of Health Sciences, the Helen Bader School of Social Welfare, the College of Letters and Sciences, and the College of Nursing as well as members from the Medical College of Wisconsin, UW-Madison and Marquette University.

3. Description

3.1 Program Description: The MPH degree is the fundamental professional public health degree and is required as part of an accredited school of public health. This degree program prepares students with a broad understanding of the subject matter and analytical methods.

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needed for public health practice. The MPH degree program requires students to develop capacity in organizing, analyzing, interpreting, and communicating knowledge in an applied manner. The public health professionals educated in the UWM SPH will play major roles in addressing myriad and complex health challenges. These challenges are best understood and addressed from an ecologic model perspective – one that “emphasizes the linkages and relationships among multiple factors (or determinants) affecting health.”4 The curriculum of this proposed MPH degree, with its required set of core courses, the concentration specific courses, and the practice/field experience and culminating experience is built on this ecologic model framework. Further, the guiding principles undergirding this degree are social and environmental justice, health promotion/prevention/ protection, health equity, community connected/campus partnerships, and evidence-based public health policy.

The long range plan for the MPH curriculum is organized around the five core disciplines (tracks) of public health: Environmental and Occupational Health, Community and Behavioral Health Promotion, Public Health Policy and Administration, Epidemiology, and Biostatistics. Knowledge and skills in these disciplines prepare the graduate to analyze and consider solutions to public health problems at the community, institutional, and societal levels.5 Courses have been designed to fulfill competencies as outlined by the Association of Schools of Public Health (ASPH), as illustrated in Figure 1. For a complete list of the track-specific competencies see Appendix 1.6

The proposed MPH will require students to complete 42-45 credit hours of courses made up of a 24 credit required common core and 18-21 credits of courses in one of two tracks offered: Environmental and Occupational Health and Community and Behavioral Health Promotion. Within two to three years of degree offering, the MPH intends to expand to include three additional tracks in Public Health Policy and Administration, Epidemiology, and Biostatistics. The common core includes a practical field experience as well as a capstone experience.

Full-time students are expected to complete the degree requirements in two years. Part-time students are expected to complete the degree within five calendar years. We expect approximately one third of the students to be part-time students. All required courses will be offered in evenings or online to enable part-time students to complete the degree in a timely fashion.

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3.2 Objectives: The objective of the proposed program is to educate students who will become leading public health professionals serving in a variety of settings in Wisconsin and elsewhere. They are expected to become members of the public health workforce and help address the public health needs of their respective communities. In keeping with this objective, students will receive graduate/professional level training in the five core competencies of public health (as determined by ASPH and accepted by the accrediting body of schools of public health, the Council on Education in Public Health [CEPH]).
The core competencies for the two tracks initially implemented in the MPH are as follows:

**Environmental and Occupational Health Core Competencies**

- Describe the direct and indirect human, ecological and safety effects of major environmental and occupational agents.
- Describe genetic, physiologic and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental hazards.
- Describe federal and state regulatory programs, guidelines and authorities that control environmental health issues.
- Specify current environmental risk assessment methods.
- Specify approaches for assessing, preventing and controlling environmental hazards that pose risks to human health and safety.
- Explain the general mechanisms of toxicity in eliciting a toxic response to various environmental and exposures.
- Discuss various risk management and risk communication approaches in relation to issues of environmental justice and equity.
- Develop a testable model of environmental insult.

**Community and Behavioral Health Promotion Core Competencies**

- Identify basic theories, concepts and models from a range of social and behavioral disciplines that are used in public health research and practice.
- Identify the causes of social and behavioral factors that affect health of individuals and populations.
- Identify individual, organizational and community concerns, assets, resources and deficits for social and behavioral science interventions.
- Identify critical stakeholders for the planning, implementation and evaluation of public health programs, policies and interventions.
- Describe steps and procedures for the planning, implementation and evaluation of public health programs, policies and interventions.
- Describe the role of social and community factors in both the onset and solution of public health problems.
- Describe the merits of social and behavioral science interventions and policies.
- Apply evidence-based approaches in the development and evaluation of social and behavioral science interventions.
- Apply ethical principles to public health program planning, implementation and evaluation.
- Specify multiple targets and levels of intervention for social and behavioral science programs and/or policies.
3.2 **Curriculum**: According to the Council on Education in Public Health (CEPH), the accrediting agency for public health schools and programs, all MPH students must develop skills in basic public health concepts and demonstrate the application of these concepts through a practice experience that is relevant to the students’ areas of specialization (or track of study). All MPH students will take a common core curriculum of 24 credit hours, including a practice/field experience and a culminating experience, as well as a variable number of track-specific credit hours, 95% of which are graduate level courses. Students must earn a 3.0 or better to progress.

3.3 **Tracks**: Each student will be required to select one of the five tracks ultimately to be offered in the MPH program as described below. Each track will have a minimum of 42 credit hours of required coursework (including the 24 credit hours for the required common core courses all MPH students take,) required track-specific courses, the practice/field experience and the culminating experience in keeping with the Council on Education for Public Health (CEPH) accreditation requirements. CEPH requires accredited MPH degree programs to be at least 42 semester credit units in length.

The program will be launched with two tracks, Environmental and Occupational Health and Community and Behavioral Health Promotion. We anticipate that the three remaining tracks will be launched within two to three years of degree offering, beginning with Epidemiology and following with Biostatistics and Public Health Policy and Administration, as resources become available.

**Initial Launch**

**Environmental and Occupational Health**: environmental factors including biological, physical and chemical factors and the built environment that affect the health of a community.

**Community and Behavioral Health Promotion**: concepts and methods of social and behavioral sciences relevant to the identification and solution of public health problems.

**Future Launch**

**Epidemiology**: distributions and determinates of disease, disabilities and death in human populations; the characteristics and dynamics of human populations; and the natural history and biologic basis of disease; determinants of health; and the prevention and control of public health problems.

**Public Health Administration and Policy**: planning, organization, administration, and evaluation of public health programs and systems; analysis of public and corporate policy with regard to population-level health effects.

**Biostatistics**: collection, storage, retrieval, analysis, interpretation, and utilization of public health data; design and analysis of health-related studies in the context of a stated hypothesis; and concepts and practice of statistical data analysis.
Proposed Courses

The course list consists of required common core, required track core, and elective track courses. Course descriptions can be found in the following pages and course competencies and curriculum maps can be found in Appendix 1. The assemblage of elective courses is not exhaustive but reflects a starting point for the new program. With few exceptions, all of the courses are graduate level courses for which enrollees must meet prerequisite requirements or be given a waiver by the course instructor. Those that are U/G are courses standard in the curricula, all of which include graduate-level coursework. Courses with PH curricular codes will be created by School of Public Health faculty as the program develops. Some courses that already exist from other departments will be cross-listed or jointly offered with PH. Students may select electives from any academic unit on campus upon approval of the faculty advisor.

The faculty of the School recognizes the importance of including practice-based experiences in coursework throughout this professional degree curriculum. The program will incorporate expert practitioners from the City of Milwaukee Health Department and other state and local public health agencies in curricular planning and instructional deliver.

Many courses in the MPH curriculum will utilize case studies relevant to course learning objectives. This will include, but not be limited to, case studies developed by the Mid-America Regional Public Health Leadership Institute, scenario-based assessments provided by TrainingFinder Real-time Affiliate Integrated Network (TRAIN), and other action learning resources in classroom exercises and assignments. MPH courses will include practice-based dimensions early and often, such as case studies (local, statewide, national, and global), lab work, in-class presentations by public health professionals, and field trips to observe existing public health problems and population-focused interventions.

At some future point and similar to other professional degree programs, the School may create non-credit based certificates to provide professional develop opportunities for public health professionals who seek educational opportunities outside of master’s level programs.
Required Common Core Courses
(24 credits total; Required of Students in All Tracks)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH 701</td>
<td>Public Health Principles and Practice</td>
<td>3</td>
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<tr>
<td>PH 702</td>
<td>Introduction to Biostatistics</td>
<td>3</td>
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<tr>
<td>PH 703</td>
<td>Environmental and Occupational Health</td>
<td>3</td>
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<tr>
<td>PH 704</td>
<td>Principles and Methods of Epidemiology</td>
<td>3</td>
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<tr>
<td>PH 705</td>
<td>Principles of Public Health Policy and Administration</td>
<td>3</td>
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<tr>
<td>PH 706</td>
<td>Perspectives in Community and Behavioral Health</td>
<td>3</td>
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<tr>
<td>PH 707</td>
<td>Introduction to Statistical Computing</td>
<td>1</td>
</tr>
<tr>
<td>PH 790</td>
<td>Field Practice Experience *</td>
<td>3 *</td>
</tr>
<tr>
<td>PH 800</td>
<td>Culminating Experience/Capstone</td>
<td>2</td>
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TOTAL REQUIRED COMMON CORE CREDITS 24

*Students enrolled in the Environmental and Occupational Health track must take an extra credit of Field Practice Experience for a total of 4 credits.

PH 701 Public Health Principles and Practice (3 credits)
This course introduces students to concepts, structures and activities in public health practices. The course covers the spectrum of health determinants (including socioeconomic, physical, political, environmental, behavioral, healthcare-related, and policy-related forces) looking through the lens of social and environmental justice, and how public population-level health outcomes are influenced by them. It introduces fundamental public health skills such as community health assessment and community health improvement planning. The course will feature in-class presentations by public health professionals, including those working with the City of Milwaukee Health Department and other local public health agencies. In addition, such professionals may be utilized as small group discussion facilitators. Some of these professionals will be co-located with SPH faculty in the downtown SPH building.

PH 702 Introduction to Biostatistics (3 credits)
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. Fundamental statistical concepts related to the practice of public health: descriptive statistics; probability; sampling; statistical distributions; estimation; hypothesis testing; chi-square tests; simple and multiple linear regression; one-way ANOVA. Use of computers in statistical analysis.

PH 703 Environmental and Occupational Health (3 credits)
Study of environmental factors including biological, physical and chemical factors and the built environment that affect the health of the community.

**PH 704 Principles and Methods of Epidemiology (3 credits)**
Study of patterns and determinants of diseases and injury in human populations and the application of this study to the control of health problems. (Prerequisite: complete PH 702 or PH 710.)

**PH 705 Principles of Public Health Policy and Administration (3 credits)**
Planning, organization, administration, evaluation and policy analysis of public health programs and systems.

**PH 706 Community and Behavioral Health Promotion (3 credits)**
An ecological / systems approach to the study of the behavioral, social, cultural, and community contextual 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 of individuals and populations.

**PH 707 Introduction to Statistical Computing (1 credit)**
This course, taken concurrently with PH 702 or PH 710, provides MPH students with experience in SAS programming for basic data management and data processing. The course introduces students to the statistical computing knowledge necessary for courses in biostatistics and epidemiology.
PH 790 Field Experience (3-5 credits, Pass/Fail)

A planned, supervised, and evaluated practice experience related to a student’s track in the MPH program and professional interests. All students enrolled in the MPH program are expected to complete a minimum of 3 credits of practice experience in a government or non-governmental agency or organization (including community-based organizations and other not-for profit agencies) involved in public health activities. Many students may choose to complete their field experience working in participating local health department settings.

The over-arching objectives of the practice experience are:

- to help students further develop skills or competencies learned in their coursework by applying them in a public health practice setting;
- to provide a means for acquiring practical skills that are useful to public health professions and that are not available solely through academic instruction;
- to link the classroom experience to the core functions of public health practice and priorities as described in the Healthy People 2020 and Healthiest Wisconsin 2020 Plans (or their successors);
- to understand the political, economic, environmental, social and organizational contexts within which public health activities are conducted; and
- to gain exposure to an organizational and/or community context for public health activities.

Learning objectives for each specific practice experience will be defined as the practice experience is developed. All practice experiences will have the following characteristics:

- Students will enroll in PH 790 Field Experience for 3 to 5 credit hours (65 contact hours being equivalent to 1 graduate credit for a total of 200 + contact hours).
- Students will complete 19 credits of required core courses (PH 701 through PH 707) before enrolling in PH 790.
- Field experience placements will be made in organizations that have a formal memorandum of understanding (MOU) with the UWM SPH that includes a clear description of expectation of all parties (i.e., school faculty and field placement administrators, students, preceptors that mentor students at the placement site and the placement organization).
- Each student will have a faculty supervisor for the practice experience from the School of Public Health and a preceptor (mentor) at the placement site. The faculty member, preceptor, and student will discuss and agree upon (through completion of a practice experience “contract”) the learning objectives and other expectations for the field practice experience.
- All parties shall participate in a transparent evaluation of the field practice experience.

PH 800 Capstone/Culminating Experience (2 credits, Pass/Fail)

The capstone seminar offers students the opportunity to integrate their academic and professional work in the MPH through an individual project that will include both written and oral presentation components. The project should relate to the student’s professional and career interests, and the capstone experience “must be used as a means by which
faculty judge whether the student has mastered the body of knowledge and can demonstrate proficiency in the required competencies” (CEPH, p19).
**ENVIRONMENTAL AND OCCUPATIONAL HEALTH (EOH)**

**Total credits:**
- MPH common core courses: 24
- EOH required track core: 15
- Electives: 3
- **Total:** 42

**EOH Required Track Core Courses**

**PH 790 Field Experience (One Additional Required Credit)**
Students in the Environmental and Occupational Health track must enroll in PH 790 Field Experience for a minimum of 4 credits (65 contact hours being equivalent to 1 graduate credit for a total of 260 + contact hours).

**PH 762 Environmental and Occupational Epidemiology (3 credits)**
Methods of environmental and occupational epidemiology including outbreak, cluster analysis, cross-sectional, case-control, cohort, ecological, and time series designs, and contemporary issues: reproductive, developmental, and cancer. *Prerequisite(s): PH 704.*

**PH 750 Seminar (2 credits)**
Seminar covers current topics in environmental and occupational health, including presentation of research and relevant publications.

**Biological Environment (Choose one of the following courses—3 credits total)**

**PH 741 Public Health Microbiology (3 credits)**
*May be cross-listed with CLS 539/540*
The role of microbiological analysis in public health and the current techniques for detecting, identifying, and enumerating pathogenic microorganisms.

**PH 742 Mechanisms of Infectious Disease (3 credits)**
*May be cross-listed with CLS 775*
Review of current molecular and cellular aspects of infectious disease as related to microbial determinants of virulence and the host response.

**PH 743 Vectors of Infectious Disease (3 credits)**
Many infectious diseases are passed from person to person, but others are transferred through animals (zoonotic) or through vectors such as insects. This course describes the vectors and diseases, as well as effective measures for control and elimination of threats. Emerging vectorborne and zoonotic diseases are included.
Chemical Environment (Choose one of the following courses—3 credits total)

PH 744 Cellular and Molecular Toxicology (3 credits)
May be cross-listed with CLS 615
Students will learn how environmental and occupational chemical exposures affect human health at the cellular and molecular level using an organ systems approach. Specifically, concepts of hazard identification, routes of exposure, dose response, pharmacokinetics, and mechanism of action will be introduced using target tissue and organ systems for each major class of toxicological compounds to be discussed.

PH 745 Developmental Toxicology (3 credits)
Developmental Toxicology is a course designed to help students familiarize themselves with the agents (chemicals, pharmaceuticals, and infectious diseases) known to cause birth defects and developmental abnormalities. Students will be expected to understand routes of exposure, and biochemical mechanism(s) of action for each agent. Finally, understanding the relatively new concept of the fetal basis of adult diseases caused by low dose developmental toxicant exposure will be integrated throughout the course.

Built Environment (Choose one of the following courses—3 credits total)

PH 746 Occupational Health (3 credits)
Students enrolled will learn the principles of occupational safety, safety regulations, and accident investigation procedures. Engineering, behavioral, and administrative techniques for occupational accident prevention and mitigation will be discussed and developed. Emphasis on high energy hazards in occupational settings with an understanding of effective control measures.

PH 747 Ergonomics (3 credits)
May be cross-listed with I&ME 580 Ergonomics of the Workplace and other courses in the College of Health Sciences
Basic principles of ergonomics in the work environment will be applied to problems of worker and management. Topics include measurement of physical work capacity, problems of fatigue and heat stress, applied biomechanics, worker-machine interactions and communication, design of displays and controls.

PH 748 Built Environment (3 credits)
May be jointly offered with courses from the School of Architecture and Urban Planning
This interdisciplinary course focuses on the increasing recognition that the design of communities can impact human health. Community designs that feature parks, sidewalks, trails, public transit, and connectivity among destinations can encourage physical activity, help prevent obesity and its associated health consequences, and reduce dependence on automobiles whose use contributes to air pollution, motor vehicle crashes, and pedestrian injuries. Increased attention to the health implications of the built environment has led to various innovative solutions, such as mixed-use Smart Growth developments, investments in bicycling and pedestrian infrastructure, and the use of health impact assessments to convey health information to community decision-makers.
EOH Track Electives: Choose at least one course among the following for at least three credits total.

**PH 749 Climate Change and Health (3 credits)**
*May be offered as UG course, titled Environmental Sustainability (offered in Spring 2010 as a special topics course).*
The public health effects of global climate change will be investigated using epidemiologic and other methods. Understanding and studying, the public health adaptation response, and health impacts of potential mitigation efforts and activities will be a key focus of this course. The public health response will be discussed with emphasis on global health issues and a practical approach to vulnerability and risk assessment.

**PH 751 Methods in Environmental Health (3 credits)**
Methods in Environmental Health provides a comprehensive overview of current methodology, technology, applications and issues in survey sample design and associated estimation procedures.

**PH 752 Environment, Ecology and Law (3 credits)**
Surveys basic concepts and content in major areas of environmental health law; explains the sources of legal authority; and develops familiarity with legal language and thinking.

**PH 753 Freshwater Environmental Health (3 credits)**
*May be cross-listed with Freshwater 506 Environmental Health of Freshwater Ecosystems*  
An ecosystems approach to understand the issues of water supply and contamination locally, regionally, and globally. Provides introduction to methods of analysis of water quality.

**PH 740 Special Topics (Varying credits dependent on course)**
Topics of current interest in the field of public health. Major themes for each semester will be posted. With written consent of the MPH faculty committee, students may repeat PH 740 with change in topic in place of core courses or electives to a maximum of 9 credits.

**PH 799 Independent Study**
Independent Study may be taken as an equivalent to core courses or electives subject to advisor approval.

Other courses may be taken as equivalents to core courses or electives subject to advisor approval.
COMMUNITY AND BEHAVIORAL HEALTH PROMOTION TRACK (CBHP)

Total credits:  
- MPH common core courses: 24  
- CBHP required track core: 18  
- Electives: 3  
- Total: 45

**CBHP Required Track Core Courses (18 credits)**

**PH 725 Theories of Health Behavior (3 credits)**  
Theoretical and conceptual foundations of health-related behavior. The development, change, and maintenance of these behaviors from a bio-psycho-social perspective; needs and concerns of underserved and under-represented segments of the population.

**PH 726 Community Assessment (3 credits)**  
Theory and practice of community assessment in public health; Focus on measuring a community's health status, determinants of health, capacity for improving health. Qualitative and quantitative methods will be covered.

**PH 727 Program Planning and Implementation (3 credits)**  
This course introduces students to principles and methods of public health program development, focusing on policy analysis, program planning, collaboration and integration within communities, implementation of programs, and maintenance/sustainability. Cases studies will focus on underserved populations and health disparities.

**PH 728 Program Evaluation (3 credits)**  
This class will familiarize students in different types of program evaluation, including models of evaluation, process evaluation, monitoring of outputs and outcomes, impact assessment, and cost analysis. Readings, lectures and exercises will cover the strength and limitations of experimental, quasi-experimental, and non-experimental study designs.

**CBHP Methods**  
Choose at least two courses among the following for at least six credits total

**PH 729 Survey Research (3 credits)**  
*May be cross-listed with Sociology 752*  
This course will present students with an overview of survey methods, survey development, and tools for engaging in survey based research on public health issues. Readings, lectures, and learning activities will cover principles and practice of sampling, interviewing, computer-based assessments, data management, and other critical issues. Students will learn to critically evaluate the methods and the interpretations of findings in published studies.

**PH 730 Qualitative Methods (3 credits)**  
The course will cover topics in qualitative research including (1) theories of qualitative research, including ethnography, grounded theory, and other models; (2) models for operationalizing and implementing qualitative public health research; (3) Approaches to managing and analyzing qualitative data.
PH 731 Community-Based Participatory Research (3 credits)
The involvement of community members in research and scholarship has emerged as a critical component for public health research. Community empowerment and involvement plays a role in public health policy change, social, and environmental justice. This class will cover philosophical, practical, and methodological issues in the conduct of community-based participatory research across different public health disciplines.

CBHP Track Electives Choose at least one course among the following for at least three credits total

- CLS 552 Advanced Nutrition (3 credits)
- CLS 590* Public Health Nutrition & Food Politics (3 credits)
- Ed Psy 734 Contextual Determinants of Motivation (3 credits)
- Ed Psy 735 Social Cognition in Educational Psychology (3 credits)
- Ed Psy 833 Psychology of Race and Ethnicity (3 credits)
- NURS 750 Evaluation of the Quality of Health Care (3 credits)
- NURS 760 Processes of Aging (3 credits)
- Psych 555 Health Psychology (3 credits)
- Psych 611* Race, Ethnicity and Health (3 credits)
- PH 819 Social and Environmental Justice in Public Health (3 credits)
- SOC 940 Applied Gerontology Capstone (1 credit)

* Topics courses, which can be developed into regularly offered courses.

PH 740 Special Topics (Varying credits dependent on course)
Topics of current interest in the field of public health. Major themes for each semester will be posted. With written consent of the MPH faculty committee, students may repeat PH 740 with change in topic in place of core courses or electives to a maximum of 9 credits.

PH 799 Independent Study
Independent Study may be taken as an equivalent to core courses or electives subject to advisor approval.

Other courses may be taken as equivalents to core courses or electives subject to advisor approval.
3.4. **Admission requirements**: Applicants must meet all UWM Graduate School degree admission requirements. In addition, admission requirements to the MPH degree in the School of Public Health require: (1) submission of GRE scores, (2) transcripts showing a minimum 3.0 grade point average, and (3) three letters of recommendation from persons familiar with the applicant’s academic experience and potential for graduate work in public health. The admissions committee may consider GMAT, LSAT, MCAT scores in place of GRE scores. These materials will be considered in a holistic admissions process with special attention to ensure a diverse student body.

Prior to the start of classes in the first semester, students will be required to take diagnostic exams to assess their competencies at initial enrollment. Students will work with their advisors to choose appropriate coursework and to determine a plan of study. For admitted students who score below an acceptable level on diagnostic exams, advisors may suggest remedial courses to best prepare students to succeed in MPH common core coursework.

Successful applicants to the Environmental and Occupational track will have upper-level chemistry, biology, and mathematics through at least one semester of calculus.

3.5. **Interrelationship with other curricula**: Public health is inter-disciplinary by nature and as such students who pursue an MPH are likely to be interested in taking graduate courses, as electives, from across the UWM campus. The School of Public Health will collaborate with various campus units to cross-list class choices when possible.

Often the courses offered in MPH programs are of interest to students in other disciplines, most particularly students in nursing, other health sciences, statistics, and in some of the social sciences. Further, there may be opportunities for students from UWM to take electives at the Medical College of Wisconsin or at other UW System campuses. The maximum number of transferable credits allowable is the higher of (a) 12 semester credits or (b) 40% of the total number of credits required for graduation, according to UWM Graduate School policy.

3.6. **Accreditation requirement**: Accreditation is conferred on the School of Public Health, the administrative home of this MPH program. The Council on Education for Public Health (CEPH) is the accrediting body for programs in public health as well as schools of public health. It examines all degree programs offered by the applicant school, which would eventually include all academic and professional degree programs including graduate certificates. The SPH will be eligible for accreditation after the school has instituted the MPH degree and has graduated one class, has three doctoral degrees in place with at least one of these having graduated a student, has at least five faculty dedicated on a full-time basis to each doctoral program, and three full-time plus two full-time equivalent faculty in each of the five core public health disciplines. All courses, programs, and administration are designed to align with CEPH requirements with collaboration from CEPH.

3.7. **Diversity and Inclusion**: Appreciating and promoting diversity, as well as the practice of inclusion, are essential to the mission and culture of a school of public health. Such individual and cultural appreciation is vital to maintain the interdisciplinary underpinnings of the curriculum and the multiplicities of cultures, ethnicities, and unique assets of the public health workforce, as well as the breadth of community organizations and initiatives that promote public health. The UWM School of Public Health goes one step further. With a thematic focus of social and environmental justice, diversity and inclusion practices will be of critical emphasis in all aspects of the MPH program’s teaching, recruitment, administration and overall culture.
The MPH program will engage in actions that indicate respect for and appreciation of cultural and individual diversity. Cultural and individual diversity refers to differences with regard to personal and demographic characteristics. These include, but are not limited to age, disability, ethnicity, veteran status, gender, gender identity, language, national origin, race, religion, culture, sexual orientation, social economic status, as well as personal learning styles and life experiences. Inclusion refers to the active, intentional and ongoing engagement with diversity, in ways that increase one’s awareness, content knowledge, cognitive sophistication, and empathic understanding of the complex ways individuals interact with organizations.

The MPH program will practice inclusion throughout its policies, including adherence to nondiscriminatory policies and operating conditions of UWM, aligning with the university mission “to further academic and professional opportunities at all levels for women, minority, part-time, and financially or educationally disadvantaged students.” To this end, all SPH faculty and staff will complete UW-sanctioned diversity training. In addition, the program will utilize resources from the UWM Office of Equity and Diversity Services and consistently strive for diversity within its faculty ranks in accordance with the UWM Equal Employment Opportunity Policy. All current and future faculty recruitments emphasize the importance of attracting and hiring highly qualified candidates of diverse backgrounds. Applications from minority candidates will be encouraged through advertising positions in appropriate targeted venues, as well as through community networking.

Respect for and understanding of student cultural and individual diversity will be reflected in the MPH program’s policies for recruitment, retention, mentoring, and other support (i.e. funding for travel and data presentation). As a school, the SPH will seek funding to support programmatic initiatives to recruit more targeted minority enrollees into the MPH program. The SPH will offer field placements that reflect the cultural and individual diversity of student academic and career interests as well as the diversity of clients they are anticipated to serve. We are designing our courses with the theme of social and environmental justice woven through them and in addition, will seek opportunities to cross list elective courses with programs focused on diversity, including Women’s/Gender Studies, Ethnic Studies, Disabilities Studies, and Global Studies.

In many MPH programs, core coursework include the five public health disciplines (environmental health, community behavioral health promotion, public health policy and administration, epidemiology, and biostatistics). The UWM MPH program will include an additional required core course, PH 701 Public Health Principles and Practice, which looks at population health outcomes through the lens of social and environmental justice. This requirement, in addition to the practice of diversity and inclusion infused throughout the school, will give our MPH a quality that is attractive to students, faculty, staff, community organizations, and prospective employers.

3.8. Collaboration: Collaboration with a variety of academic programs within UWM and in other regional institutions, as well as with community agencies, is essential to the School of Public Health and its MPH degree program. Such partnerships not only provide synergies for all partners, but they also increase learning and research opportunities for public health students and faculty. Moreover, they increase opportunities for federal funding. Partnerships ensure connections between public health education and practice. Current collaborations and partnerships already suggest the potential for a great many more.
Examples of UWM’s current public health collaborations include the following:

- The Children’s Environmental Health Sciences Core Center (a Center of Excellence funded by the National Institute of Environmental Health Sciences), a partnership with the Children’s Hospital and Health System and the Medical College of Wisconsin
- The Center for Urban Population Health, a joint initiative between UWM, UW-Madison School of Medicine and Public Health, and Aurora Health Care
- The reciprocal agreement between UWM and the Medical College of Wisconsin, in which students from either institution may take courses and work with faculty from the other institution.
- The City of Milwaukee Health Department, which joined UWM in the planning of the School and plans to co-locate key staff within the School to enhance community-based participatory research and practice-based learning.

Additional partners of UWM School of Public Health include:

- Center for Addiction and Behavioral Health Research (CABHR)
- Center for Urban Initiatives and Research (CUIR)
- Institute for Urban Health Partnerships
- Marshfield Clinic
- Marquette University
- Rehabilitation Research Design and Disability Center (R2D2)
- UWM College of Health Sciences
- UWM College of Letters & Science
- UWM College of Nursing
- UWM Helen Bader School of Social Welfare
- UWM School of Freshwater Science

A diverse group of public, non-profit and community-based organizations have expressed an interest in sponsoring MPH students in their field placements including: (1) local health departments in Southeastern Wisconsin, (2) local federally-qualified health centers, and (3) community-based organizations with public health-related programs and services.

The University of Wisconsin-Milwaukee (UWM) School of Public Health SPH was appropriated $900,000 in the Omnibus Appropriations Bill to launch a Public Health Impact Initiative.

The Public Health Impact Initiative is bringing together SPH researchers, faculty, and students at the SPH, City of Milwaukee Health Department practitioners, and the community-based organizations in greater Milwaukee and beyond to address public health issues in Wisconsin. They will develop, implement, and evaluate strategies to improve, promote and protect the health of the people of Milwaukee and beyond. The initial focus will be healthy birth outcomes in Milwaukee.

The UWM School of Public Health is a partner in a collaborative education program that recently received a five-year $3.2 million grant from the U.S. Department of Health and Human Services to establish a new Wisconsin Center for Public Health Education and Training (WiCHPHET). Participants in this program include four higher education institutions in Wisconsin that are currently or soon will be offering an MPH degree: the University of Wisconsin Madison, University of Wisconsin LaCrosse, University of Wisconsin Milwaukee, and the Medical College of Wisconsin. Included within this
collaborative grant program will be the development of unique web-based courses on individual campuses that will be available to students in other MPH programs in the state. WiCHPHET is the first Public Health Training Center in Wisconsin.

The University of Wisconsin (UW) School of Medicine and Public Health is administering the grant, which includes partners from all four Wisconsin institutions offering or planning MPH programs. In addition to UW Madison and UW Milwaukee, the other academic partners are UW La Crosse and the Medical College of Wisconsin. The Wisconsin Department of Health Services Division of Public Health, Wisconsin Area Health Education Centers, Wisconsin Public Health Association, UW Office of Continuing Professional Development and the UW-Madison Population Health Institute are also part of the collaborative effort.

The partner institutions will collaborate in planning for and implementing professional preparation and development. The WiCHPHET will work with local health departments, community-based agencies and regional health organizations to assess the education needs of the public health workforce. From those assessments, projects will be implemented including: offering online academic courses focusing on social determinants of health to students across the state; support of community health interns, MPH field placements, and post graduate fellowships; preceptor training; education to new health officers, board of health members, and new public health workers; web-based resources; and providing evidence-based public health materials to local health departments and community organizations.

3.9. Outreach: An important and required element of an accredited school of public health is community service and professional development opportunities. Hence, the academic programs within such a school, such as the MPH proposed herein, are often engaged in outreach endeavors. These endeavors include, but are not limited to:

- certificate programs consisting of a limited, but specific, array of MPH courses
- credit-non-degree course availability
- community advisory groups that provide input to the curriculum
- the field/practice experience required of all MPH students wherein community members serve as preceptors
- open access to the community for workshops, lectures, and presentations
- non degree workshops and coursework for community public health professional training

Opportunities exist for MPH students to engage in K-12 educational activities within the Milwaukee Public School system. These activities will build upon current existing outreach programs at UWM whereby MPH students will have opportunities to inform/teach the next generation of Wisconsinites about healthy lifestyles choices. The School of Public Health builds on the outreach traditions of UWM to enrich student and community interaction.

3.10. Delivery Method: On-site classroom and laboratory course delivery and off-site public health practice experiences will be utilized in this degree. Because this MPH is designed to serve the state of Wisconsin, appropriate classes will be made available online. Within the first three years, it is planned that 20% of the MPH courses will be offered online. It is possible, as the WICPHET
partnership evolves, that an even greater number will be offered online. Also, UWM MPH students will have access to online courses offered at the UW-Madison and UW-LaCrosse campuses.

4. Need for Program

4.1 Introduction: The health and well being of populations depend to a great extent upon the strength of the public health infrastructure. Essential elements of public health infrastructure include a highly qualified workforce, research that examines root causes of population-level health outcomes and associated health disparities, the identification of strategies to improve overall health outcomes, and the analysis and development of policies to protect the health of the public. There is a critical need to upgrade the knowledge and skills of the current public health workforce, and to train future public health workers as their numbers decline. Milwaukee and Wisconsin follow the national public health workforce statistics that indicate more than 50% of the public health workforce is aged 50 years or older, demonstrating a critical need to train new workers. In addition to needing new workers, it is estimated that as many as four out of five public health professionals lack formal public health training. An MPH program at UWM with its five concentrations, along with the current Graduate Certificate Public Health program, will be an indispensable catalyst toward a trained and responsive public health workforce. These academic programs will provide a broad conceptual overview of public health, and will ultimately enhance the performance and effectiveness of these professionals.

According to the Association of Schools of Public Health, there is a great increase in demand for public health education. Between 1995 and 2006, nationwide applications for admittance to schools of public health have virtually doubled, from 1,319 to 2,506. According to the United States Bureau of Labor Statistics, “faster than average” growth is expected for Epidemiologists and Health Educators, with 15% and 18% respective increases projected for 2008-2018. The United States Bureau of Labor Statistics projects average growth for Environmental Health Specialists, an 11% increase from 2008 to 2018. This demand is being satisfied to a certain degree by a commensurate increase in the number of accredited schools which in that time period grew from 27 to 39. Currently there are 44 accredited schools.

The growth is fueled by the realization that in this era of globalization, health threats from pandemics to obesity transcend national boundaries, and students are committed to finding long-term solutions through public health studies.

Further, within Milwaukee and throughout Wisconsin, stakeholders in the community- and public health workers in particular- have expressed significant interest in advancing education in the field.

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of public health. Through a survey of its membership representing more than 500 public health workers, the Milwaukee/Waukesha County Consortium for Emergency Public Health Preparedness determined that a huge gap exists in affordable and accessible public health graduate level education in Southeast Wisconsin. The survey found that 61% of respondents had only a baccalaureate education and over 80% of those responding were interested in earning an MPH. The proposed MPH will be a key component in supporting the State Health Plan’s goal of developing a sufficient and competent public health workforce.

4.2. Comparable programs in Wisconsin: There are two accredited MPH programs available in the UW System, but they are not housed in accredited schools of public health: UW-La Crosse and UW-Madison. La Crosse offers an MPH in Community Health Education focused on improving health and well being through the use of community health education approaches. UW-Madison offers a generalist MPH program. The proposed MPH at UWM, as part of the School of Public Health, will afford the students a much more in depth public health educational opportunity, including the possibility of pursuing the MPH in one of five different areas of concentration.

In Milwaukee, the Medical College of Wisconsin (MCW) offers an online MPH program focused on either community health or occupational health/medicine. The latter focus is part of an occupational medicine residency program. The MCW program looks at community health through a medical lens, whereas the proposed UWM program will look at all five tracks through a public health lens.

4.3. Comparable programs outside Wisconsin: There are schools of public health in all of the states that surround Wisconsin (MN, IA, MI, and IL), each of which has an MPH program. They are part of the group of 44 accredited schools of public health in the U.S.

For Wisconsin students interested in public health, the nearest accredited schools of public health are located at the University of Minnesota-Minneapolis and the University of Illinois-Chicago. The commute to both of these locations presents a hardship for many students, as does out-of-state tuition rates. Locating the UWM MPH program in Wisconsin’s largest metropolitan area will be crucial for many public health learners and workers located within the state. It is clear that UWM’s SPH location in Milwaukee will not only be advantageous to both local and regional students, but it will also be advantageous to the country’s “Midwestern public health academic belt,” increasing collaborative opportunities between Chicago, Milwaukee, Madison, La Crosse and Minneapolis.

4.4. Regional, state, and national needs: The 2003 Institute of Medicine report underscored the importance of master and PhD prepared professionals to the public health workforce. Education in public health should be directed toward master and doctoral-level preparation of students who will fulfill many professional positions within public health, toward persons destined for practice careers in positions of senior responsibility and leadership, and toward those who will become public health researchers and academic faculty. Schools of public health are in the ideal position to focus on this needed leadership development because of the range of skills and knowledge represented within the faculty, and because of the partnerships that can be sustained with public health practice.  

The need is great. In all societies, the foundation of health and wellness is public health: clean air and water, nutritious food, adequate shelter, etc. A tiny fraction of health dollars are focused on

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prevention of disease; most goes toward treating illness and biomedical research aimed at individual-level treatments. Further, not only will nearly half of all public health workers will reach retirement age in the next few years, approximately 20% of available jobs in public health are now unfilled. The students who graduate from our program should find employment both within and outside Wisconsin, and as expert practitioners would be likely to have significant impact on a local, regional, or even global scale.

Wisconsin currently does not have an accredited school of public health. It is the only state in the vicinity that must confront its health problems without the leadership of an academic organization, a school of public health, that is dedicated to understanding the roots of health and disease and educating students who will populate the public institutions vested with the responsibility to sustain the public’s health. In this context, it is imperative that the elements of an accredited school of public health be assembled to address this deficit in Wisconsin’s public health foundation. The MPH program is a critical and required element of an accredited school of public health.

4.5. Student demand – Future enrollment: With anticipated approval of the MPH program, the intent is to admit students beginning in the fall semester of 2011 in the first two tracks (Environmental Occupational Health and Community Behavioral Health Promotion). We anticipate a gradual increase in enrollment as the program hires more faculty and as marketing of the program reaches a greater audience. The student body will increase in tandem with the faculty during the early years of the program.

As indicated by the constant and regular inquiries regarding this program that have been received by our offices during the past two years, we anticipate a strong enrollment in the implementation year of the program.

The anticipated student numbers may be raised, determined by demand for the program and allowable resources. Anticipated enrollments in the MPH Degree Program are as follows for the first three years of program implementation:

<table>
<thead>
<tr>
<th></th>
<th>Implementation year</th>
<th>2nd year</th>
<th>3rd year</th>
</tr>
</thead>
<tbody>
<tr>
<td>New students admitted</td>
<td>20</td>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>Continuing students</td>
<td>0</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Total enrollment</td>
<td>20</td>
<td>43</td>
<td>62</td>
</tr>
<tr>
<td>Graduating students</td>
<td>0</td>
<td>14</td>
<td>18</td>
</tr>
</tbody>
</table>

4.6. Collaborative Program Exploration: At this time, we are not planning a collaborative program element, but we foresee a market for potential collaborative programs such as an MPH/MBA, MPH/MSW, MPH/MUP, MPH/MSN, MPH/MPA, MPH/MA in Political Science, MPH/MA in Anthropology, or MPH/MS in Freshwater Sciences. Since Public Health is interdisciplinary in nature,
the School of Public Health will collaborate with various campus units to cross-list class choices as well.

5. Assessment and Advising

5.1. Assessment: Faculty have mapped competencies for each track, based on those established by the Association of Schools of Public Health (ASPH) MPH Core Competency Model (Competencies maps included in Appendix 1). With the assistance of the UWM Center for Instructional and Professional Development, program faculty will identify a set of student products—case studies, writing assignments, essays, and other projects—in courses within the required MPH curriculum that demonstrate select MPH core competencies.

Evidence of student work, which faculty identify, will be gathered and stored in an ongoing electronic learning competency system, an e-portfolio created using the d2L module. The ongoing electronic learning competency system will not be used to assess student progress but instead to assess the ability of the program to demonstrate satisfactory student learning of core and cross-cutting MPH competencies. The Graduate Program Committee will be responsible for reviewing these materials annually (each summer), using measurement rubrics. Based upon this systemic review of portfolios, recommendations for program improvement will be made and forwarded to the full faculty for considerations. Improvements may focus on such items as enhancements to program requirements, curriculum, field experiences, and capstone projects. Annual summer reviews by the Graduate Program Committee of these electronic learning pieces from students in the MPH program will allow a subcommittee of the program faculty to review the sum of student work to assess the extent to which students can demonstrate mastery of MPH core competencies.

The School of Public Health will also conduct one year post-graduation surveys of alumni as well as “one-year-out surveys” of employers of alumni. Surveys of alumni and employers will continue annually to evaluate the real-world strengths and weaknesses of the academic program from the perspective of student capacity to translate learning into practice.

The Graduate Program Committee will be responsible for collecting all artifacts created for this assessment and forward recommendations to the full faculty for review.

5.2. Advising: Each student will be assigned a faculty advisor, who will typically be the student’s mentor. The advisor will assist the student in the development of an individual course of study. The advisor is also responsible for advancing the career goals of the student.

Administrative offices of the School of Public Health will also have staff assigned to advise prospective and current students, related to recruitment, academic progress, and graduation.

Upon acceptance to the program, students will be required to take diagnostic exams. Students will work with their advisors to choose appropriate coursework and to determine a plan of study. Advisors may suggest remedial courses to best prepare students to succeed in MPH common core coursework.

5.3. Access for individuals with disabilities – UWM has as one of its core philosophies the access to education and facilities for all qualified students. This program supports the access initiative and will constantly seek to remove barriers as they become apparent. New facilities that are built or acquired will be wheelchair accessible and meet all applicable state and federal laws. The Student Accessibility Center at UWM is an excellent resource for determining compliance. The School of
Public Health also has assigned a representative to the UWM Universal Design Committee, to oversee implementation universal design throughout the school.

6. Personnel

6.1. Current Faculty Requirements: As this MPH degree program is launched, it will be supported by UWM faculty as identified in Appendix 3 (including faculty in place and faculty being recruited in 2010-11 through funding provided to the School).

Appendix 2 provides a table which outlines all of the required core courses plus the core courses and electives for the two tracks to be launched in the MPH: (1) Environmental and Occupational Health and (2) Community and Behavioral Health. This table also outlines the faculty FTEs required to offer these courses (counting each 3-credit course as .125 FTE). The required faculty FTEs for teaching and advising/mentoring in the MPH Degree Program are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>FTEs for Teaching</th>
<th>FTEs for Advising/Mentoring</th>
<th>Total FTEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year One: 2011-12</td>
<td>1.875</td>
<td>.75</td>
<td>2.625</td>
</tr>
<tr>
<td>Year Two: 2012-13</td>
<td>3.375</td>
<td>1.25</td>
<td>4.625</td>
</tr>
<tr>
<td>Year Three: 2013-14</td>
<td>4.25</td>
<td>1.75</td>
<td>6.0</td>
</tr>
</tbody>
</table>

The faculty FTEs within the School of Public Health (as outlined in Appendix 3) satisfy all needs for teaching and mentoring in the MPH Degree program as it is launched with two tracks. As more faculty are hired into the School, the program will seek authorization to expand to all five tracks.

In addition, a faculty buyout arrangement shall be utilized to support leadership in administration of the MPH program.

6.2. Additional faculty requirements: None

6.3. Academic staff: 1.5 FTE staff will support this program.

6.4. Classified staff: 0.5 FTE

7. Academic Support Services

7.1. Library resources: The UWM Libraries, in consultation with program faculty, have reviewed library holdings and have identified areas where collections should be expanded to support a full array of public health disciplines. Through fiscal year 2009 legislative appropriations to the School of Public Health, an initial investment of $60,000 was received to expand School of Public Health library holdings. The Provost also pledged a percentage of indirect funds from research across the campus to support the libraries’ electronic serial holdings and databases, including those that support the School of Public Health curriculum and faculty research.

7.2. Access to student services: Students in this MPH program will have access to all of the support services available to UWM students. Student services can be found at http://www4.uwm.edu/current_students/student_services/index.cfm. The Graduate Program Manager devotes 40% of the position to connecting students with these services, including UWM Centers such as LGBTQ Center, Women’s Center, International Student Center, African American Center, and Asian American Center.
7.3. **Technical support**: All students at UWM have access to the technical services of the university, including computer support, e-mail and D2L, and related services. Information technology and support services will be provided in collaboration with University Information and Technology Services (UITS). The School of Public Health will create protocols that identify the support needed for email, D2L, and related instructional technology needs. UITS services will be utilized for instructional support services. See Technology Services at [http://www4.uwm.edu/current_students/first_semester/technology_resources/index.cfm](http://www4.uwm.edu/current_students/first_semester/technology_resources/index.cfm). In addition, .25 FTE of the Graduate Program Manager’s position will be dedicated to learning and teaching technology support.
8. Facilities

8.1. Capital resources – existing facilities and capital equipment

The MPH program will be offered by the School of Public Health primarily at the downtown Milwaukee facility currently under construction planning with an anticipated occupancy date of August 2012. The exception may be courses in the Environmental and Occupational Health track that require laboratory facilities for instruction. These courses will be operated on SPH space being created for Environmental and Occupational Health on the Kenwood campus.

All school facilities are being constructed through dedicated campus funding used to create state-of-the-art facilities for graduate-level instruction.

Funding for these capital needs has been furnished through campus resources as well as the Founding Gift to support the school by Joseph Zilber in the amount of $10 million.

8.2. Capital budget needs – additional facilities and capital equipment

8.3. Clinical facilities: The program does not need clinical facilities.

8.4. Security: The School of Public Health will follow the practice of other UWM schools and colleges and university facilities in ensuring the integrity of academic work.

8.5. Transportation: In the near term, space for the program will be available on the University’s Alumni House, Kenwood, and Harbor campuses. SPH faculty will be located on a combination of these campuses. As part of its Master Plan, UWM will support a transportation system to facilitate movement of faculty, students, and staff between the various UWM campuses.

9. Finance

9.1. Operating budget and budget narrative: The budget for this graduate program is included in Table 1 below. During 2010-11, the SPH will hire 8-10 new faculty members who will support this program. For purposes of this budget, Faculty Instructional Staff salary per FTE estimated at $80,000. Sources of funding include:

- 101 base dollars currently in the SPH base budget (or will be added as soon as the 8-10 new faculty hires for 2010-11 are complete).
- Tuition revenues generated from MPH courses will be reinvested in the MPH program.
Table 1: Budget for MPH Program

<table>
<thead>
<tr>
<th></th>
<th>First Year (2011-12)</th>
<th>Second Year (2012-13)</th>
<th>Third Year (2013-14)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#FTE</td>
<td>Dollars</td>
<td>#FTE</td>
</tr>
<tr>
<td><strong>CURRENT COSTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty/Instructional Staff (1)</td>
<td>2.625</td>
<td>$236,250</td>
<td>4.625</td>
</tr>
<tr>
<td>Graduate Assistants</td>
<td>2.0</td>
<td>$21,000</td>
<td>4.0</td>
</tr>
<tr>
<td>Non-instructional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic/Classified Staff</td>
<td>2.0</td>
<td>$75,000</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>ADDITIONAL COSTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Assistants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-instructional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic/Classified Staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Non-personnel</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplies &amp; Expenses</td>
<td></td>
<td>$40,000</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL COSTS</strong></td>
<td>6.625</td>
<td>$372,250</td>
<td>10.265</td>
</tr>
<tr>
<td><strong>CURRENT RESOURCES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Purpose Revenue (GPR ) (2)</td>
<td>4.625</td>
<td>$311,250</td>
<td>8.625</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ADDITIONAL RESOURCES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPR Allocation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition Revenues (3)</td>
<td>2.0</td>
<td>$61,000</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL RESOURCES</strong></td>
<td>8.0</td>
<td>$372,250</td>
<td>14.0</td>
</tr>
</tbody>
</table>

(1) Salaries based upon average faculty salary of $90,000.
(2) The faculty are already in place or are being recruited in 2010-11.
9.2. **Operating budget reallocation**: There is no expectation of reallocation of resources from other existing UWM units.

9.3. **Extramural research support**: Schools of public health are prime recipients of NIH and NIEHS funding opportunities. Our current faculty, and those we are recruiting, have a proven track record for winning extramural research awards.

9.4. **Costing methodology**: The School of Public Health will use the UW System common costing methodology.

9.5. **Commitment to Maintain Program**: The faculty hiring process will continue through successive DIN opportunities until a full complement of professors is achieved. In addition, the UWM Master Plan includes planning for the facilities and equipment needed for a successful initiation of the School of Public Health. Technical expertise and financial planning expertise will be provided by the University as for other academic units.

9.6. **Document Reviewers**: Two reviewers provided useful feedback, which the School of Public Health faculty carefully considered. The reviewers were Dr. Patricia Wahl, Dean Emeritus and Professor of Biostatistics, University of Washington School of Public Health and Dr. Louis Rowitz, Director and Professor, Center for Public Health Practice, University of Illinois-Chicago School of Public Health. This document, as of February 16, 2011, incorporates revisions, based on comments from external reviewers.
Appendix 1A: Association of Schools of Public Health MPH Core Competencies
<table>
<thead>
<tr>
<th>Course Title</th>
<th>PH 706</th>
<th>PH 725</th>
<th>PH 726</th>
<th>PH 727</th>
<th>PH 728</th>
<th>PH 729</th>
<th>PH 730</th>
<th>PH 731</th>
<th>PH 819</th>
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</thead>
<tbody>
<tr>
<td>ASPH Community and Behavioral Health Promotion (Social and Behavioral Sciences) Core Competencies</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>E. 1. Identify basic theories, concepts and models from a range of social and behavioral disciplines that are used in public health research and practice.</td>
<td>☑</td>
<td>☑</td>
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<td>☑</td>
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</tr>
<tr>
<td>E. 2. Identify the causes of social and behavioral factors that affect health of individuals and populations.</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
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<td>☑</td>
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</tr>
<tr>
<td>E. 3. Identify individual, organizational and community concerns, assets, resources and deficits for social and behavioral science interventions.</td>
<td>☑</td>
<td>☑</td>
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<td>☑</td>
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</tr>
<tr>
<td>E. 4. Identify critical stakeholders for the planning, implementation and evaluation of public health programs, policies and interventions.</td>
<td>☑</td>
<td>☑</td>
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<tr>
<td>E. 5. Describe steps and procedures for the planning, implementation and evaluation of public health programs, policies and interventions.</td>
<td>☑</td>
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</tr>
<tr>
<td>E. 6. Describe the role of social and community factors in both the onset and solution of public health problems.</td>
<td>☑</td>
<td>☑</td>
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<td>☑</td>
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<tr>
<td>E. 7. Describe the merits of social and behavioral science interventions and policies.</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
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<tr>
<td>E. 8. Apply evidence-based approaches in the development and evaluation of social and behavioral science interventions.</td>
<td>☑</td>
<td>☑</td>
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<td>☑</td>
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<tr>
<td>E. 9. Apply ethical principles to public health program planning, implementation and evaluation.</td>
<td>☑</td>
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<tr>
<td>E. 10. Specify multiple targets and levels of intervention for social and behavioral science programs and/or policies.</td>
<td>☑</td>
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### Appendix 1B: Association of Schools of Public Health MPH Core Competencies

<table>
<thead>
<tr>
<th>Course Title</th>
<th>PH 703</th>
<th>PH 757</th>
<th>PH 750</th>
<th>PH 741</th>
<th>PH 742</th>
<th>PH 743</th>
<th>PH 744</th>
<th>PH 745</th>
<th>PH 746</th>
<th>PH 747</th>
<th>PH 748</th>
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<th>PH 751</th>
<th>PH 752</th>
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<tbody>
<tr>
<td>ASPH Environmental and Occupational Core Competencies</td>
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<tr>
<td>B. 1. Describe the direct and indirect human, ecological and safety effects of major environmental and occupational agents.</td>
<td>🟢</td>
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<tr>
<td>B. 2. Describe genetic, physiologic and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental hazards.</td>
<td>🟠</td>
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<td>🟠</td>
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<tr>
<td>B. 3. Describe federal and state regulatory programs, guidelines and authorities that control environmental health issues.</td>
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<tr>
<td>B. 5. Specify approaches for assessing, preventing and controlling environmental hazards that pose risks to human health and safety.</td>
<td>🟠</td>
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<tr>
<td>B. 6. Explain the general mechanisms of toxicity in eliciting a toxic response to various environmental exposures.</td>
<td>🟠</td>
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<tr>
<td>B. 7. Discuss various risk management and risk communication approaches in relation to issues of environmental justice and equity.</td>
<td>🟠</td>
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<tr>
<td>B. 8. Develop a testable model of environmental insult.</td>
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Appendix 2: MPH Course Planning 2011-2014
## Course Requirements

### Common Required Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>2011-2012</th>
<th>2012-2013</th>
<th>2013-2014</th>
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</thead>
<tbody>
<tr>
<td>PH 701 Public Health Principles and Practice</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
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<tr>
<td>PH 702 Introduction to Biostatistics</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PH 703 Environmental and Occupational Health</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PH 704 Principles and Methods of Epidemiology</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PH 705 Principles of Public Health Policy and Administration</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PH 706 Perspectives in Community and Behavioral Health</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>PH 707 Introduction to Statistical Computing</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
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<tr>
<td>PH 790 Field Practice Experience</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
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<tr>
<td>PH 800 Culminating Experience/Capstone</td>
<td>2</td>
<td>0</td>
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<td><strong>Total Common Required Core Courses Offered</strong></td>
<td></td>
<td>8</td>
<td>12</td>
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### Environmental and Occupational (EOH) Required Track Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>2011-2012</th>
<th>2012-2013</th>
<th>2013-2014</th>
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</thead>
<tbody>
<tr>
<td>PH 762 Environmental and Occupational Epidemiology</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PH 750 Seminar</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Biological Environment: Choose one course: PH 741 Public Health Microbiology, PH 742 Mechanisms of Infectious Disease, or PH 743 Vectors of Infectious Disease</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Chemical Environment: Choose one course: PH 744 Cellular and Molecular Toxicology, or PH 745 Developmental Toxicology</td>
<td>3</td>
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<tr>
<td>Built Environment: Choose one course: PH 746 Occupational Health, PH 747 Ergonomics, or PH 748 Built Environment</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>SPhI-offered Electives: Choose one course: PH 748 Climate Change and Health, PH 751 Methods in Environmental Health, PH 752 Environment, Ecology and Law, or PH 753 Freshwater Environmental Health</td>
<td>3</td>
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<td>2</td>
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<tr>
<td><strong>Total EOH Track Sections Offered</strong></td>
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<td>4</td>
<td>9</td>
<td>9</td>
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### Community and Behavioral Health Promotion (CBHP) Required Track Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>2011-2012</th>
<th>2012-2013</th>
<th>2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track Core: PH 725 Theories of Health Behavior, PH 726 Community Assessment, PH 727 Program Planning and Implementation, and PH 728 Program Evaluation</td>
<td>12</td>
<td>2</td>
<td>4</td>
<td>4</td>
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<tr>
<td>CBHP Methods: Choose two courses: PH 729 Survey Research, PH 730 Qualitative Methods, PH 731 Community-Based Participatory Research</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>2</td>
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<tr>
<td><strong>Total CBHP Track Sections Offered</strong></td>
<td></td>
<td>3</td>
<td>6</td>
<td>6</td>
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</tbody>
</table>

| Total Sections Offered | 15 | 27 | 34 |

# FTE's = # Total Sections Offered × 0.125

- 2011-2012: 1.875
- 2012-2013: 3.375
- 2013-2014: 4.25
## Appendix 3: Faculty Roster for the MPH Master of Public Health Program

### CURRENT FACULTY

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karla Bartholomew, PhD</td>
<td>Assistant Professor of Public Health</td>
</tr>
<tr>
<td></td>
<td>Public Health Policy (<em>Effective August 2011</em>)</td>
</tr>
<tr>
<td>Robert Burlage, PhD</td>
<td>Adjunct Associate Professor of Public Health</td>
</tr>
<tr>
<td></td>
<td>Environmental Microbiology</td>
</tr>
<tr>
<td>Michael Carvan, PhD</td>
<td>Shaw Associate Scientist at the Water Institute</td>
</tr>
<tr>
<td></td>
<td>Environmental Biomonitoring</td>
</tr>
<tr>
<td>Young Cho, PhD</td>
<td>Associate Professor of Public Health</td>
</tr>
<tr>
<td></td>
<td>CBHP(<em>Effective August 2011</em>)</td>
</tr>
<tr>
<td>Paul Florsheim, PhD</td>
<td>Associate Professor of Social Welfare</td>
</tr>
<tr>
<td></td>
<td>Adolescent Mental Health</td>
</tr>
<tr>
<td>Eric Gass, PhD</td>
<td>Adjunct Assistant Professor of Public Health</td>
</tr>
<tr>
<td>Amy Harley, PhD</td>
<td>Assistant Professor of Public Health</td>
</tr>
<tr>
<td></td>
<td>Health Promotion</td>
</tr>
<tr>
<td>Jeanne Hewitt, PhD</td>
<td>Associate Professor of Nursing</td>
</tr>
<tr>
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<td>Epidemiology</td>
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<tr>
<td>Amy Kalkbrenner, PhD</td>
<td>Assistant Professor of Public Health</td>
</tr>
<tr>
<td></td>
<td>Environmental Health (<em>Effective August 2011</em>)</td>
</tr>
<tr>
<td>Michael Laiosa, PhD</td>
<td>Assistant Professor of Public Health</td>
</tr>
<tr>
<td></td>
<td>Environmental Health</td>
</tr>
<tr>
<td>Nancy A. Mathiowetz, PhD</td>
<td>Professor of Sociology</td>
</tr>
</tbody>
</table>
Todd Miller, PhD  
Assistant Professor of Public Health  
Environmental Health

Stephen Percy, PhD  
Professor of Political Science  
Director, Center for Urban Initiatives and Research

Kurt Svoboda, PhD  
Associate Professor of Public Health  
Developmental Neurotoxicology/Neurobiology

Geoffrey R. Swain, MD, MPH  
Adjunct Associate Professor of Public Health

Peter Tonellato, PhD  
Professor of Public Health  
Public Health Informatics

Renee Walker, PhD  
Assistant Professor of Public Health  
Health Disparities *(Effective August 2011)*

Helen Wang, PhD  
Assistant Professor of Public Health  
Biostatistics *(Effective August 2011)*

Lance Weinhardt, PhD  
Professor of Public Health  
CBHP *(Effective August 2011)*

Alice Yan, PhD  
Assistant Professor of Public Health  
Health Disparities *(Effective August 2011)*

**NEW FACULTY BEING HIRED IN 2010-11**  
*(2-3 Additional Positions Approved by Provost December 2009; Recruitments in progress)*

TBN (2 faculty)  
Epidemiology

TBN (1 faculty)  
Biostatistics