

UIC School of Public Health Student Handbook 2005-2006

MPH Degree Requirements for the Community Health Sciences Division

[COMPREHENSIVE MPH CURRICULUM](#) • [PROFESSIONAL ENHANCEMENT PROGRAM MPH CURRICULUM](#) • [CHS CAPSTONE REQUIREMENTS](#)

Students are admitted to either the Comprehensive Program or the Professional Enhancement Program (PEP). The number of credits required for graduation is determined at admission. Programs of study are developed by the student and his/her faculty advisor based on conditions set at admission and the requirements of the MPH curriculum including elective courses which are selected to enhance the student's background and professional goals.

Comprehensive MPH Curriculum

CHS students in the MPH program may select one of the following three tracks:

Behavioral Sciences and Health Promotion
Gerontology
Maternal and Child Health (including MCH Epidemiology)

Students not wanting to focus their studies in any of these tracks may select a general course of study. Additional course work is available in the areas of developmental disabilities, international health, public health nutrition, public health practice, and women's health. The curriculum below represents the minimum requirements for a comprehensive program in CHS. Advisors often recommend additional courses for students. Students should refer to the CHS Student Handbook (<http://www.uic.edu/sph/handbooks.htm>) for a complete description of the MPH degree requirements and competencies.

Comprehensive Curriculum (47-52 minimum semester hour credits)

SPH Core Requirements (19 semester hours)

EPID 403 Introduction to Epidemiology-Principles and Methods (3 sh)

BSTT 400 Biostatistics I (3 sh)

HPA 400 Principles of Management in Public Health (3 sh)

CHSC 400 Public Health Concepts and Practice (3 sh)

EOHS 400 Principles of Environmental Health Sciences (3 sh)

CHSC 401 Behavioral Sciences in Public Health (3 sh)

IPHS 698 MPH Capstone Experience (1 sh)

CHS Core Requirements (15 semester hours)

CHSC 431 Community Assessment in Public Health (3 sh)

CHSC 433 Public Health Planning and Evaluation (3 sh)

CHSC 446 Research Methods in Community Health (3 sh)

CHSC 480 Health Education and Health Promotion (3 sh)

Students must select one of the following policy/advocacy courses: CHSC 527, CHSC 543 or HPA 430 (3 sh)

CHS Track Requirements (see below) (5-9 semester hours)

Elective Requirements (see below) (5 semester hours)

Field Experience (a CHS capstone experience) (3 or 5 semester hours)

IPHS 650: Field Experience in Public Health

CHS Track Requirements

Each track has two to four content courses as follows:

Behavioral Sciences and Health Promotion

Select two of the following:

CHSC 485 Communications, Mass Media and Public Health (3 sh)

CHSC 584 Community Organizing for Health (3 sh)

CHSC 586 Health Behavior Interventions (3 sh)

Gerontology

CHSC 425 Public Health and Aging (3 sh)

Select one of the following:

CHSC 528 Societal Analysis of Aging, Health and Health Care (3 sh)

CHSC 529 Gerontological Health/Illness Behavior (3 sh)

Gerontology students must take CHSC 527 as their policy/advocacy course within the CHS core.

Maternal and Child Health:

CHSC 441 Introduction to Maternal and Child Health (3 sh)

CHSC 542 Advanced Maternal and Child Health Applied Programs (3 sh)

CHSC 595 MCH Seminar (students are required to complete two semesters of this 1 credit course)

MCH students must take CHSC 543 as their policy/advocacy course within the CHS core. CHS elective requirement must include at least one MCH approved course. Additional materials are available if the student is interested in an MPH in MCH Epidemiology.

CHS Elective Requirements

Students must take a minimum of 5 credits of electives. One of the following methods or public health practice courses is strongly encouraged to meet this requirement. Students may take additional electives to enrich their program.

Methods Courses:

CHSC 434 (Introduction to Qualitative Methods in Public Health), CHSC 446 (Research Methods in Community Health), CHSC 447 (Survey Research Methods), CHSC 534 (Management and Analysis of Qualitative Data Analysis), CHSC 577 (Survey Questionnaire Design)

Public Health Practice Courses:

CHSC 403 (The Future of Public Health), CHSC 405 (Leadership in Public Health)

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Professional Enhancement Program MPH Curriculum

The MPH Professional Enhancement Program (PEP) is a minimum of 34 semester hour program for medical, nursing and public health professionals working in public health organizations or in community settings. The admission criteria require the applicant to have a Bachelor's or advanced degree in a health or related profession plus 3 years of paid public health or community health experience. Physicians in training, including medical students and physicians in residency training programs, must also complete a field experience (5 semester hours) in addition to the 34 semester hours.

PEP Curriculum (34-39 **minimum** semester hours)

SPH Core Requirements (18 semester hours)

EPID 403 Introduction to Epidemiology-Principles and Methods (3 sh)

BSTT 400 Biostatistics I (3 sh)

HPA 400 Principles of Management in Public Health (3 sh)

CHSC 400 Public Health Concepts and Practice (3 sh)

EOHS 400 Principles of Environmental Health Sciences (3 sh)

CHSC 401 Behavioral Sciences in Public Health (3 sh)

IPHS 698 MPH Capstone Experience (1 sh)

CHS Core Requirements (15 semester hours)

CHSC 431 Community Assessment in Public Health (3 sh)

CHSC 433 Public Health Planning and Evaluation (3 sh)

CHSC 446 Research Methods in Community Health (3 sh)

CHSC 480 Health Education and Health Promotion (3 sh)

Students must select one of the following policy/advocacy courses: CHSC 527, CHSC 543 or HPA 430 (3 sh)

Field Experience (5 semester hour credits for those not meeting the experience requirements-- including physicians in training):

IPHS 650: Field Experience in Public Health

The curriculum above represents the minimum requirements for a PEP program in CHS. Advisors often encourage students to take additional elective courses.

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CHS Capstone Requirements

Completion of both the field experience (IPHS 650) and a Master's Paper (IPHS 698) are required to meet the capstone requirements in CHS. For some students the Master's Paper will be directly related to the practicum. The culminating capstone experience enables MPH students to achieve the following learning objectives

Apply key public health concepts (e.g., prevention, risk assessment) to a specific public health area (e.g., gerontology, infectious disease epidemiology).

Apply knowledge of the core areas of public health to a specific health problem.

Integrate skills and knowledge gained through core and division-required courses toward resolving a public health problem either through practice in a public health setting or through investigation and analysis.

Students who are doing research involving human subjects will need to undergo training and have their protocols approved by the Institutional Review Board (IRB).

Field Experience/Practicum (IPHS 650): Most students are required to complete a field experience of 5 credits (320 contact hours). A few students may qualify for a reduced practicum of 3 credits (192 contact hours) or a full waiver depending on their prior public health experience and career goals. The practicum provides the student with practical experience in a public health setting requiring the student to apply and integrate the skills and knowledge learned during their graduate study. A reflective journal helps the student to synthesize the experience and is used by the faculty advisor to evaluate student performance.

Master's Paper (IPHS 698): Each student is required to complete a Master's Paper and make an oral presentation of his/her work. In addition to the required IPHS 698, students may take up to two hours of Independent Study (IPHS 596) credit toward their Master's Paper. The purpose of the Master's Paper is for the CHS student to be able to integrate health principles and knowledge of some aspect of the public health field at the end of the student's study period. The paper may be drawn from previous course work and may incorporate results of a community survey, an analysis of secondary data, a literature review, an environmental impact statement, a grant proposal, a position paper, a program evaluation, etc.

The CHS capstone will be evaluated in four ways:

Evaluation of the field experience/practicum by the student, student's practicum preceptor, and faculty advisor; and

Evaluation of the Master's Paper by the advisor and second faculty member; and

Evaluation of the oral presentation by the faculty in attendance; and

Review by the advisor and a second faculty member to assure that the practicum and Master's Paper together meet the capstone goals as established.

Additional MPH learning objectives for CHS students are the following. Students should refer to the CHS Student Handbook for MPH competencies.

Design and develop approaches to public health problems, taking into account community and cultural health definitions, culturally-based health behaviors, and cultural communication styles in planning and implementing effective programs and evaluations. These approaches also involve the community in assessing health needs, selecting a program approach, and planning, implementing and evaluating health programs.

Work effectively in cross-cultural settings and with culturally diverse communities, promote cultural competence within an organization, and compare culturally appropriate public health interventions cross-culturally within the U.S. and internationally.

Access and use national/state/local data sets for data management, determining statistical significance of data; analyze primary and secondary data; monitor data gathering; and review data analysis. Use data and community assessment information to develop solutions to complex public health problems and demonstrate creative problem solving.

Design a health education program for a specific audience, including selecting an appropriate intervention strategy, program objectives and evaluation, and include a rationale for all decisions. They also will know when and how to use principles of mass media communication in selecting/designing a health education intervention.

Analyze public health policy, regulation and/or legislation; design a policy position; write a policy statement; design and implement an advocacy plan promoting the policy; and defend a policy position in a controversial area.

Identify components of a good research design; create a simple quantitative and qualitative research study; select the quantitative, qualitative or combination of analytical methods research process appropriate for a particular public health research problem; select/monitor appropriate research tools; select the qualitative research method appropriate for a public health research problem; and explain how qualitative research will "interact" with public health data sets and other quantitative information.

MPH Degree Requirements for the Environmental and Occupational Health Sciences Division

[COMPREHENSIVE PROGRAM](#) • [PROFESSIONAL ENHANCEMENT PROGRAM](#) • [ADDITIONAL REQUIREMENTS FOR ABET PROGRAM](#) • [LEARNING OBJECTIVES FOR EOHS MPH STUDENTS](#)

The comprehensive program requires 40-56 sh, with the minimum required length of program decided by the admissions committee at the time of admission.

MPH - Comprehensive Program

SPH Core Requirements (19 semester hours)

EPID 400 Principles of Epidemiology (3 sh)

BSTT 400 Biostatistics I (3 sh)

HPA 400 Principles of Management in Public Health (3 sh)

CHSC 400 Public Health Concepts and Practice (3 sh)

EOHS 400 Principles of Environmental Health Sciences (3 sh)

CHSC 401 Behavioral Sciences in Public Health (3 sh)

IPHS 698 MPH Capstone Experience (1 sh)

Division Core

All students are required to take a minimum of 12 sh in EOHS courses, choosing at least one course in each of the following three areas:

Exposure Assessment and Measurement

EOHS 405 Environmental Calculations (2 sh)

EOHS 440 Chemistry for Environmental Professionals (3 sh)

EOHS 421 Fundamentals of Industrial Hygiene (2 sh)

EOHS 418 Analysis of Water and Wastewater Quality (2 sh)

EOHS 428 Industrial Hygiene Laboratory I (2 sh)

EOHS 438 Air Quality Laboratory (2 sh)

EOHS 542 Water Chemistry (3 sh)

EOHS 543 Environmental Organic Chemistry (3 sh)

EOHS 557 Design and Analysis of Experiments (4 sh)

EOHS 564 Geographic Information System Applications in Public Health (3 sh)

EOHS 565 - Datamining Applications in Public Health (3 sh)

Health Assessment

EOHS 450 Principles of Occupational/Environmental Medicine (2 sh)

EOHS 455 Environmental and Occupational Toxicology (3 sh)

EOHS 495 Environmental/Occupational Health Seminar (1 sh)

EOHS 551 Occupational Diseases (4 sh)

EOHS 554 Occupational and Environmental Epidemiology (2 sh)

EOHS 555 Advanced Toxicology (3 sh)

Intervention Strategies

EOHS 408 Biological, Chemical, Explosives, and Nuclear Weapons as Public Health Threats (3 sh)

EOHS 411 Water Quality Management I (4 sh)

EOHS 431 Air Quality Management I (3 sh)

EOHS 461 Community Health and Consumer Protection (2 sh)

EOHS 482 Occupational Safety Science (2 sh)

EOHS 556 Risk Assessment in Environmental and Occupational Health (3 sh)

EOHS 572 Environmental Risk Management (4 sh)

Sub-total 12 sh

Comprehensive MPH Themes (does not apply to PEP students):

With the approval of the faculty advisor, MPH students choose from among a series of grouped quantitative courses to acquire skills that can be applied to occupational and environmental content. These include three courses, one of which should be at the 500 level. Following are a few samples of three-course quantitative themes, but other series may be developed with the advisor's approval.

EOHS epidemiology/biostatistics:

EPID 403 Quantitative Methods in Epidemiology I (3 sh)

BSTT 401 Biostatistics II (4 sh)

EOHS 554 Occupational and Environmental Epidemiology (2 sh)

Environmental Health data management and analysis:

BSTT401 Biostatistics II (4 sh)
HPA 465 Health Information and Decision Support Systems (4 sh)
EOHS 564 Geographic Information System Application in Public Health (3 sh)

Environmental Chemistry:

EOHS 418 Analysis of Water and Wastewater Quality (2 sh)
EOHS 440 Chemistry for Environmental Professionals (3 sh)
EOHS 542 Water Chemistry (3 sh)

Human Health Risk Assessment:

BSTT401 Biostatistics II (4 sh)
EOHS455 Environmental and Occupational Toxicology (3 sh)
EOHS556 Risk Assessment in Env and Occ Health (2 sh)

Electives

Students should select courses with their advisor in a discipline of interest.

Subtotal 8-24 sh

Capstone Requirement

For students in the comprehensive program, the required capstone experience is the field practicum (IPHS 650). Students are required to complete the practicum after completion of all, or nearly all, of their coursework. Students may register for IPHS 650 for 3-5 sh with 1 sh credit awarded for each 64 hr of contact time. MPH students must summarize their experience in a poster presentation.

All students should undergo Institutional Review Board (IRB) training prior to beginning their field experience (IPHS 650) and/or their proposed Capstone project (IPHS 698) if human subject data or analysis is used. Students must submit for IRB review as early as possible, to allow sufficient time for the lengthy review process. Students should consult the SPH Student Reference Guide and their academic advisors to determine the proper IRB procedure to follow. Please note: The field experience and capstone cannot be undertaken without IRB review or exemption.

Subtotal 3- 5 sh

Program Total: 40-56 sh

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Students with appropriate academic backgrounds and at least 3 years of relevant professional experience may be eligible for the Professional Enhancement Program. The program total is 35 semester hours.

MPH - Professional Enhancement Program (PEP)

SPH Core Requirements (19 semester hours)

EPID 400 Principles of Epidemiology (3 sh)

BSTT 400 Biostatistics I (3 sh)

HPA 400 Principles of Management in Public Health (3 sh)

CHSC 400 Public Health Concepts and Practice (3 sh)

EOHS 400 Principles of Environmental Health Sciences (3 sh)

CHSC 401 Behavioral Sciences in Public Health (3 sh)

IPHS 698 MPH Capstone Experience (1 sh)

Division Core

All students are required to take a minimum of 12 sh in EOHS courses, choosing at least one course in each of the following three areas:

Exposure Assessment and Measurement

EOHS 405 Environmental Calculations (2 sh)

EOHS 440 Chemistry for Environmental Professionals (3 sh)

EOHS 421 Fundamentals of Industrial Hygiene (2 sh)

EOHS 418 Analysis of Water and Wastewater Quality (2 sh)

EOHS 428 Industrial Hygiene Laboratory I (2 sh)

EOHS 438 Air Quality Laboratory (2 sh)

EOHS 542 Water Chemistry (3 sh)

EOHS 543 Environmental Organic Chemistry (3 sh)

EOHS 557 Design and Analysis of Experiments (4 sh)

EOHS 564 Geographic Information System Applications in Public Health (3 sh)

EOHS 565 - Datamining Applications in Public Health (3 sh)

Health Assessment

EOHS 450 Principles of Occupational/Environmental Medicine (2 sh)

EOHS 455 Environmental and Occupational Toxicology (3 sh)

EOHS 495 Environmental/Occupational Health Seminar (1 sh)

EOHS 551 Occupational Diseases (4 sh)

EOHS 554 Occupational and Environmental Epidemiology (2 sh)

EOHS 555 Advanced Toxicology (3 sh)

Intervention Strategies

EOHS 408 Biological, Chemical, Explosives, and Nuclear Weapons as Public Health Threats (3 sh)

EOHS 411 Water Quality Management I (4 sh)

EOHS 431 Air Quality Management I (3 sh)

EOHS 461 Community Health and Consumer Protection (2 sh)

EOHS 482 Occupational Safety Science (2 sh)

EOHS 556 Risk Assessment in Environmental and Occupational Health (3 sh)

EOHS 572 Environmental Risk Management (4 sh)

Subtotal 12 sh

Electives

Students should select courses with their advisor in a discipline of interest.

Subtotal 1-3 sh

Capstone Requirement

Students in the PEP are required to complete a capstone experience with 3-5 sh credit. Students may use IPHS 650 Field Practicum as their capstone experience or PEP students may choose to complete a project selected with the student's advisor. Students must summarize their experience in a poster presentation.

Subtotal 3-5 sh

Program Total: 35 sh

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Additional Requirements for Students Enrolled in the Occupational Medicine Residency Program, Applied Science Accreditation Board for Engineering and Technology, Inc. (ASAC-ABET) - Accredited Industrial Hygiene Program

Occupational Medicine Residency Program

Additional Requirements (if not selected to meet divisional core requirements).

EOHS 421 Fundamentals of Industrial Hygiene (2 sh)

EOHS 455 Environmental and Occupational Toxicology (3 sh)

EOHS 551 Occupational Diseases (4 sh)

EOHS 554 Occupational and Environmental Epidemiology (2 sh)

EOHS 482 Occupational Safety Science (2 sh)

Subtotal (divisional core and residency requirements) (12 + 4 sh= 16 sh)

Capstone Requirement

For occupational medicine residents, the required capstone experience is the field practicum (IPHS 650). Students are required to complete the practicum after completion of all, or nearly all, of their coursework. Students may register for IPHS 650 for 3-5 sh with 1 sh credit awarded for each 64 hr of contact time. Students must summarize their experience in a poster presentation.

Subtotal 3-5 sh

Program Total: 36 sh

ASAC-ABET - Accredited MPH Program in Industrial Hygiene

Additional Requirements (if not selected to meet the divisional core)

EOHS 405 Environmental Calculations (2 sh)

EOHS 421 Fundamentals of Industrial Hygiene (2 sh)

EOHS 428 Industrial Hygiene Laboratory I (2 sh)

EOHS 431 Air Quality Management I (3 sh)

EOHS 438 Air Quality Laboratory (2 sh)

EOHS 424 Environmental Acoustics (2 sh)

EOHS 482 Occupational Safety Science (2 sh)

EOHS 529 Industrial Hygiene Lab II (2 sh)

EOHS 523 Engineering Controls/Industrial Ventilation (4 sh)

EOHS 570 Hazardous Materials Management (3 sh)

EOHS 584 Radiation Protection (3 sh)

either EOHS 455 Environmental and Occupational Toxicology (3 sh)

and EOHS 554 Occupational and Environmental Epidemiology (2 sh)

or EOHS 551 Occupational and Environmental Diseases (4 sh)

Subtotal (divisional core and additional requirements) (12 + 19 sh = 31 sh)

Capstone Requirement

For students with limited practical experience, the required capstone experience is the field practicum (IPHS 650). Students are required to complete the practicum after completion of all, or nearly all, of their coursework. Students may register for IPHS 650 for 3-5 sh with 1 sh credit awarded for each 64 hr of contact time. For students with appropriate prior work experience, the culminating experience can be a project selected with the student's advisor. Students must summarize their experience in a poster presentation.

Subtotal 3-5 sh

Program Total: 56 sh

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Additional MPH learning objectives for EOHS students:

Understand the basic mechanism by which environmental and occupational pollutants impact health (i.e., the linkage of pollutants' source, media, receptor and health effects) and the means to develop controls or interventions to protect humans and ecological systems.

Understand the basic sciences deemed most relevant for the study of environmental and occupational health - toxicology, epidemiology and environmental chemistry.

Be able to collect, analyze and interpret environmental and occupational quality data.

Understand the structure of regulations and policies that govern the efforts to protect workplace and environmental health.

Demonstrate the ability to implement an occupational or environmental health investigation or project and clearly report on the result.

MPH Degree Requirements for the Epidemiology and Biostatistics Division

[EPIDEMIOLOGY](#) • [BIOSTATISTICS](#)

Epidemiology

Students are admitted to either the Comprehensive Program or the Professional Enhancement Program (PEP). Admission to the PEP program is generally considered at the time of admission to the School. Current MPH students may petition for admission into the PEP by submitting to their advisor a statement detailing their eligibility based on the following conditions:

Pre-matriculation professional education in accordance with schoolwide guidelines on PEP

3+ years of direct experience in epidemiology. This experience can be work on research projects or applied public health programs; or publications and/or presentations directly relevant to epidemiology.

Graduate or current student in a US School of Medicine, which provides an evidence-based curriculum exposing students to the US medical/public health systems, epidemiology, and biostatistics.

Other case-by-case reviews to be conducted by a faculty committee of three.

Comprehensive Program Curriculum (minimum of 50 sh)

SPH Core Requirements (19 semester hours)

EPID 403 Introduction to Epidemiology: Principles & Methods (3 sh)

BSTT 400 Biostatistics I (3 sh)

HPA 400 Principles of Management in Public Health (3 sh)

CHSC 400 Public Health Concepts and Practice (3 sh)

EOHS 400 Principles of Environmental Health Sciences (3 sh)

CHSC 401 Behavioral Sciences in Public Health (3 sh)

IPHS 698 MPH Capstone Experience (1 sh)

Epidemiology Requirements (17 sh)

EPID 406 Epidemiologic Computing** (2-3 sh)

EPID 404 Intermediate Epidemiologic Methods (4 sh)

EPID 410 Epidemiology of Infectious Diseases (2 sh)

EPID 411 Epidemiology of Chronic Disease (3 sh)

EPID 591 Current Epidemiologic Literature (2 sh)

BSTT 401 Biostatistics II (4 sh)

**For Fall 05, students will need to register for 1 sh of IPHS 596 to receive 3 sh of credit for the course, for future semesters the course will be listed as 3 sh.

Electives

Comprehensive program minimum requirement 12 sh

Field Experience

IPHS 650 Field Experience in Public Health 3-5 sh

Professional Enhancement Program Curriculum (minimum of 36 sh)

SPH Core Requirements (19 semester hours)

EPID 403 Introduction to Epidemiology: Principles & Methods* (3 sh)

BSTT 400 Biostatistics I (3 sh)

HPA 400 Principles of Management in Public Health (3 sh)

CHSC 400 Public Health Concepts and Practice (3 sh)

EOHS 400 Principles of Environmental Health Sciences (3 sh)

CHSC 401 Behavioral Sciences in Public Health (3 sh)

IPHS 698 MPH Capstone Experience (1 sh)

Epidemiology Requirements (17 sh)

EPID 406 Epidemiologic Computing (2-3 sh)

EPID 404 Intermediate Epidemiologic Methods (4 sh)

EPID 410 Epidemiology of Infectious Diseases (2 sh)

EPID 411 Epidemiology of Chronic Disease (3 sh)

EPID 591 Current Epidemiologic Literature (2 sh)

BSTT 401 Biostatistics II (4 sh)

*For Fall 05, students will need to register for 1 sh of IPHS 596 to receive 3 sh of credit for the course, for future semesters the course will be listed as 3 sh.

Electives

PEP minimum requirement 1 sh

Field Experience

Not required for the PEP

Any required course may be waived on the basis of prior education or experience. Please refer to the section on Academic Policies and Standards for course waiver rules and procedure.

Students must select electives in consultation with their advisor. In developing the program of study, students should consult the SPH Student Handbook and the semester course schedule which are available online at the [SPH website](#).

Field Experience: IPHS 650

For students who are in the comprehensive program, the field experience may be for 3-5 semester hours, based on the field experience responsibilities. Field experience is not required for students in the Professional Enhancement Program (PEP). SPH Memorandum of Understanding and Field Learning Agreement forms must be completed prior to embarking upon the field experience.

The field experience must be practical, applied and public health in orientation, and should preferably be with an organized public or private agency. Working with his/her academic advisor, and with the latter's signed approval the student must submit a detailed (but brief) field experience proposal to the field supervisor. Final Student and Supervisor Evaluation Forms must be given to the advisor for review and signature in order to obtain a grade for IPHS 650.

Capstone Requirement: IPHS 698

Students must enroll in IPHS 698 (MPH Capstone Experience), for 1 credit hour. Students must complete a formal oral presentation to Division students and faculty on a topic as described below. The presentation will conform to the format and time length of a paper delivered at the annual meetings of the American Public Health Association (APHA). Students are cautioned to restrict their courseload during the semester of capstone registration, as this is an involved and challenging project.

The topic is to be approved by the student's advisor, and a final abstract of the presentation is to be submitted at least one week prior to the presentation. The topic should not be the same as one already addressed in a paper submitted for a previous course. Where appropriate, students are encouraged to present findings based on their field experience (IPHS 650). However, it may take an alternative form, such as a comprehensive review of the literature on a public health issue from an epidemiologic perspective; a report on another research project in which the student has taken part; a proposal for a study to address an important public health issue; or another format acceptable to the student and his/her academic advisor or faculty mentor. Students may consult with other faculty mentors in addition to their academic advisor for the purposes of developing their capstone presentation.

Three faculty members will evaluate the quality of the presentation. Each faculty member will assess the experience based on three criteria: content (60%), organization (20%) and oral presentation (20%). A presentation should consist of an introduction to the problem or issue, an explanation of the methods used to research the topic, a summary of the results or findings, conclusions as to the public health implications of the results, and recommendations for practical applications or further research.

If the presentation is evaluated as unsatisfactory by at least two of the three faculty members, the student will be required to submit a written paper, including citations, covering the same material as the oral presentation. The written paper will be evaluated by the three committee members on the content and organization of the material. In some cases, the capstone review committee may simply require written clarification or additional analyses pertinent to identified deficiencies in the oral presentation.

Students should refer to the Program Requirements for the MPH Degree in this Handbook for more detail about the field experience and capstone.

IRB: Institutional Review Board

All students must undergo Institutional Review Board (IRB) training by the end of their first year of study, and, where required, must submit IRB review or exemption forms prior to beginning the field experience. Students should consult the SPH Student Reference Guides available in the division, and speak with their advisors. Where required, the field experience and capstone cannot be undertaken without first obtaining IRB review or exemption.

Standards of Performance for Epidemiology MPH Program

In addition to school-wide standards, for students in Epidemiology no grade below "B" is acceptable in any epidemiology or biostatistics course. If a grade below "B" is achieved in such a course, it may be repeated once. Failure to maintain this standard will be grounds for dismissal from the epidemiology program.

MPH in Maternal and Child Epidemiology (53-57 sh)

In conjunction with the Community Health Sciences division, the Division of Epidemiology and Biostatistics allows students the opportunity to pursue an MPH in Epidemiology under the Maternal and Child Health (MCH) Epidemiology track. This program offers courses in both maternal and child health and epidemiology for students wishing to focus on applied MCH epidemiology.

In addition to the 18 sh of core MPH course requirements, students in the Maternal and Child Health Epidemiology track must take the following courses:

Community Health Sciences Courses (6-7 sh)

Choose 2 of 5:

CHSC 431 Community Assessment in Public Health (3 sh)

CHSC 433 Public Health Planning and Evaluation (3 sh)

CHSC 434 Qualitative Methods in Public Health (3 sh)

CHSC 446 Research Methods in Community Health (3 sh)

PA 540 Research Methods for Public Administration (4 sh)

Biostatistics and Epidemiology Courses (16 sh)

BSTT 401 Biostatistics II (4 sh)

EPID 406 Epidemiologic Computing* (2-3 sh)

EPID 404 Intermediate Epidemiologic Methods (4 sh)

EPID 410 Introduction to Infectious Disease Epidemiology (2 sh)

EPID 411 Introduction to Chronic Disease Epidemiology (3 sh)

*For Fall 05, students will need to register for 1 sh of IPHS 596 to receive 3 sh of credit for the course, for future semesters the course will be listed as 3 sh.

MCH Concentration Courses (10 to 11 sh)

CHSC 441 Introduction to Maternal and Child Health (3 sh)

Choose one:

CHSC 542 Advanced Maternal and Child Health Applied Programs (3 sh)

OR

CHSC 543 MCH Policy and Advocacy (3 sh)

Choose one:

CHSC 548 Readings in Reproductive and Perinatal Epidemiology (1 sh)

OR

EPID 591 Current Epidemiologic Literature (2 sh)

And:

EPID/CHSC 545 Reproductive and Perinatal Health (3 sh)

Field Experience

IPHS 650 Field Experience in Public Health (3-5 sh)

Any required course may be waived on the basis of prior education or experience. Please refer to the section on Academic Policies and Standards for course waiver rules and procedure.

Field Experience: IPHS 650:

The Field Experience or practicum for MCH Epidemiology must be undertaken in conjunction with a state or local public health agency.

Students in the Maternal and Child Health Epidemiology program should adhere to all other guidelines for the Epidemiology MPH degree, in addition to the Program Requirements for the MPH Degree in this Handbook.

Additional learning objectives for students in epidemiology:

Appreciate the history and philosophy of epidemiology as a public health science.

Understand the implications of epidemiology for other health specialists.

Understand and apply measures of disease frequency.

Have substantive knowledge of chronic and infectious disease epidemiology and their related multidisciplinary fields.

Have knowledge of protocol development, subject recruitment, instrumentation, data collection, quality control, multidisciplinary collaboration, reporting and presentation of findings.

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Biostatistics

A Masters of Public Health (MPH) degree in Quantitative Methods is offered through the School's Biostatistics program. The degree is tailored to those within the public health workforce who require competency in the management, analysis and interpretation of public health data, and knowledge of data analysis issues as applied to a particular area of public health.

Program of Study (Minimum credit hour requirement: 48 sh)

SPH Core Requirements (19 semester hours)

EPID 403 Introduction to Epidemiology: Principles & Methods (3 sh)

BSTT 400 Biostatistics I (3 sh)

HPA 400 Principles of Management in Public Health (3 sh)

CHSC 400 Public Health Concepts and Practice (3 sh)

EOHS 400 Principles of Environmental Health Sciences (3 sh)

CHSC 401 Behavioral Sciences in Public Health (3 sh)

IPHS 698 MPH Capstone Experience (1 sh)

Quantitative Methods Core Requirements (20 sh)

BSTT 401 Biostatistics II (4 sh)

BSTT 402 Logistic Regression and Survival Analysis (2 sh)

BSTT 410 Introduction to Statistical Computing (1 sh)

BSTT 430 Design of Clinical Trials (3 sh)

BSTT 440 Sampling and Estimation Methods (3 sh)

EPID 404 Intermediate Epidemiologic Methods (4 sh)

CHSC 447 Survey Research Methods (3 sh)

Concentration Electives

Minimum of 7 sh; may be more depending on the concentration 7-10 sh

The following are examples of courses in each of the three areas of concentration which would satisfy requirements for the MPH in Quantitative Methods. (Courses will be selected in consultation with a faculty advisor from the student's chosen area of concentration.)

Concentration in EOHS

Option 1:

EOHS 405 Environmental Calculation (1 sh)

EOHS 411 Water Quality Management (3 sh)

EOHS 418 Analysis of Water and Waste Water Quality (2 sh)

EOHS 421 Fundamentals of Industrial Hygiene (2 sh)

Option 2:

EOHS 431 Air Quality Management (3 sh)

EOHS 438 Air Quality Laboratory (2 sh)

EOHS 532 Air Quality Management II (2 sh)

Concentration in CHS

CHSC 433 Public Health Planning and Evaluation (3 sh)

CHSC 434 Qualitative Methods (2 sh)

CHSC 442 Introduction to Community Assessment (2 sh)

Concentration in HPA

HPA 403 US Health Care System (2 sh)

HPA 417 Quality management Health Services (2 sh)

HPA 465 Health Information and Decision Support Systems (4 sh)

Field Practicum

IPHS 650 Field Practicum 3-5 sh

Field Experience: IPHS 650

The field experience or practicum must be practical, applied and public health in orientation, and should preferably be with an organized public or private agency. A student works with his/her advisor to determine an appropriate practicum site. Students must complete all forms required by the School of Public Health in the semester prior to registration for the Field. (see Program Requirements for the MPH degree in this Handbook).

Capstone Requirement: IPHS 698

All MPH Quantitative Methods students are required to complete a capstone project in their area of concentration, typically a data management and analysis project for a study in that area. Each student will identify a key faculty member in his or her area of concentration as well as a faculty member in Biostatistics. The student will work with these two faculty members to design a plan for an appropriate capstone project, which should include substantive interpretation of results and discussion of consequences in addition to actually carrying out the analysis. The student will write a report which will be evaluated by the two faculty members. The data set may arise from the student's field practicum experience.

Students should refer to the Program Requirements for the MPH Degree in this Handbook for more details about the field experience and capstone.

IRB: Institutional Review Board

All students must undergo Institutional Review Board (IRB) training by the end of their first year of study, and, where required, must submit IRB review or exemption forms prior to beginning the field experience. Students should consult the SPH Student Reference Guides available in the division, and speak with their advisors. Where required, the field experience and capstone cannot be undertaken without first obtaining IRB review or exemption.

Standards of Performance for Biostatistics MPH Program

Students in Biostatistics are allowed only one grade of C in required courses. A student who receives two Cs in required courses will not be allowed to graduate from the program. A student may re-take a course one time and attempt to replace the C with a higher grade.

[COMPREHENSIVE PROGRAM](#) • [PROFESSIONAL ENHANCEMENT PROGRAM](#) • [IRB PROCESS](#) • [CAPSTONE REQUIREMENT](#)

Divisional Course Requirements

Comprehensive Program

The existing PHPA curriculum for Comprehensive MPH students in HPA is found below. However, as of Fall of 2005, the HPA faculty has proposed a new curriculum in "Public Health Policy and Management." You will find this proposal immediately following the existing curriculum. The proposed changes have been approved by the School and are waiting approval at the campus, which should occur sometime during AY 05-06. If you are a Comprehensive MPH student, please talk with your advisor about planning your curriculum.

Public Health Policy and Administration (PHPA):

The Public Health Policy and Administration Track (PHPA) is designed to prepare students in the MPH Comprehensive Program for participation in organizational and governmental decisions which promote prevention and health protection. Some of these students will be employed as public health administrators in local, state and federal health departments and agencies or in community not-for-profit settings. Others will be policy analysts and advocates within the public health arena.

Requirements

SPH Core Courses (18 sh):

EPID 400 Principles of Epidemiology (3 sh)

BSTT 400 Biostatistics I (3 sh)

HPA 400 Principles of Management in Public Health (3 sh)

CHSC 400 Public Health Concepts and Practice (3 sh)

EOHS 400 Principles of Environmental Health Sciences (3 sh)

CHSC 401 Behavioral Sciences in Public Health (3 sh)

PHPA Required Courses (21 sh):

HPA 460 Introduction to the Economics of Health and Healthcare (2 sh)

HPA 444 Health Care Budgeting and Strategic Planning (3 sh)

HPA 465 Health Information and Decision Support Systems (4 sh)

HPA 516 Health Personnel Management** (3 sh)

HPA 430 Introduction to Public Health Policy (3 sh)

HPA 431 Law and Public Health (3 sh)

HPA 432 Public Health Advocacy (3 sh)

Selectives (2 in either administration or policy)

Policy:

HPA 402 Social Ethics and Public Health (3 sh)

CHSC 403 The Future of Public Health** (2 sh)

CHSC 584 Community Organizing for Health** (3 sh)

EPID 428 Epidemiology of Violence** (2 sh)

Administration:

HPA 511 Organizational Theory** (3 sh)

HPA 522 Health Evaluation Methods (3 sh)

HPA 551 Marketing Health Programs (3 sh)

HPA 405 Leadership & P.H. Practice** (3 sh)

**NOTE: Courses offered in other UIC departments and institutions may be substituted for PHPA requirements with approval of the student's advisor and the Division Director.

Electives (3 courses minimum) (6-9 sh)

Field Experience/Practicum:

IPHS 650 (3-5 sh)

MPH Capstone Experience:

IPHS 698 (1 sh)

Total 52-60 sh

Additional learning objectives for students in the Public Health Policy and Administration track:

Identify and define relevant terms, concepts and theories within the fields of law, health policy analysis, public policy development, public health ethics and public health advocacy.

Identify and define management principles in analyzing, planning, controlling and leading public health agencies.

Demonstrate an understanding of public policy processes and how they affect the public's health, the field of public health, and the management of public health agencies.

Apply principles of management to the analysis of case studies in public health administration.

Select and apply methods for analyzing a public health policy issue and discuss the pros and cons of the method selected.

Develop and support opinions on public health policy and administration.

Following is the proposal by the HPA faculty for changes in the Comprehensive MPH program. Again, you are strongly encouraged to discuss your curriculum with your advisor.

Health Policy and Administration
M.P.H. in Public Health Policy and Management
Draft: June 7, 2005

Introduction

The Council on Education for Public Health requires that a school of public health have a program leading to a masters degree in the five basic areas of knowledge in public health. (Criterion V.A.). One part of that Criterion identifies the need to prepare masters students in the "planning, organization, administration, management, evaluation and policy analysis of health programs." In "Who Will Keep the Public Healthy: Educating Public Health Professionals for the 21st Century," the Institute of Medicine committee identified eight additional content areas that are vital to be addressed by public health education. Three of those are "communication, policy and law, and public health ethics."

To meet these educational goals, the faculty of Health Policy and Administration have established a new comprehensive MPH track in Public Health Policy and Management (PHPM). Comprehensive students in this track are prepared for employment in the not for profit sector, usually working to establish good public health policies and programs and to implement them well. They tend to work as (1) public health administrators working in government or community-based organizations or (2) public health policy analysts and advocates. Many of the corresponding students in HPA's Professional Enhancement Program (PEP) fill similar roles.

Curriculum Objectives

The curriculum addresses competencies in (1) public health law and policy, (2) public health administration, (3) communications, and (4) public health ethics.

At the end of the PHPM Comprehensive Curriculum, graduates will be able to:

(a) Describe the processes by which laws and regulations are made and the factors that influence those decisions, (b) analyze a particular state or federal policy making process to identify the determinants of its outcome and (c) demonstrate a theoretical understanding of the forces that have shaped and that continue to shape those processes.

Demonstrate a basic understanding of American jurisprudence and its application to public health policies and programs.

Describe basic principles of economics and demonstrate an ability to interpret studies (as opposed to being able to produce such studies), knowing the lexicon of the technologies of economic analysis, and their strengths and weaknesses.

Describe different policy analytic and program evaluation techniques, again with an emphasis on interpretation, not production.

Demonstrate an understanding of the institutions of public health and of the health services system in the U.S.

(a) Demonstrate strong written and oral communication skills, as well as skills in negotiating and in advocacy, (b) demonstrate an understanding of the importance of community support for public health programs and an ability to communicate effectively with the community, and (c) demonstrate an understanding of the role of the media in public health policy-making, and an ability to communicate effectively with the media.

Identify ethical principles that are involved in public health policy making and programming.

Identify the skills necessary to administer public health programs, such as community assessment, strategic management, budgeting and organizational control, and leadership.

Demonstrate the ability to evaluate a public policy problem, and to communicate the results effectively in writing and orally.

Put into practice the skills learned in previous coursework through engaging in a field experience.

Summary of PHPM Requirements

This new curriculum will consist of (1) the SPH Core Courses, (2) five PHPM Core Courses, (3) four Enrichment Courses covering four specific areas, to be drawn from courses offered by HPA, by other SPH divisions or by other UIC colleges, and (4) the Practicum.

<i>Course title</i>	<i>Course Number</i>	<i>Existing or New</i>	<i>Semester hours</i>	<i>Professors</i>
PHPM Core Courses:				
Social Ethics and Public Health	402	Existing	3	Swartzman
U.S. Health Care System	403	Existing	3	Forman and Greenspan
Introduction to Public Health Policy Analysis (to be revised by 06-07)	430	Existing	3	Neuberger
Law and Public Health	431	Existing	3	Swartzman and Neuberger
Public Health Advocacy (to be revised by 06-07)	432	Existing	3	Mundhenk and Neuberger
Enrichment Courses:				
Introductory course in micro-economics			2	
Introductory course in organizational leadership			3	
Introductory course in strategic planning and budgeting			3	
Advanced course in public policy analysis and program evaluation			3	
Total PHPM requirements			26	
SPH Core courses			18	

Practicum			3	
Capstone			1	
Total curriculum			48	

Electives

Students are not required to take electives to graduate from the PPHM Comprehensive Program. However, it is assumed that the large majority of students will, in conjunction with their advisor, choose 2 to 4 electives from other courses within the School, based upon (a) their career interests and (b) their academic and professional preparation at the time of matriculation.

Practice

One of the guiding principles of this curriculum is the need to embed the students' learning experience in a practice setting. Wherever possible, coursework will have a hands-on component, the use of case studies will be routine, and actual experience will be encouraged. Practicum opportunities will be identified by faculty and professional staff; students and faculty advisors will be responsible for documenting the pedagogical value of the field experience. While the minimum number of hours for the Practicum will be the equivalent of 3 semester hours of work, students and Practicum preceptors will be encouraged to consider longer experiences, particularly those that might be carried out over more than one semester. Independent studies may be used to earn credit for field based learning experiences beyond the practicum.

Capstone

All PPHM students will be required to do a capstone, consistent with HPA's policies and requirements.

Example Curriculum (Full Time Student)

Fall Semester	Spring Semester	Summer Session
Principles of Management in Public Health (HPA 400)	Social Ethics and Public Health (HPA 402)	U.S. Health Care Services (HPA 403)
Introduction to Public Health Policy Analysis (HPA 430)	Law and Public Health (HPA 431)	Independent Study (IPHS 596) (1 credit)
Practices and Principles of Public Health (CHS 400)	Public Health Advocacy (HPA 432)	
Biostatistics I (BSTT 400)	Epidemiology I (EPID 400)	
Elective (3 credits)	Elective (3 credits)	
Introduction to	Economics, Policy Analysis	Practicum (IPHS

Economics and Health Care (HPA 460)	and Program Evaluation (HPA 494)	650)
Introductory course in leadership (TBD)	Strategic Planning and Budgeting (HPA 444)	Capstone (IPHS 660)
Behavioral Science and Public Health (CHS 401)	Introduction to Environmental Health (EOHS 400)	
Elective (3 credits)	Independent Study (IPHS 596) (2 credits)	

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Professional Enhancement Program

Students who come to the School with an advanced degree in an area relevant to public health or who have at least three years of experience in the field must be admitted into the Professional Enhancement Program (PEP). While the comprehensive MPH curriculum in Public Health Policy and Management (PHPM) is designed to offer students with little or no background in public health sufficient education to serve as successful public health professionals upon graduation, PEP students are already public health professionals. The goal of the PEP curriculum is to enhance their experiences with selected coursework tailored specifically to their needs.

Curriculum Objectives

Because the backgrounds of PEP students vary so widely, the faculty has decided that it would be unwise to specify an inflexible curriculum that all such students should take. Instead, each PEP student will work with his or her advisor to develop an individualized curriculum.

However, all PEP MPH students in HPA will, at the end of their studies, be able to:

Demonstrate an understanding of the basic principles, practices and theories of public health.

Demonstrate an understanding of selected problems in public health administration and public health policy.

Apply selected tools to the solution of those problems.

Communicate these abilities in writing and orally.

There are set minimums that all PEP students must meet:

Minimum PEP coursework	Semester hours
SPH Core Courses	18
Practicum (usually waived)	0 or 3
Capstone	1
Additional coursework, half of which must be in HPA	15
Total	34 or 37

Although PEP students only need to take 34 credits, the majority take the coursework that they believe they need to achieve their curricular goals and therefore end up with about 40 to 45 credits. The number of courses is determined by the student and the student's advisor, with approval by the Associate Division Director.

Sample Curricula

In order to assist PEP students and their advisors in thinking through the process of designing a curriculum, we are presenting three "sample curricula." These are not intended as mechanical recipes that by-pass the student/advisor interaction, but as an aid in that interaction.

Most PEP students are part-time. Therefore, the following sample curricula assume that the student will take approximately two classes per semester.

Sample Curriculum for health care professional interested in public health policy:

Fall	Spring	Summer
Principles of Management in Public Health (HPA 400) Introduction to Health Policy Analysis (HPA 430) 6 credits	Practices and Principles (CHS 400) Law and Public Health (HPA 431) 6 credits	U.S. Health Care System (HPA 403) 3 credits
Introduction to Economics and Healthcare (HPA 460) Social Ethics and Public Health (HPA 402) 5 credits	Environmental and Occupational Health (EOHS 400) Public Health Advocacy (HPA 432) 6 credits	
Epidemiology I (EPID 400) 3 credits	Biostatistics I (BSTT 400) 3 credits	Behavioral Sciences (CHS 401) 3 credits
Introduction to Maternal and Child Health (CHS 441) Biostatistics II (BSTT 401) 7 credits	Economics, Policy Analysis and Program Evaluation (HPA 467) 3 credits	Capstone 1 credit

Sample Curriculum for public health agency employee interested in administration:

Fall	Spring	Summer
Introduction to Management Principles in	Practices and Principles (CHS 400)	U.S. Healthcare System (HPA

Public Health (HPA 400) Epidemiology I (EPID 400) 6 credits	Behavioral Science (CHS 401) 6 credits	403) 3 credits
Social Ethics and Public Health (HPA 402) Strategic Planning and Budgeting (HPA 444) 6 credits	Biostatistics I (BSTT 400) Introductory course in leadership (TBD) 6 credits	
Managerial Health Economics (HPA 463) Introduction to Public Health Policy (HPA 430) 6 credits	Community Assessment in Public Health (CHS 431) Environmental and Occupational Health (EOHS 400) 6 credits	
Introductory course in human resources (TBD) 3 credits	Capstone 1 credit	

Sample Curriculum for established professional interested in a general introduction to public health:

Fall	Spring	Summer
Introduction to Management Principles in Public Health (HPA 400) Epidemiology I (EPID 400) 6 credits	Practices and Principles (CHS 400) Environmental and Occupational Health (EOHS 400) 6 credits	U.S. Healthcare System (HPA 403) 3 credits
Introduction to Economics of Healthcare Organizations (HPA 460) Introduction to Public Health Policy (HPA 430) 5 credits	Biostatistics I (BSTT 400) Law and Public Health (HPA 431) 6 credits	
Introduction to Maternal and Child Health (CHS 441) 3 credits	Public Health and Aging (CHS 425) Social Ethics and Public Health (HPA 402) 6 credits	Behavioral Science (CHS 401) 3 credits

Introductory course in leadership and public health (TBD) 3 credits	Capstone 1 credit	
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IRB Process

Prior to undertaking the field experience and capstone project students must investigate the applicability of human subjects protections and HIPPA Privacy Rule requirements to their projects. Students should consult the [SPH Student Reference Guides](#) available in the division, and speak with their advisors. The field experience and/or capstone project cannot be undertaken without full compliance with IRB and HIPPA rules.

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Capstone Requirement

All HPA students in the MPH Program must complete the following capstone requirements:

Capstone Activities:

The student, in consultation with her/his advisor, will propose (and when required), implement a Capstone project that addresses a public health issue. Strategies for completing the Capstone requirement might involve a field practicum, self-study, research project or other experience. The Capstone project must lend itself to demonstrating the integration of HPA core areas with at least one other core area of public health.

Capstone Product:

Each student will make a public presentation, approximately 15 minutes in length, that reports on the Capstone project and demonstrates effective achievement of learning objectives, notably the integration of public health concepts beyond those related to HPA content. The completed Capstone product will include the following elements: (1) Statement of the issue; (2) Review of the relevant literature; (3) Description of the methods needed or actually used to address the issue; (4) Description of the anticipated or actual results; and, (5) Summary of the lessons to be learned or actually learned.

Timeline and Evaluation:

By the end of the semester prior to the semester of graduation, the student will present a Capstone project proposal, with specific learning objectives, to the advisor (or capstone "mentor," if this is a faculty member other than the advisor) for approval.

At least six weeks prior to the public presentation of the Capstone project, the student will present a draft of the presentation to the advisor or mentor and one other faculty member for comment and feedback.

The Capstone project presentation will be reviewed, evaluated and graded by the student's advisor/mentor and by one other faculty member. The two faculty reviewers must reach consensus on a "pass" or "fail" grade for the Capstone project presentation.

A more detailed description of the Capstone process, timeline and evaluation is available from your advisor or the HPA Academic Coordinator.