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**School of Public Health**  
**Student Handbook**

**Doctor of Philosophy (PhD)**

*AY 2024-2025*

Revised August 2024

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***The SPH Student Handbooks are static documents which are updated each August. The degree requirements contained in the AY 2024-2025 handbook is applicable to students matriculating into a degree program during this academic year. Students should consult the SPH website if interested in curriculum revisions adopted during the year. Such changes will apply to the next year's entering class.***

## PHD OVERVIEW

The Doctor of Philosophy (PhD) degree in Public Health Sciences is an academic degree awarded by the Graduate College of the University of Illinois and is subject to the requirements described in the UIC Graduate Catalog. (For this degree program, the School of Public Health acts as the Department of Public Health Sciences (DPHS) of the Graduate College.) The program develops scholars capable of conducting research and teaching in the public health sciences. The program also prepares students for research careers in governmental, private, and voluntary organizations. Programs of study leading to a PhD (in Public Health Sciences) may be taken in one or more of the Divisions of the School of Public Health:

1. Community Health Sciences
2. Environmental and Occupational Health Sciences
3. Health Policy and Administration

The Doctor of Philosophy (PhD) in Biostatistics, Epidemiology and Environmental Health are academic degrees awarded by the Graduate College of the University of Illinois Chicago and is subject to the requirements described in the UIC Graduate Catalog. These degree programs are primarily comprised of STEM courses. MS degree students are prepared for continuing studies through the PhD program.

Interdisciplinary studies that combine two or more of these areas are encouraged.

The PhD program consists of six components:

1. SPH School-wide Core Course Requirements
  - IPHS 520: Foundations of Public Health\*
  - BSTT 400: Biostatistics I\*\*
  - BSTT 401: Biostatistics II\*\*
  - EPID 403: Introduction to Epidemiology: Principles and Methods

\*Requirement for PhD students who have not previously completed a degree in Public Health  
 \*\*Not required for PhD students in Biostatistics
2. Divisional Course Requirements and Electives – (variable based on chosen Division).
3. The Preliminary Examination
4. Dissertation Research Requirements
  - IPHS 599 PhD Dissertation Research Hours (minimum of 32 SH)
  - Examinations:
    - a. Dissertation Proposal Defense
    - b. Dissertation Defense
5. Instructional Experience
6. Required Non-Credit Training

- a. Title IX Training
- b. Human Subjects Research
- c. SPH Academic Integrity Tutorial

**Conditional Admission Policy Statement:** Under special circumstances, an applicant may be recommended by a Division for admission on a conditional basis (e.g., completion of preparatory course work). The conditions under which a student is admitted to the School are to be stipulated in writing by the director of the Division recommending admission of the student. Conditionally admitted students must satisfy the conditions prior to graduation (or earlier if so specified by the Division).

**Change in Division:** If a student's interests change after admission or the student determines that professional goals would be better achieved in a division different from the one originally assigned please contact the divisional academic staff in the home division to initiate the process to Request for Change of Degree.

Students requesting a division change must meet the requirements of the division they wish to enter. Admission to the new division is not guaranteed.

**Degree Completion Time Limitations:**

- **7 years:** A student who is admitted to the Graduate College with a master's degree, or who continues in the Graduate College after completing the master's degree at the University of Illinois at Chicago, must complete the degree requirements within seven years after initial registration as a doctoral student. 32 SH of credit from a relevant master's program will be credited toward the 96 SH degree requirements.
- **9 years:** A student who is admitted to the Graduate College without a master's degree and proceeds directly to the doctorate must complete degree requirements within nine years of initial registration as a doctoral student.

The Director of Graduate Studies (DGS) will periodically review the progress of doctoral candidates. If the DGS determines that the student is not making satisfactory progress toward the degree, the student may be recommended for dismissal from the program.

Time spent on a leave of absence approved by the program and the Graduate College is not counted toward the degree time limit (see the Leave of Absence section of the Academic Policies and Procedures Handbook).

**Preliminary Examination Time Limitation:** Failure to complete the degree requirements within five years of passing the preliminary examination requires retaking the examination. Graduate College rules require that a minimum of one year elapse after passing the preliminary examination, before defending the dissertation.

## PROGRAM OF STUDY

### Coursework

The curriculum is individually designed to meet the interests and goals of the student. PhD students without an MPH degree will be required to take an introductory public health course *IPHS 520: Foundations of Public Health*. This course provides a broad introduction to foundational areas of Public Health, including an overview of Public Health history, ethics, health disparities, global health, health promotion, environmental health, and biological, genetic, social and behavioral determinants.

Introductory courses in biostatistics and epidemiology are required in the PhD program, if not previously completed at the master's level\*\*. (These requirements may be waived if justified on the basis of equivalent prior experience or course work.) The division of credit hours between course work and dissertation research is highly dependent on the background of each student. At a minimum, students must complete 9 SH in formal 500 series courses in a major area of concentration (not necessarily in one division). [Note: The 595-seminar series may not be counted towards fulfillment of this requirement.] If required by the chosen division, the student must also complete 6 SH in a collateral area. Course work must be designed to assure preparation for the preliminary examination and subsequent doctoral research. Course work does not, however, usually dominate the PhD program.

\*\* Biostatistics majors are required to take an introductory epidemiology course and advanced biostatistics courses; see [BSTT PhD Curricular Chart](#).

After admission to the PhD program, the student is assigned a major advisor with interests and expertise compatible with the student's goals. Together, the student and advisor develop an overall program of study which is approved by the Division Director and the Graduate College. The approved program proposal form shall be submitted prior to the completion of the second semester of study. Revised proposals may be submitted thereafter.

The student is encouraged to utilize any of the resources of The University of Illinois at Chicago plus those in neighboring institutions. (See description of the [Chicago Metropolitan Exchange Program](#).) The primary requirement is that a meaningful, cohesive, health-directed, research-oriented program be constructed.

Students may use Independent Study (IPHS 596) to satisfy elective hours. Up to 9 semester credit hours (SH) of independent study may be credited toward the PhD program.

### Instructional Experience

Each PhD student is required to obtain experience in classroom teaching. The teaching experience for doctoral candidates should at minimum consist of planning, leading, and evaluating a minimum of two classroom sessions, which may be online or in-class sessions. If students are clear that they will be pursuing a career in academe, they should be encouraged by their advisors to go beyond this minimum.

All PhD students' efforts should be supervised and evaluated by appropriate faculty. Documentation should accompany this evaluation so that PhD students are clearly rated on their efforts at planning,

teaching, and evaluating the students in their classes. Efforts of students who are laboratory or teaching assistants should be considered vital teaching experiences as long as there is appropriate evaluation of such efforts by faculty and students. It is the responsibility of the student and his or her faculty advisor to make sure the student's instructional experience is properly evaluated.

PhD program proposal forms include areas for the date and description of the student's teaching experience. The expected term for satisfying this requirement should be identified at the initial submission of the program proposal, and, if known, a description of the proposed teaching experience. A revised program proposal must be submitted to the student's advisor near the graduation term (if not required earlier as a result of other changes to the student's program) reflecting a brief description of the instructional experience.

Students with relevant and appropriate prior teaching experience may petition to waive this requirement. At a minimum, the prior teaching experience should meet the criteria identified above.

## The Preliminary Examination

The Preliminary Exam is a rigorous test of the student's knowledge and understanding of his/her chosen program of study, and the ability to apply such knowledge to the field of his/her specialization.

**Timing:** The preliminary examination should be undertaken as soon as possible after completion of the required program of study.

**Committee Selection:** Prior to sitting for the preliminary examination, the student selects a Preliminary Examining Committee with the assistance and approval of the major advisor. It consists of a minimum of five members, of whom at least three (3) are UIC Graduate College faculty with full membership and two (2) of whom must be tenured, who have interest and expertise in the student's major and collateral areas. The Chair of the Committee must be a full member of the UIC Graduate College Faculty. If a collateral area is required, at least one member must represent the student's collateral area. Up to two of the members may be selected from outside the DPHS or UIC. The committee must be approved by the Graduate College. The committee works with the student until the preliminary examination is completed.

The preliminary examination consists of two parts—a written part prepared for the individual student by the examining committee, and an oral part administered by the committee sitting together with the student. These parts will be separated by no more than four weeks. In the case where the student has failed the written portion of the examination, the Committee may elect not to give the oral examination.

The written questions will cover broad conceptual issues and problems, providing the principal (but not necessarily exclusive) focus of the oral examination. At the discretion of the Division the format and scheduling of the written exam may vary, but will include the following information:

- Core principles, concepts, and approaches in the general area of specialization.
- Basic knowledge of the facts and current status of the discipline of specialization.
- Problem-solving, applying principles and facts to issues in the area of specialization.
- Collateral area principles, facts, and problem-solving.

The oral examination may consist of further discussion and elaboration of the answers to the written questions and/or any other relevant topics raised by the examiners.

The evaluation of the student's performance will result in one of several findings:

**Pass** - This finding indicates that the student is progressing satisfactorily in the acquisition of knowledge and understanding in the elected area of specialization. The student is, as a consequence, encouraged to proceed with additional specialized course work and to begin preparatory work on the dissertation topic. Passing this examination formally admits the student to PhD candidacy.

**Fail** - This finding indicates that the student is deficient in knowledge of the elected area of specialization and may lead to either of two consequences. The student may be required to withdraw from the PhD program or may be asked to retake the examination after completion of deficiency-oriented course work. The Preliminary Examining Committee and Division Director have jurisdiction for remedial programming, but dismissal will be the prerogative of the Director of Graduate Studies for DPHS with the advice of the Executive Committee. The decision may be appealed to the Dean. The Dean, on the recommendation of the Committee, may permit a second examination. A third examination is not permitted.

The Preliminary Examining Committee certifies the results and reports them to the Graduate College.

## The Dissertation Phase

**Dissertation Committee Selection:** After successfully completing the preliminary examination, the student, in conjunction with the major advisor, will select a dissertation chair and Dissertation Examining Committee. This committee consists of five (5) members, at least two (2) of whom must be tenured full members of the Graduate College faculty, and one who is from outside the Division. The dissertation advisor, who must be from the student's division, serves as chair of the committee and must be a member of the Graduate College faculty. The Graduate College must approve the Committee composition.

**Dissertation Committee Functions:** The Dissertation Committee is responsible for guiding the student's research and helping to assure successful performance during the Dissertation Proposal Defense and ultimately the Dissertation Defense.

The PhD candidate should work with his/her Committee chair to set an introductory meeting of the Committee during which the expected intellectual contributions of each Committee member are discussed and decided upon.

The student and committee members should also decide upon the frequency of meetings, optimal communication methods, expected timeframe for developing and completing the dissertation and scheduling examinations, faculty availability during summer months, and other guidelines and mutual expectations for the sharing and review of the student's work.

It is highly recommended that the PhD student at the point of beginning work on his or her thesis or dissertation obtain a copy of the Graduate College Thesis Manual.

## The Dissertation Proposal

**Dissertation Proposal Elements:** The Dissertation Proposal typically consists of the first three chapters of the dissertation: Chapter 1. Introduction or Broad Overview of the Proposed Research; Chapter 2. Literature Review; Chapter 3. Methodology.

**Dissertation Proposal Defense:** The Dissertation Proposal Defense, given orally by the Dissertation Examining Committee, serves two primary functions:

- To ascertain whether the student is adequately prepared to pursue the dissertation topic. If deficiencies are discovered, additional course work may be required.
- To indicate to the student whether the Dissertation Examining Committee feels that the proposed research is feasible and whether the research should result in a useful, satisfactory product within the time and resources available.

The Dissertation Proposal Defense should not put the student into a pass-fail situation. Rather, it should, when necessary, guide the student into a more feasible and/or fruitful research plan. It is the responsibility of the student to complete the PhD Dissertation Proposal Approval Form, and after obtaining the signatures of the committee submit the document to their division academic staff for processing. A "pass" constitutes a contract between the Examining Committee and the student that all major elements of the research proposal have been identified and agreed to.

## Research and Dissertation Format

The student's research is carried out under the guidance of a dissertation advisor and the Dissertation Committee. The research may take any or a combination of many forms: field, laboratory, or computer applications are some examples. The research must be creative and original, advancing a field of public health by adding significant new knowledge, testing current theory, or leading to a new theory. Completion of the assigned research credit does not guarantee an acceptable dissertation; additional research effort may be necessary.

The dissertation may be presented in the traditional thesis format or may consist of manuscripts (typically three) of publishable quality with respect to peer-reviewed journals. The specific requirements for both are to be established by the dissertation committee in accordance with Graduate College requirements.

The manuscript format typically follows the chapter outline below:

1. Introductory chapter to include the over-arching theme(s), hypotheses which tie the papers together
2. Literature review
3. Methods chapter
4. The manuscripts
  - a) Paper #1
  - b) Paper #2
  - c) Paper #3
5. Conclusion to include a discussion of the impact of the research
6. Appendices to include, as appropriate, such items as survey instruments, foundational tables, organizational charts, additional tables, and other items not appropriate for a journal article nor the body of the thesis document.



**Defense:** Both a final examination and dissertation presentation is required. This typically takes the following format. The candidate presents his/her findings at an open meeting of faculty, students, and the Dissertation Committee. Immediately following the open session, the committee meets with the student in executive session. Finally, the Dissertation Examining Committee report to the Graduate College that the student has or has not passed his/her examination and thus has or has not satisfied all requirements for the PhD degree.

**Final Formatting of Dissertation:** It is the student's and advisor's responsibility to assure the final dissertation format meets the requirements of the [Graduate College Thesis Manual](#). A final draft will be reviewed and approved by the SPH Director of Graduate Studies and the Graduate College or returned to the student for further editing.

Upon receipt of a properly formatted thesis, the Director of Graduate Studies will recommend the student to the Graduate College for award of the degree.

## PROGRESS REPORTING

PhD students are required to report on progress at least annually. The progress report includes a student self-assessment of academic progress, including evidence of his/her progress and an assessment of the student's progress by the student's advisor (before the preliminary examination) or research committee (after the preliminary examination). Prior to the preliminary examination, progress reports must be submitted to the Office of Student Affairs by October 1 each year. After the preliminary examination, progress reports must be submitted to the Office of Student Affairs by October 1 and March 1 of each year. Progress reports will be reviewed by the Committee on Academic Progress. Students placed on Academic Probation for failing to maintain a Grade Point Average (GPA) of 3.0 on a 4.0 scale, should refer to the SPH Academic Policies and Procedures Handbook. After the preliminary examination, students will be placed on Academic Probation at the first report of "lack of progress." A second report of "lack of progress" will result in dismissal from the program.

Students have the opportunity to discuss all reviews in person with the Director of Graduate Studies (DGS), if requested by the student. In the event that the student's advisor is the DGS, a suitable third party (e.g., the division director, Associate Dean for Academic Affairs, or other senior professor) should lead the discussion. The student will have an opportunity to provide written feedback to the formal review. All of the above will be retained in the student's academic file. These requirements represent minimum requirements; programs may further require additional items.

## REQUIRED NON-CREDIT TRAINING

Early in the curriculum, students will be required to complete at least two non-credit trainings. These trainings are provided through UIC (Title IX Training) and SPH (SPH Academic Integrity Tutorial).

UIC's Office for Access and Equity will administer the Title IX Training. Students will receive an official email from UIC to complete the Title IX training.

The SPH Academic Integrity Tutorial can be accessed through the [SPH Success](#) website. Please see the SPH Success Requirements and Resources for PhD Students below for more information.

Some students may need additional investigator training if working with key personnel involved in human subjects research.

Current UIC investigator training requirements are available at the following OPRS website: <https://research.uic.edu/compliance/human-subjects-irbs/education-training/>:

[SPH Academic Integrity Tutorial](#)

## SPH SUCCESS REQUIREMENTS & RESOURCES FOR PHD STUDENTS

### Description of Required Components:

- **Quantitative Baseline Assessment:** 40-item assessment designed to assess student readiness for IPHS 402/404, BSTT 400/EPI 400, or similar introductory quantitative coursework. Required for all incoming master's students (MPH, MHA, MS).
- **SPH and UIC Policies Module:** Covers the policies, expectations, and resources relevant to all courses in the School of Public Health (e.g., honor code, disability resources, library resources, etc.).
- **Academic Integrity Tutorial:** Tutorial and quizzes that cover plagiarism, cheating, use of generative AI for assignments, references and citations, ethics in the classroom and classwork, professional ethics, and honor code. Required for all students in the School of Public Health.
- **CITI Human Subjects Research Training:** Group I or Group II Basic Course (Biomedical or Social and Behavioral Research Investigators) through the CITI Program.

Table 1. Required SPH Success Components by Degree Program

SPH Success Component	Degree Program
	PhD
Quantitative Baseline Assessment	Not required
SPH & UIC Policies Module	Required
Academic Integrity Tutorial	Required
CITI Human Subjects Research Training	Required

Table 2. Due Dates for Required SPH Success Components

Program	Required Component			
	Quantitative Baseline Assessment	SPH & UIC Policies Module	Academic Integrity Tutorial	CITI Human Subjects Research Training
PhD	<i>Not required</i>	By 10th day of fall semester	By 10th day of fall semester	Prior to beginning research activities OR during 1 <sup>st</sup> semester, whichever comes first

Supplemental Resources for Students:

In addition to required content on the SPH Success Blackboard site, all students have access to the following academic support resources:

- **Writing Resources**, including resources for citing and referencing, resources for avoiding plagiarism, and guides for citation manager software. There are also resources for outlining and organizing writing and conducting literature reviews.
- **Computing Resources**, including tutorials, guidance documents, and other informational resources for operating and conducting quantitative analyses in SAS and Excel.

## THE PHD CURRICULUM BY DISCIPLINE

### Biostatistics

The STEM designated PhD in Biostatistics requires a minimum of 96 semester hours (SH). This program includes the following course requirements:

**Note:** PhD students majoring in Biostatistics must take any required MS courses who's equivalent they have not taken previously.

#### School-Wide Core Requirements (min. 38 SH)

Course	Title	Credits
EPID 403	Introduction to Epidemiology: Principles and Methods*	3 SH
IPHS 520	Foundations of Public Health (required for all PhD students without an MPH degree).	3 SH
IPHS 599	PhD Dissertation Research	min. 32 SH
Required Non-Credit Training		
Title IX Training		Non-credit
SPH Academic Integrity Tutorial		Non-credit

(\*If not taken previously)

#### Divisional Core Requirements (22 SH)

Course	Title	Credits
BSTT 560	Large Sample Theory	2 SH
BSTT 561	Advanced Statistical Inference	3 SH
BSTT 562	Linear Models	4 SH
BSTT 565	Computational Statistics (every Fall)	4 SH
BSTT 595	Seminar	1 SH

### Selectives (8 SH)

Select at least two of the following (minimum 8 SH):

- BSTT 563 Generalized Linear Models (spring, odd #d yrs.) (4 SH)
- BSTT 564 Missing Data (spring, even #d yrs.) (4 SH)
- BSTT 566 Bayesian Methods (spring, even #d yrs.) (4 SH)
- BSTT 567 Advanced Survival Analysis (spring, odd #d yrs.) (4 SH)

### Electives (4 SH):

Electives can be any graduate level course of the students choosing. BSTT 400, BSTT 401, BSTT 410, BSTT 505, BSTT 523, BSTT 524, and BSTT 525 are not suitable electives.

\*Students with a master's degree in public health or a related area may receive up to 32 SH of credit towards the 96 SH total.

### Doctoral Preliminary Examination in Biostatistics

The written exam includes both in-class and take-home portions. The in-class portion is scheduled for 4 hours, while students have 1 week to complete the take-home portion. Material for the exam is based

primarily on the 500-level biostatistics courses as well as the required statistics courses. The oral examination follows the written examination (within one month) and may re-examine students based on the answers to the written portion or include additional material based on required coursework.

### **Standards of Performance for Biostatistics Program**

In addition to University, Graduate College, and schoolwide standards, 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.

### **Other Requirements**

Each PhD student is required to obtain experience in classroom teaching. The teaching experience for doctoral candidates should at a minimum consist of planning, leading, and evaluating a minimum of two classroom sessions, which may be online or in-class sessions. If students are clear that they will pursuing a career in academe they should be encouraged by their advisors to go beyond this minimum.

All PhD students' efforts should be supervised and evaluated by appropriate faculty. Documentation should accompany this evaluation so that PhD students are clearly rated on their efforts at planning, teaching, and evaluating students in their classes. Efforts of students who are laboratory or teaching assistants should be considered vital teaching experiences if there is appropriate evaluation of such efforts by faculty and students. It is the responsibility of the student and his or her faculty advisor to make sure the student's instructional experience is properly evaluated.

## Community Health Sciences

The PhD in Public Health Sciences in the Division of Community Health Sciences requires a minimum of 96 semester hours (SH), although more hours are often necessary. PhD students in Community Health Sciences are required to select a major area of concentration relevant to community health and obtain advisor approval in all course selections. For students interested in focusing on Maternal and Child Health (MCH), there are some adaptations to the CHS requirements; see MCH section below. For students selecting the concentration in Maternal and Child Health Epidemiology (MCH EPI), there are additional requirements; see MCH EPI section below. The PhD in Community Health Sciences includes the following course requirements:

### School-Wide Core Requirements (32-35 SH)

Course	Title	Credits
IPHS 520	Foundations of Public Health (required for all PhD students without an MPH degree).	3 SH
IPHS 599	PhD Dissertation Research	min. 32 SH
Required Non-Credit Training		
Title IX Training		Non-credit
Human Subjects Training		Non-credit
SPH Academic Integrity Tutorial		Non-credit

### Divisional Core Requirements (2 SH)

Seminar Courses (2 SH total)		
Course	Title	Credits
*IPHS 595	Doctoral Seminar (1 SH; take 2 semesters)	2 SH

\*If appropriate sections of CHSC 595 are available, students may select CHSC 595 to fulfill this requirement.

In addition, PhD students in the Community Health Sciences are required to take courses from three specific areas: 1) Community Health Sciences Theory and Methods, 2) Advanced Research Methods, and 3) Advanced Analytic Methods. Students must complete all courses from Community Health Sciences Theory and Methods, and at least three courses from the combined Advanced Research Methods and Advanced Analytic Methods lists, at least one course coming from each list. Registration in CHS 593 is required every semester in the program.

Community Health Sciences Theory and Methods Courses (13+ SH total)		
Course	Title	Credits
CHSC 550	Advanced Theories and Topics in Community Health Sciences	3 SH
CHSC 551	Advanced Research Methods for Community Health Sciences	3 SH
CHSC 552	Advanced Analytic Methods for Community Health Sciences	3 SH
CHSC 593	Doctoral Laboratory in Community Health Sciences Research Development	0-1 SH

Advanced Research Methods Courses (3-8 SH)		
Course	Title	Credits

ANTH/GEOG 418	Ethnographic and Qualitative Research Methods	4 SH
BHIS 508	Q Research Methodology? Qualitative Research	3 SH
BSTT 426	Analytics Using Python	3 SH
BSTT 529	Investigations	2 SH
CHSC 434	Introduction to Qualitative Methods in Public Health	3 SH
CHSC/PA 447	Survey Planning and Design	3 SH
CHSC/PA 577	Survey Questionnaire Design	3 SH
CHSC 588	Research Synthesis and Meta-Analysis	3 SH
CHSC 594	Social Networks and Health	3 SH
CLJ 561	Qualitative Methods and Design	4 SH
CLJ 563	Evaluation Research in Criminology, Law, and Justice	4 SH
DHD 546	Qualitative Methods in Disability Research	4 SH
ED 501	Data and Interpretation in Educational Inquiry	4 SH
ED 502	Essentials of Qualitative Inquiry in Education	4 SH
EPSY 550	Rating Scale and Questionnaire Design and Analysis	4 SH
EPSY 560	Educational Program Evaluation	4 SH
EPSY 564	Evaluation Principles and Methods	3 SH
NUEL 548	Methodological Issues for Cross-Cultural Research	3 SH
NURS 574	Qualitative Research in Nursing	4 SH
OT 553/DHD 543	Program Evaluation: Documenting the Impact of Human Services	3 SH
PA 528	Public Program Evaluation	4 SH
^PSCH 531	Community Research Design	3 SH
SOCW 578	Qualitative Methods in Social Work Research	3 SH
UPP 461	Geographic Information Systems for Planning	4 SH
UPP 462	Intermediate GIS for Planning	4 SH

*^Only useful as a methodologic refresher for those who have previously taken CHSC 551.*

<b>Advanced Analytic Methods Courses (3-8 SH)</b>		
<b>Course</b>	<b>Title</b>	<b>Credits</b>
BHIS 540	Essentials of Health Data Science	3 SH
BHIS 541	Health Data Analytics	3 SH
BSTT 505	Logistic Regression and Survival Analysis	2 SH
BSTT 527	Statistical Learning	3 SH
BSTT 528	Machine Learning	3 SH
*CHSC/EPID 518	Epidemiology or Pediatric Diseases	3 SH
CHSC 534	Management and Analysis of Qualitative Data	3 SH
*CHSC/EPID 545	Reproductive and Perinatal Health	4 SH
CHSC/EPID 549	Advanced Applied Methods in MCH Epidemiology	3 SH
^DHD 515	Statistical Methods and SPSS in Disability Research	3 SH
EPID 404	Intermediate Epidemiologic Methods	4 SH
EPID 500	Applied Methods for the Analysis of Epidemiologic Data	4 SH
EPID 501	Advanced Quantitative Methods in Epidemiology	4 SH
EPSY 514	Non-Parametric Modeling	4 SH
EPSY 543	Advanced Analysis of Variance in Educational Research	4 SH

EPSY 546	Educational Measurement	4 SH
EPSY 547	Multiple Regression in Educational Research	4 SH
EPSY 551	Item Response Theory/Rasch Measurement	4 SH
EPSY 583	Multivariate Analysis of Educational Data	4 SH
EPSY 584	Hierarchical Linear Models	4 SH
HPA 564	GIS Application in Public Health	3 SH
HPA 592	Spatial Data Analysis and Visualization	4 SH
IDS 561	Analytics for Big Data	4 SH
PSCH 541 & 543	Intro to Computing in PSCH/Research Design and Analysis	1 + 4 SH
PSCH 545	Multivariate Analysis	3 SH
PA 541/POLS 501	Advanced Data Analysis I	4 SH
PA 542/POLS 502	Advanced Data Analysis II	4 SH
PA 588	Applied Survey Sampling and Analysis	4 SH
SOCW 597	Applied Linear and Generalized Linear Regression Models	3 SH

**Note: Substitutions for courses in the Advanced Research Methods and Advanced Analytic Methods lists may be possible with approval from the CHS Doctoral Committee; see the CHS Associate Director of Academic Services for information on the substitution process.**

*\*Students with a focus in Maternal and Child Health must select at least one of these courses.*

*^Only useful as an analytic refresher for those who have previously taken CHSC 552.*

### Additional Required Courses

The following courses must be taken if an equivalent course was not completed in the student's master's program:

- BSTT 400 Biostatistics I (4 SH)
- BSTT 401 Biostatistics II (4 SH)
- CHSC 421 Community Health I (4 SH)
- CHSC 422 Community Health II (4 SH)
- CHSC 446 Research Methods in Community Health (3 SH)
- EPID 403 Introduction to Epidemiology: Principles and Methods (3 SH)
- For students with a focus in Maternal and Child Health, 2 of:
  - CHSC 510 MCH Inequities and Responses I (4 SH)
  - CHSC 511 MCH Inequities and Responses II (4 SH)
  - CHSC 543 MCH Policy and Advocacy (3 SH)

### Concentration and Electives (minimum of 12 SH)

Select 12 SH in an approved concentration area; at least 9 SH must be 500-level courses. The 595-seminar series may not be counted towards fulfillment of this requirement. Note: Students must complete the number of electives necessary to bring total program hours to a minimum of 96 credit hours.

**Note:** Students with a master's degree in public health or a related area may receive up to 32 SH of credit towards the 96 SH total. The 32 SH of credit will apply to the needed elective hours.



## Preliminary Examination Requirements

The Preliminary Examination is an important milestone for PhD Students. Successful completion of the exam indicates that the student is ready to commence dissertation research. Students must undertake their Preliminary Examination within one year after completion of the coursework in their required program of study. Students wishing to undertake their Preliminary Examination at a different time must petition the CHS Doctoral Committee. Students must complete the degree within 5 years after taking the Preliminary Examination or they must retake the exam.

## Maternal and Child Health

Admitted CHS applicants with a specific interest in MCH expressed as MCH-oriented career goals, MCH practice/research experience, MCH publications, and/or MCH research interests may be eligible to become an MCH Scholar which includes a small amount of additional support from the Center of Excellence (CoE) in Maternal and Child Health. If you are interested in focusing on Maternal and Child Health in completion of your CHS PhD or you have questions, contact Alisa Velonis, Director of CoE in MCH ([avelonis@uic.edu](mailto:avelonis@uic.edu)).

### MCH PhD Scholar Curriculum

Students selected as MCH PhD Scholars will follow the CHS PhD curriculum, inclusive of the following adaptations specified below:

1. Two of three MCH core courses:

Course	Title	Credits	Term Offered
*CHSC 510	MCH Inequities and Responses I	4	Spring
*CHSC 511	MCH Inequities and Responses II	4	Fall
*CHSC 543	MCH Policy and Advocacy	3	Fall

\*For those with an MPH in MCH, MCH core courses are not required.

2. One MCH-oriented analytic course as part of the meeting CHS advanced analytic and advanced research methods requirements:

Course	Title	Credit	Term Offered
CHSC/EPID 518	Epidemiology of Pediatric Diseases**	3	Fall
CHSC/EPID 545	Reproductive and Perinatal Health (plus lab)	3 + 1	Fall

3. One-two MCH electives (list of pre-approved electives below; additional electives may be approved). If it meets your needs and interests, you can consider one of the CHSC-MCH core courses as an elective with faculty advisor approval.

4. MCH-Oriented dissertation

*Please note:* CHS and MCH PhD students are eligible to participate in the Chicago Metropolitan Exchange Program (CMEP) of the Graduate College to take relevant courses at Northwestern and the University of

Chicago. For more information, please see the Graduate College website (<https://grad.uic.edu/chicago-metropolitan-exchange-program/>).

### Financial Aid

To the extent possible, we offer financial support upon admission to doctoral students when they express a strong MCH interest in their application (personal statement, work experience, recommendations).

### Pre-Approved MCH Electives:

Course	Title	Credits
CHSC 434	Introduction to Qualitative Methods in Public Health	3 SH
CHSC 544	Public Health Approaches with Adolescents and Young Adults	3 SH
CHSC 586	Health Behavior Interventions	3 SH
CHSC 594	Sexuality, Reproduction, Gender, and Violence: A Seminar on Key Issues and Inequities in Health	1 SH
CHSC 594	Public Health Aspects of Abortion and Family Planning	3 SH
EPID 594	Epidemiology of Sexually Transmitted Infections	3 SH
EPID 594	Social Epidemiology	3 SH
IPHS 494	International Women's Health: Current and Emerging Issues	3 SH
IPHS 594	Global Women's Health and Rights	3 SH
GWS 501	Feminist Theories	4 SH
GWS 502	Feminist Knowledge Production	4 SH
GWS 515	Psychology of Women and Gender	3 SH
GWS 547	Race, Class, and Gender Dimensions of Crime and Justice	4 SH
NUEL 570	International Dimensions in Women's Health	3 SH

### MCH PHD STUDENT PROFESSIONAL DEVELOPMENT

#### Career Development/ Leadership & Management Training

CHS students are required to participate in 2 IPHS 595 seminars that focus on professional development and academic/research career skill building. If appropriate sections of CHSC 595 are available, students may select CHSC 595 to fulfill this requirement instead.

#### Leadership Training & Coaching

- Each MCH PhD student will be required to meet with an MCH Leadership Coach two (2) times throughout their academic career.

#### Teaching/Research Training

- Students should consult with their faculty advisor to confirm specific opportunities meet the Professional Development requirements.
- It is suggested that all MCH PhD students interested in a career in academe take the "Foundations of College Instruction" course offered through the Graduate College (<https://grad.uic.edu/programs/graduate-college-courses/>), or an equivalent course.

## Environmental and Occupational Health Sciences

The PhD in Environmental and Occupational Health Sciences program requires a minimum of 96 semester hours (SH). Students must complete a minimum of 9 SH in formal 500 series courses in major area of concentration (not necessarily in one division). Students must also complete 6 SH in a collateral area. Note: The 595-seminar series may not be counted towards fulfillment of this requirement.

### School-Wide Core Requirements (min. 46 SH)

Course	Title	Credits
BSTT 400*	Biostatistics I	4 SH
BSTT 401*	Biostatistics II	4 SH
EPID 403*	Introduction to Epidemiology: Principles and Methods	3 SH
IPHS 520	Foundations of Public Health (required for all PhD students without an MPH degree).	3 SH
IPHS 599	PhD Dissertation Research	min. 32 SH
Required Non-Credit Training		
Title IX Training		Non-credit
Human Subjects Research		Non-credit
SPH Academic Integrity Tutorial		Non-credit

\*If not previously taken at the master's level

### Divisional Core Requirements (21-22 SH)

Course	Title	Credits
EOHS 401	Ethics and Justice in Environmental and Occupational Health	2 SH
EOHS 402	Systems Approaches to Environmental and Occupational Health	4 SH
EOHS 501	Exposure Assessment Strategies	3 SH
EOHS 502	Environment, Toxicology, and Disease	4 SH
EOHS 495	Seminar in Environmental and Occupational Health Science	1 SH
EOHS 556	Risk Assessment for Environmental and Occupational Health	3 SH
EOHS 595	PhD Seminar in EOHS (enrollment to be repeated at least four semesters) (4 SH total)	1 SH
Methods selective: Students should select <b>one</b> course from the following lists of courses in qualitative <b>or</b> quantitative methods; to be selected according to academic needs and research activities:		
1. Qualitative Methods		
Course	Title	Credits
CHSC 534	Management and Analysis of Qualitative Data	3 SH
CLJ 561	Qualitative Methods and Design	4 SH
DHD 546	Qualitative Methods in Disability Research	4 SH
NURS 574	Qualitative Research in Nursing	4 SH
PSCH 531	Community Research	3 SH
2. Quantitative Methods		
Course	Title	Credits

BSTT 537	Longitudinal Data Analysis	4 SH
EPID 500	Applied Epidemiologic Methods	4 SH
EPID 501	Adv. Quant Methods Epidemiology	4 SH
IE 442	Design and Analysis of Experiments in Engineering	4 SH

### **Electives (9 SH) \***

Students are required to complete 9 SH of 500-level courses related to their declared area of concentration, and 6 SH of 500-level courses related to their declared collateral area. EOHS 595 cannot be applied towards these requirements. In addition, students are required to take electives to obtain a minimum of 96 SH. \*Students without a prior master's degree in public health or a related area will be required to complete 37 SH of electives.

## Epidemiology

The PhD in Epidemiology requires a minimum of 96 semester hours (SH). This program includes the following course requirements:

### School-Wide Core Requirements (32 - 46 SH)

Course	Title	Credits
BSTT 400*	Biostatistics I	4 SH
BSTT 401*	Biostatistics II	4 SH
IPHS 520	Foundations of Public Health (required for all PhD students without an MPH degree).	3 SH
EPID 403*	Introduction to Epidemiology: Principles and Methods	3 SH
IPHS 599	PhD Dissertation Research	min. 32 SH
Required Non-Credit Training		
Title IX Training		Non-credit
Human Subjects Research		Non-credit
SPH Academic Integrity Tutorial		Non-credit

\*If not previously taken at the master's level

### Divisional Core Requirements (28 SH)

Course	Title	Credits
BSTT 505	Logistic Regression and Survival Analysis	2 SH
EPID 404	Intermediate Epidemiologic Methods	4 SH
EPID 406	Epidemiologic Computing	3 SH
EPID 410	Epidemiology of Infectious Diseases	2 SH
EPID 411	Epidemiology of Chronic Disease	3 SH
EPID 500	Advanced Applied Epidemiologic Methods II	4 SH
EPID 501	Advanced Quantitative Methods in Epidemiology	4 SH
EPID 591	Current Epidemiologic Literature	2 SH
EPID 595	Epidemiology Research Seminar	1 SH
BSTT 506	Design of Clinical Trials	3 SH

**Note:** Students in the PhD program in Maternal and Child Health Epidemiology need to discuss these requirements with their advisor.

### Electives (minimum of 29 SH)

- Students are strongly encouraged to participate in at least two IPHS 595 seminars that focus on professional development and skills building. IPHS seminars are typically 1 semester hour, but this varies depending on topic area.
- Two 500-level substantive Epidemiology classes, in different areas, to prepare for substantive sections of preliminary examination (e.g., Cardiovascular, Cancer, Aging, Infectious, Pediatrics, Genetics) (4-6 SH)
- At least one biological science class relevant to student's research area is required if no prior biological sciences background (4 SH) **Note: Students may enroll in an undergraduate biological**

**sciences course to fulfill this requirement with faculty advisor approval; however, these hours will not count towards graduation credits for the PhD.**

- Additional coursework in relevant area outside of Epidemiology and approved by your advisor (e.g., Biostatistics, Nutrition, Maternal and Child Health, Environmental Sciences, Sociology) (6 SH)
- Remaining electives (13-15 SH)

**Note:** Students must complete the number of electives necessary to bring total program hours to a minimum of 96 credit hours. Students with a master’s degree in public health or a related area may receive up to 32 SH of credit towards the 96 SH total.

**Performance Standards:** In addition to University, Graduate College, and schoolwide standards, no grade below “B” is acceptable in any required Epidemiology (EPID) or Biostatistics (BSTT) course or IPHS 402 (or IPHS 404 and 405). A student may re-take a course one time and attempt to replace the C with a higher grade. Failure to maintain this standard will be grounds for dismissal from the Epidemiology Program.

**Other Requirements:** Each PhD student is required to obtain experience in classroom teaching. The teaching experience for doctoral candidates should at a minimum consist of planning, leading, and evaluating a minimum of two classroom sessions, which may be online or in-class sessions. If students are clear that they will pursuing a career in academe they should be encouraged by their advisors to go beyond this minimum.

All PhD students’ efforts should be supervised and evaluated by appropriate faculty. Documentation should accompany this evaluation so that PhD students are clearly rated on their efforts at planning, teaching, and evaluating students in their classes. Efforts of students who are laboratory or teaching assistants should be considered vital teaching experiences if there is appropriate evaluation of such efforts by faculty and students. It is the responsibility of the student and his or her faculty advisor to make sure the student’s instructional experience is properly evaluated.

## Optional Concentrations

### Occupational and Environmental Epidemiology in Epidemiology (100-101 SH) EPIDEMIOLOGY STUDENTS ONLY

Students must complete the School-Wide Core Requirements above and 54-55 semester credit hours of the following courses as part of their divisional and elective choices.

#### School-Wide Core Requirements (43 - 46 SH)

Course	Title	Credits
BSTT 400*	Biostatistics I	4 SH
BSTT 401*	Biostatistics II	4 SH
IPHS 520	Foundations of Public Health (required for all PhD students without an MPH degree).	3 SH
EPID 403*	Introduction to Epidemiology: Principles and Methods	3 SH
IPHS 599	PhD Dissertation Research	min. 32 SH
Required Non-Credit Training		
Title IX Training		Non-credit
Human Subjects Research		Non-credit
SPH Academic Integrity Tutorial		Non-credit

\*If not previously taken at the master's level

#### Occupational and Environmental Epidemiology in Epidemiology Core Requirements (54 SH)

Course	Title	Credits
BSTT 505	Logistic Regression and Survival Analysis	2 SH
EPID 404	Intermediate Epidemiologic Methods	4 SH
EPID 406	Epidemiologic Computing	3 SH
EPID 411	Epidemiology of Non-Infectious Diseases	3 SH
EPID 500	Applied Methods for the Analysis of Epidemiologic Data	4 SH
EPID 501	Advanced Quantitative Methods in Epidemiology	4 SH
EPID/EOHS 530	Current Topics in Occupational & Environmental Epidemiology	2 SH
EPID/EOHS 535	Applied Methods in Occupational Epidemiology	2 SH
EPID/EOHS 536	Applied Methods in Environmental Epidemiology	2 SH
EPID/EOHS 571	Injury Epidemiology and Prevention	3 SH
EOHS 421	Occupational Safety and Health Practice	2 SH
EOHS 502	Environmental and Occupational Toxicology and Diseases	4 SH
EOHS 501	Exposure Assessment Strategies	3 SH
EOHS 495	Environmental/Occupational Health Seminar (students must participate in 4 semesters, but need only enroll for credit in one semester)	1 SH
EOHS 556	Risk Assessment in Environmental and Occupational Health	3 SH
Select <u>one</u> of the following courses:		
EOHS/HPA 436	GIS for Environmental and Public Health Professionals	4 SH

EOHS/HPA 564 or UPP 461	Geographical Information Systems in PH Geographic Information Systems of Planning and Policy	3 SH
<b>ELECTIVES:</b> 9 hours of electives identified by student and advisor based on research interests		9 SH
<b>Total Credit Hours Including School-Wide Core Requirements</b>		<b>100-101</b>

Required courses will be waived based on previous course work thus reducing the total number of required semester hours. However, a minimum of 96 SH will be required of all students in the PhD program.

**Performance Standards:** In addition to University, Graduate College, and schoolwide standards, no grade below “B” is acceptable in any required Epidemiology (EPID) or Biostatistics (BSTT) course or IPHS 402 (or IPHS 404 and 405). A student may re-take a course one time and attempt to replace the C with a higher grade. Failure to maintain this standard will be grounds for dismissal from the Epidemiology Program.



## Optional Program - Maternal and Child Health Epidemiology

Students in the PhD in MCH Epidemiology (MCHEPI) can enter through the Division of Community Health Sciences or the Division of Epidemiology and Biostatistics (EPID-BSTT). Regardless of division, MCHEPI PhD students are required to take courses in both Epidemiology and Maternal and Child Health (MCH), along with courses from other disciplines that focus on the substantive, analytic, and technical aspects of the public health planning cycle

- A minimum of 96 semester hours of credit, to include the required courses listed below (32 credits can be transferred from a master's degree).
- A written and oral preliminary exam. This exam is administered through EPID-BSTT, regardless of the student's home division. A separate written substantive exam on an MCHEPI topic is administered by the MCHEPI program.
- A dissertation which must be conducted in conjunction with a state or local public health agency or using the data from such agencies.
- Leadership coaching offered by the Center of Excellence in MCH (CoE-MCH) and other professional development.

### Strongly Recommended Courses

<i>Foundational Epidemiology Courses</i>		
EPID 404	Intermediate Epidemiologic Methods	4 SH
EPID 594	Concepts in Causal Epidemiology	3 SH

### Required Courses

<i>Master's Level Courses (if no MPH in Epidemiology):</i>		
IPHS 520	Public Health Frameworks for Researchers ( <i>for student's w/o MPH</i> )	3 SH
BSTT 401	Biostatistics II	4 SH
EPID 404	Intermediate Epidemiologic Methods	4 SH
EPID 406	Epidemiologic Computing ( <i>Prereq. for EPID 404</i> )	3 SH
Select <b>ONE</b> of the following courses (if no MPH in MCH):		
CHSC 510	MCH Inequities and Responses I	4 SH
CHSC 511	MCH Inequities and Responses II	4 SH
CHSC 543	MCH Policy and Advocacy	3 SH
Select <b>ONE</b> of the following courses:		
EPID 409	The Epidemiology of HIV/AIDS	2 SH
EPID 410	Introduction to Infectious Disease Epidemiology	2 SH
EPID 411	Introduction to Chronic Disease Epidemiology	3 SH
EPID 550	Public Health Surveillance	3 SH
<i>Additional Epidemiology Requirements</i>		
EPID 591*	Current Epidemiologic Literature	1 SH
EPID 595*	Epidemiology Research Seminar	1 SH
<i>CHS Doctoral Theory and Method Courses:</i>		
CHSC 550	Advanced Theories and Topics in Community Health Sciences	3 SH
CHSC 551*	Advanced Research Methods for Community Health Sciences	3 SH

CHSC 552*	Advanced Analytic Methods for Community Health Sciences	3 SH
<i>Additional CHS Requirements</i>		
CHSC 595/ IPHS 595**	Seminar in CHS or IPHS Seminar	1 SH
CHSC 595/ IPHS 595**	Seminar in CHS or IPHS Seminar	1 SH
<i>MCH Epidemiology Courses:</i>		
EPID/CHSC 518+	Epidemiology of Pediatric Diseases	3 SH
EPID/CHSC 545+	Reproductive and Perinatal Health (plus lab)	3 SH
<i>Advanced Analytic Methods Courses</i>		
BSTT 505+	Logistic Regression & Survival Analysis (Prereq for EPID 501)	2 SH
EPID 500	Applied Epidemiologic Methods	4 SH
EPID 501+	Advanced Quantitative Methods in Epidemiology	4 SH
PA 588+	Survey Data Reduction and Analysis (ONLINE ONLY)	4 SH
Select <b>ONE</b> of the following courses:		
BSTT 537+	Longitudinal Data Analysis	4 SH
EPSY 584+	Hierarchical Linear Models	4 SH

### Other Requirements

	Academic Integrity Tutorial	0 SH
	Human Subjects Research Training	0 SH
	Title IX Training	0 SH
IPHS 599**	PhD Dissertation Research	32 SH
	MCH PhD Student Professional Development Requirements	Varies

\*This course is required for MCHPEI PhD students in **EPID** division. CHS MCHPEI PhD students are strongly encouraged to take EPID 591 and EPID 595.

\*\* Only required for MCHPEI PhD students in the **CHS** division. MCHPEI PhD students in EPID are strongly encouraged to take CHSC 551, 552, and two seminars in CHS or IPHS (CHSC 595/IPHS 595).

+ This course can be used to meet the Advanced Analytic Methods Course Requirement for PhD in CHS. A complete list of courses that meet the CHS Advanced Analytic and Advanced Research Method Requirements can be found in the [PhD Student Handbook](#).

\*\* A dissertation which must be conducted in conjunction with a state or local public health agency or using the data from such agencies.

^ EPID 404 is a prerequisite for this course.

## MCH EPI PhD Student Professional Development Requirements

Students should consult with their faculty advisor to confirm if specific opportunities meet the Professional Development requirements.

### CAREER DEVELOPMENT/LEADERSHIP & MANAGEMENT TRAINING

CHS students are required to participate in 2 IPHS 595 seminars that focus on professional development and academic/research career skill building. If appropriate sections of CHSC 595 are available, students may select CHSC 595 to fulfill this requirement instead.

EPID students are required to participate in EPID 595. Two semesters of IPHS 595 are highly recommended for EPID students but are not required.

### LEADERSHIP COACHING

- Each MCHEPI PhD student will be encouraged to meet with an MCH Leadership Coach each year of their academic career.

### TEACHING/RESEARCH TRAINING

The teaching experience for doctoral candidates consist of planning, leading, and evaluating a minimum of two classroom sessions, which may be online or in-class sessions. It is suggested that all MCHEPI PhD students take the “Foundations of College Teaching” course that is offered through the UIC Graduate College (<https://grad.uic.edu/academic-support/programs/graduate-college-courses/>) or an equivalent course if they are interested in a career in academe. Lecture content should relate to the student’s dissertation focus area (e.g., reproductive and sexual health, pediatric immunization, maternal health, adolescent suicide, etc.)

### Health Policy and Administration

The PhD in Public Health Sciences in the Health Policy and Administration program requires a minimum of 118 semester hours (SH). This program includes the following course requirements:

#### School-Wide Core Requirements (46 SH)

Course	Title	Credits
BSTT 400*	Biostatistics I	4 SH
BSTT 401*	Biostatistics II	4 SH
EPID 403*	Introduction to Epidemiology: Principles and Methods	3 SH
IPHS 520	Foundations of Public Health (required for all PhD students without an MPH degree).	3 SH
IPHS 599	PhD Dissertation Research	min. 32 SH
<b>Required Non-Credit Training</b>		
Title IX Training		Non-credit
Human Subjects Research		Non-credit
SPH Academic Integrity Tutorial		Non-credit

\*If not previously taken at the master’s level

#### Health Policy & Administration Core Requirements (32 - 46 SH)

Course	Title	Credits
HPA 420	US Healthcare System for Public Health Practitioners	3 SH
HPA 521	Empirical Methods for Health Research I	3 SH
HPA 522	Empirical Methods for Health Research II	3 SH
HPA 567	Public Health Policy Analysis	3
HPA 573	Principles of Economic Evaluation of Health Care Interventions	3 SH
HPA 581	Advanced Topics in Health Economics	3 SH

IPHS 595	PhD Seminar	1 credit per semester for a total of 4 SH in the first 2 years
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### Selectives

All students must complete a minimum of 9 semester hours of selectives from the below list.

BSTT 505	Logistic Regression and Survival Analysis	2 SH
BSTT 537	Longitudinal Data Analysis	2 SH
ECON 509	Microeconomic Theory I	4 SH
ECON 534	Econometrics I	4 SH
ECON 535	Econometrics II	4 SH
ECON 516	Development Economics	4 SH
ECON 539	Microeconomics	4 SH
ECON 555	Health Economics	4 SH
ECON 531	Labor Economics	4 SH
CHSC 534	Management and Analysis of Qualitative Data	3 SH
CHSC 551	Advanced Research Methods for Community Health Sciences	3 SH
EOHS 501	Exposure Assessment Strategies	3 SH
POLS 502	Time Series Analysis for Political Science	3 SH
POLS 544	Regulatory Public Policies	3 SH
POLS 566	Interest Groups	3 SH
POLS 584	Methods of Policy Analysis	3 SH
PSOP 502	Research Methods in Pharmacy Systems, Outcomes and Policy	3 SH
UPP 500	History and Theory of Urban Planning	4 SH
UPP 501	Urban Space, Place and Institutions	4 SH

### Electives

All students must complete a sufficient number of courses to bring the total program hours to 118 SH. A minimum of 9 SH must be taken at the 500-level. **Note:** IPHS 599 hours may not be counted toward fulfillment of this requirement

Students with a master's degree in a relevant research area may receive 32 SH of credit towards the 118 SH total.

### Recommended Plan of Study

Under direction of the academic advisor, each student must complete appropriate courses that address the curriculum objectives. Students will be expected to take additional courses in their area(s) of focus, e.g., economics, qualitative research, measurement, survey research, program evaluation. The specific courses taken to achieve curriculum objectives must be approved by the HPA PhD Program Director.

Students may enter the doctoral program with a bachelor's degree but will be strongly encouraged to remediate a math deficiency by the end of the first year.

Students entering the program with a prior master's degree may be permitted to transfer 32 SH of relevant coursework, depending on relevancy and appropriateness of the master coursework.

## DUAL MD/PHD DEGREE

The School of Public Health participates in a joint MD/PhD with the College of Medicine.

Joint Degree	Availability of Joint Degree Programs by Division				
	CHS	EOHS	Epi	Bio	HPA
MD/PhD	X		X	X	X

MD/PhD training in epidemiology and/or biostatistics provides an extended period of study in the etiologic and methodological approaches of population-based health research in concert with complete medical school education. Application is normally made at the time of application to the College of Medicine; however, applicants will also be considered during their first two years of medical training. Students must apply to the MD/PhD Training Program and to the College of Medicine and indicate in their application that they are interested in a PhD in Community Health Sciences, Epidemiology or Biostatistics. Criteria for admission to the program include academic excellence, prior research experience, potential for independent and creative research, and commitment to a career in academic medicine. Students receive a stipend throughout their years of study. Students interested in further information may contact Interim Associate Dean for Academic Affairs, or the MD/PhD Training Program: Barbara Gottesman, Director of Program Administration, MSTP Program, phone: (312) 413-2629, e-mail: [bgottesm@uic.edu](mailto:bgottesm@uic.edu).

## CHICAGO METROPOLITAN EXCHANGE PROGRAM (CMEP)

The Chicago Metropolitan Exchange Program (CMEP) allows UIC doctoral students to access courses at the University of Chicago and Northwestern University. Courses taken through the CMEP should be relevant to the student's program and not offered at UIC. Students will be billed for courses taken through the CMEP at their home campus at its usual rate. Please note that UIC students who would like to take courses at the University of Illinois at Urbana-Champaign, or the University of Illinois at Springfield may do so as a concurrent registrant through the UIC Registrar's Office and would not be part of this program.

More information about the CMEP is available on the Graduate College website at: <http://grad.uic.edu/chicago-metropolitan-exchange-program>.

## PHD DEGREE PUBLIC HEALTH KNOWLEDGE ITEMS

PhD degree students are prepared to assume academic or research careers in a basic or applied science related to public health or careers in public health practice within both the public and private sectors. In general, the PhD student completes coursework that provides a broad introduction to public health. For students without a prior MPH, this introduction addresses the following learning objectives:

1. Explain public health history, philosophy, and values
2. Identify the core functions of public health and the 10 Essential Services
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.
6. Explain the critical importance of evidence in advancing public health knowledge
7. Explain effects of environmental factors on a population's health
8. Explain biological and genetic factors that affect a population's health
9. Explain behavioral and psychological factors that affect a population's health
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities
11. Explain how globalization affects global burdens of disease
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)