## Minors and Breadths by Department (Fall 2021 — Summer 2022)

#### **MINOR AREAS OF STUDY**

The following minor requirements are listed for each public health discipline. For further discussion about how your minor or breadth area can help you meet your career goals, please contact your faculty advisor.

### Department of Biostatistics and Data Science Minor in Biostatistics

A minor in biostatistics consists of at least nine (9) SCH of the following required courses:

- Masters students: PHM 1690L Introduction to Biostatistics in Public Health & PH 1700L
   Intermediate Biostatistics & at least one Biostatistics elective above PH 1700L
- Doctoral students: PHM 1690L Introduction to Biostatistics in Public Health & PH 1700L
   Intermediate Biostatistics & at least two Biostatistics electives above PH 1700L (Note: PHM 1690L Introduction to Biostatistics in Public Health is a prerequisite to PH 1700L but may be waived depending on the student's background.)

PH 1820L Applied Linear Regression is strongly recommended as an elective for all students.

# Department of Epidemiology, Human Genetics and Environmental Sciences Minor in Epidemiology

The department offers a minor course of study (nine (9) semester credit hours) for MS and doctoral students majoring in other public health disciplines. Courses required for the minor include:

- Masters students: PHM 2612L Epidemiology I & two Epidemiology electives
- Doctoral students: PH 2615L Epidemiology II, PH 2710L Epidemiology III & one Epidemiology elective

### Department of Epidemiology, Human Genetics and Environmental Sciences Minor in Environmental Sciences

EOHS also offers a minor course of study (minimum nine (9) semester credit hours) for MS and doctoral students majoring in other public health disciplines. Courses required for the minor include:

- Masters students: **PHWM 2110L** Public Health Ecology & the Human Environment & two EOHS electives (2100-24099) (**PH 2175L** is recommended)
- Doctoral students: PHD 2135L Risk Analysis: Principles and Practice & [PHWD 2106L Introduction to Doctoral Research Methods in Environmental and Occupational Health Sciences OR PHWD 2108L Applied Epidemiological Analysis OR PHWD 2760L Occupational Epidemiology] & an EOHS elective (2100-2499). PHM courses do not count toward a doctoral minor.

### Department of Health Promotion and Behavioral Sciences Minor in Behavioral Sciences

The department offers a minor course of study (nine (9) semester credit hours) for MS and doctoral students. Students are required to select at least one course from the Theory category and one course from the Methods category:

- Theory Courses: PHD 1113L Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping) OR PHD 1122 Health Promotion Theories for Individuals and Groups: Part I OR PHD 1123L Community Health Promotion Theory and Practice OR PHD 1227L Health Promotion Theories for Individuals and Groups: Part II
- Methods Courses: PHD 1118L Qualitative Methods OR PH 1324L Applied Discrete Data Analysis using STATA OR PHD 1130L Applied Measurement Theory OR PHD 1132 Latent Variable Models

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and Factor Analysis OR PHD 1420L Quantitative Research Design for Behavioral Sciences AND PHD 1421L Quantitative Analysis for Behavioral Sciences, Meta-Analysis, and Evidence-Based Public Health OR PHD 1431 Tools and Methods for Systematic Reviews and Meta-Analysis OR PH 1498L ST: Applied Longitudinal Data Analysis

## Department of Management, Policy and Community Health Minor in Community Health Practice

The department offers a minor course of study (nine (9) semester credit hours) for students majoring in other public health disciplines. Student select three courses from the approved list:

- Masters students: PHM 3630 Health Program Planning, Implementation, and Evaluation; PH
  1112L Community Assessment Methods in Public Health; PH 3920 Health Services Delivery and
  Performance; PHM 3922 Economic and Social Determinants of Health; PHM 3620L Principles and
  Practice of Public Health
- Doctoral students: PHD 3800L Working with Diverse Communities & PHD 3631L Community Engagement/ Community-based Participatory Research & PHD 3625L Practice-based Methods and Design.

#### Minor in Health Economics

The department offers a minor course of study (nine (9) semester credit hours) for students majoring in other public health disciplines. Students elect three courses from the approved list: PHD 3910 Health Economics; PH 3915 Methods for Economic Evaluation of Health Programs; PH 3922 Economic and Social Determinants of Health; PHD 3930 Econometrics in Public Health; PHD 3931 Advanced Econometrics; PHD 3935 Advanced Health Economics; PHD 3998 Decision Analysis in Public Health and Medicine.

#### Minor in Health Policy

The department offers a minor course of study (nine (9) semester credit hours) for students majoring in other public health disciplines. Student select three courses from the approved list: PHD 3810 Health Policy in the United States; PHD 3812 Comparative Health Systems; PH 3815 Health Policy Analysis; PH 3738L Legal Issues in Healthcare; PHD 3830 Ethics and Policy; PH 3736L U.S. Healthcare Payment Systems and Policy.

#### Minor in Health Services Research

The department offers a minor course of study (nine (9) semester credit hours) for students majoring in other public health disciplines. Student select three courses from the approved list: PH 3920 Health Services Delivery and Performance; PHD 3926L Health Survey Research Design; PHD 3930 Econometrics in Public Health; PH 3940 Healthcare Outcomes and Quality Research; PHD 3945 Advanced Health Services Research Methods; PHD 3998 Decision Analysis in Public Health and Medicine.

#### Minor in Healthcare Management

The department offers a minor course of study (nine (9) semester credit hours) for students majoring in other public health disciplines. Students complete a Healthcare Management related **PH 9997** *Practicum* course & select three courses from the approved list:

- Masters students: PHM 3718 Accounting for Healthcare Management; PHM 3744L
   Organizational Behavior and Human Resource Management in Health Services Organizations;
   PHM 3746L Evaluation and Improvement of Healthcare Quality; PHM 3720L Healthcare Finance;
   PH 3747L Healthcare Operations Management; PH 3735L Healthcare Strategic Management
- Doctoral students: PHD 3846L Quality Management and Improvement in Healthcare; PHD 3721L
   Healthcare Finance; PHD 3946L Strategy, Governance, and Leadership; PHD 3743L
   Organizational and Management Theory

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#### **BREADTH AREAS OF STUDY**

Doctoral students are required to complete one major area of study and two additional areas of study. The additional focus areas can be one minor area of study and one breadth area of study OR two minor areas of study. DrPH students who matirculated fall 2018 or later are required to complete one (1) minor only, as a breadth is built into the curriculum. The following are some examples of breadth topic areas, however a breadth area is not limited to the following. Specific courses can be changed to meet the individual needs of the student with the approval of the committee members.

### Department of Biostatistics and Data Science Bioinformatics Breadth

Courses required for the bioinformatics breadth includes 9 credit hours selected from:

- PH 1821 Advanced Multivariate Analysis for Biostatistics
- **PH 1980** Introduction to Genomics and Bioinformatics
- PH 1982 Evolution of DNA and Protein Sequences
- **PH 1984** Population Genetics

- PH 1985 Data Mining and Statistical Learning
- PH 1986 Introduction to Statistical Genetics
- PH 2782 Practical Computational Genetics and Bioinformatics
- PH 2998 ST: Computational Genomics and NGS Data Analysis

### Department of Management, Policy and Community Health Leadership Breadth

DrPH students are recommended to select a breadth in Leadership. Courses required include 9 credit hours from the following:

- **PH 5200** Foundations of Leadership
- PH 3815 Health Policy Analysis
- PH 3825 Public Health Law
- PH 3830 Ethics and Policy
- **PHD 3946** Strategy, Governance, and Leadership
- PHD 3950 Advanced Leadership Studies in Public Health
- PHD 5210 Selected Readings in Leadership Studies
- PH 5220 Gender and Leadership

#### **Quantitative Methods Breadth**

DrPH students in Community Health Practice are recommended to select a breadth area in Leadership or Methods. Substitutions in either recommended breadth may be made with approval of the student's committee.

- PH 2710 Epidemiology III
- PHD 2711 Epidemiology IV
- PH 2998 Applied Epidemiology
- **PH 1820** Regression Techniques

- PH 1119 Qualitative Analysis
- **PHD 3918** Geographic Information Systems Science
- PH 3998 Demography for Public Health

#### Healthcare Information Technology Management (HITM) Breadth

Selection of courses for the HITM breadth could depend on whether the student is pursuing a major or minor within the MPACH department. Students are expected to seek guidance from the HITM coordinator in selection of courses. Courses required include 9 credit hours from the following:

- PHD 3750 Policy Issues of Health IT or HI 6324
   Health Information Technology Policy\*
- PHD 3998 Health Care Delivery in EHR
   Enabled Environment or HI 6328 Health Care
   Delivery in EHR Enabled Environment\*
- PHD 3998 Operations, Technology, and Decision Management
- HI 5327 Standards in Health Informatics\*
- **HI 5381** Methods of Public Health Informatics\*

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<sup>\*</sup>These courses are offered by UTHealth School of Biomedical Informatics.