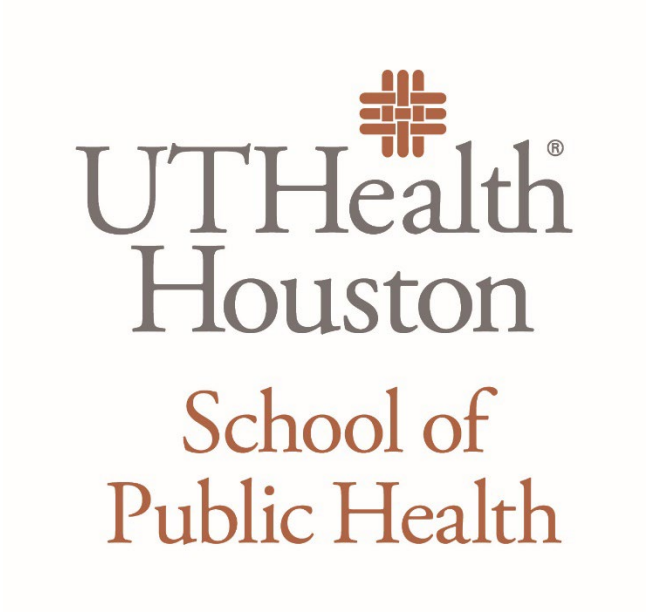

The University of Texas
Health Science Center at Houston
School of Public Health

2024-2025 Academic Catalog

TABLE OF CONTENTS

SCHOOL OF PUBLIC HEALTH

Health Without Boundaries

Finding Bold Solutions for Complex Problems

Health Without Boundaries is the vision of UTHealth Houston School of Public Health. It is the driving motivation behind everything we do. We believe that everyone deserves the opportunity to be healthy - without obstacles, caveats, or conditions.

UTHealth Houston School of Public Health is changing the culture of health through excellence in graduation education, research, and engagement. Every aspect of our educational experience puts our core values into action: students learn to collaborate, lead, transform, and diversify within the field of public health.

With locations across Texas, UTHealth School of Public Health is responsive to the cultural and geographic diversity of Texas, making it a unique environment to undertake research or implement interventions. With populations that represent future demographic trends for the entire U.S., the locality of our impact is balanced by its ability to scale to national and global consequences.

What is Public Health?

Public Health is a multidisciplinary field focused on protecting and improving people's health where they live, work, study, and play. Public health includes identifying the causes of disease and disability, developing interventions and solutions to protect the health of communities, ensuring equitable access to healthcare, advocating for evidence-based policies, and protecting people from threats to their health and safety posed by the environment. Public health aims to protect the health and safety of communities as small as a school or local neighborhood or as large as a state, country, or the world.

Degrees

Master of Public Health

- MPH in Community Health Practice (p. 15)
- MPH in Environmental Health (p. 15)
- MPH in Epidemiology (p. 16)
- MPH in Health Promotion/Health Education (p. 16)
- MPH in Health Promotion/Health Education: Dietetic Internship (p. 17)
- MPH in Healthcare Management (p. 18)
- MPH in Health Services Organization (p. 18)
- MPH in Public Health (Customized) (p. 19)

Master of Science

- MS in Biostatistics and Data Science (p. 20)

Doctor of Public Health

- DrPH in Community Health Practice (p. 22)
- DrPH in Health Promotion/Health Education (p. 22)

Doctor of Philosophy

- PhD in Behavioral Sciences and Health Promotion (p. 24)
- PhD in Biostatistics and Data Science (p. 25)
- PhD in Biostatistics and Data Science: Direct Admission (p. 25)
- PhD in Environmental Sciences: Environmental Disease Prevention Track (p. 26)
- PhD in Environmental Sciences: Total Worker Health Track (p. 27)
- PhD in Epidemiology (p. 28)
- PhD in Epidemiology: Direct Admission (p. 28)
- PhD in Management and Policy Studies: Health Economics/Health Services Research Track (p. 29)
- PhD in Management and Policy Studies: Healthcare Management/ Health Policy Track (p. 30)

Minors

- Minor in Behavioral Science (p. 30)
- Minor in Biostatistics (p. 30)
- Minor in Epidemiology (p. 30)
- Minor in Environmental Sciences (p. 30)
- Minor in Health Economics (p. 30)
- Minor in Health Policy (p. 30)
- Minor in Health Services Research (p. 30)
- Minor in Healthcare Management (p. 30)

Graduate Certificates

- Certificate in Advanced Data Science (p. 32)
- Certificate in Advanced Planning and Evaluation for Health Promotion Programs (p. 33)
- Certificate in Advanced Quantitative Methods for Behavioral Sciences (p. 33)
- Certificate in Applied Biostatistics in Public Health (p. 33)
- Certificate in Culinary Nutrition and Public Health (p. 34)
- Certificate in Data Science (p. 34)
- Certificate in Dissemination and Implementation Science (p. 34)
- Certificate in Genomics and Bioinformatics (p. 35)
- Certificate in Global Health (p. 35)
- Certificate in Health Disparities (p. 36)
- Certificate in Health Promotion Program Planning and Evaluation (p. 36)
- Certificate in Healthcare Administration (p. 37)
- Certificate in Infectious Disease Epidemiology (https://catalog.uth.edu/public-health/programs/graduate-certificates/infectious-disease-epi/)
- Certificate in Introduction to Quantitative Methods for Behavioral Sciences (p. 37)
- Certificate in Leadership Theory and Practice (p. 37)
- Certificate in Maternal and Child Health (p. 38)
- Certificate in Nutrition and Public Health (p. 38)
- Certificate in Physical Activity and Public Health (p. 39)
- Certificate in Public Health (p. 39)
- Certificate in Public Health Informatics (p. 39)
- Certificate in Public Health Law Research and Policy Surveillance (p. 40)

Accelerated Master's

- Accelerated Master's Programs (p. 40)

Dual and Pathway Programs

- Dual Degree and Pathway Programs (p. 40)

Special Programs

- UT System Graduate Archer Fellowship Program (p. 41)
- Industrial Hygiene (p. 41)
- Residency Program in Occupational and Environmental Medicine (p. 41)

About Us

Health Without Boundaries

Finding Bold Solutions for Complex Problems

Health Without Boundaries is the vision of UTHealth Houston School of Public Health. It is the driving motivation behind everything we do. We believe that everyone deserves the opportunity to be healthy - without obstacles, caveats, or conditions.

UTHealth Houston School of Public Health is changing the culture of health through excellence in graduation education, research, and engagement. Every aspect of our educational experience puts our core values into action: students learn to collaborate, lead, transform, and diversify within the field of public health.

With locations across Texas, UTHealth School of Public Health is responsive to the cultural and geographic diversity of Texas, making it a unique environment to undertake research or implement interventions. With populations that represent future demographic trends for the entire U.S., the locality of our impact is balanced by its ability to scale to national and global consequences.

What is Public Health?

Public Health is a multidisciplinary field focused on protecting and improving people's health where they live, work, study, and play. Public health includes identifying the causes of disease and disability, developing interventions and solutions to protect the health of communities, ensuring equitable access to healthcare, advocating for evidence-based policies, and protecting people from threats to their health and safety posed by the environment. Public health aims to protect the health and safety of communities as small as a school or local neighborhood or as large as a state, country, or the world.

Our five academic departments offer students the opportunity to pursue public health programs with a specialization in the following core areas of study:

- Biostatistics and Data Science
- Community Health Practice
- Environmental and Occupational Health Sciences
- Epidemiology
- Health Economics/ Health Services Research
- Health Promotion and Behavioral Sciences
- Healthcare Management and Policy

Message from the Dean

Welcome from Dean Eric Boerwinkle, PhD

I am honored to be the Dean of UTHealth Houston School of Public Health. Here, we offer advanced degrees in the diverse field of public health including behavior sciences, genetics, and health care management. Our accomplished graduates are innovative leaders at the forefront of population health programs in universities, the private sector, and government organizations in Texas and across the nation. We are continuously challenging ourselves to broaden our educational mission to meet the growing demands of the workforce, and to expand our repertoire of excellence to lead the ever-changing field of health care.

What is public health?

Public Health is a science that aims to keep people and communities healthy by preventing disease and ensuring better health care outcomes. Public health is also a profession. UTHealth Houston School of Public Health is here to improve the health of the people of Texas, the nation and the world - our faculty, students and alumni have been doing so for nearly 50 years.

We are conducting exciting and innovative research to identify new ways to keep people healthy and to reduce their risk of future disease. This includes investigating new ways to get young people to eat healthier; new ways to prevent teen pregnancy through better education; new ways to prevent and treat infectious diseases; and new ways to identify the genes that may make some of us more susceptible to or protected from disease. And finally, in the event that you or a loved one gets sick and needs to go to a hospital, it is the people from UTHealth Houston School of Public Health who are leading the way through research and training to ensure that best practices are being used to achieve the best possible health care outcomes.

What sets us apart from other public health programs?

Texas is a big and diverse state - both ethnically and economically. UTHealth Houston School of Public Health has six locations that span the entire state: from Houston to El Paso; Brownsville to Dallas; and with San Antonio and Austin in the center. We can - and we do - touch virtually the entire population of Texas. At each location, we have strong ties to health care organizations, but our strongest ties are to the local communities. We are working side-by-side with partners in clinics, schools, and in people's homes to prevent or delay the onset of disease and to improve health care outcomes within these communities.

Research is the engine that drives advanced education and modern health care. To achieve this, retention and recruitment of the world's best population scientists are critical. Strong strategic partnerships across The University of Texas System and throughout Texas are also important. We are working to solidify the "third coast" as a leader in advanced biotechnologies, health care, and population sciences.

The Houston Campus of UTHealth Houston School of Public Health is nestled in the heart of the Texas Medical Center - the largest medical center in the world - but, more importantly, it is the best place in the world for healthcare and biomedical research. The number of renowned institutions, highly-trained individuals, and patient visits is unsurpassed. In addition, there is a strong desire to collaborate among the physicians, scientists, and trainees at each of these institutions. Although the Texas Medical Center has grown strong through competition, it will continue to do so through cooperation and collaboration.

I am the luckiest person on earth to have the privilege to work with so many passionate, dedicated, and intelligent people. I look forward to working with you to achieve these important and shared goals of keeping Texas healthy and the Texas economy strong.

Thank you, and I hope you stay healthy.

Eric Boerwinkle, PhD

Dean, UTHealth Houston School of Public Health

Mission, Vision and Values

Our vision, mission and values are the bedrock of our school.

They direct our strategic planning, shape key performance goals, and serve as reminders for why we continue to seek bold solutions for complex problems in the field of public health.

Our vision: Health without boundaries.

We believe that a world in which there are no caveats or conditions on who can have good health is within our reach.

Our mission: Changing the culture of health through excellence in graduate education, research and engagement.

To achieve a world in which health has no boundaries, we must first shift the way people—from the communities around us to the healthcare industry to decision-makers in government—think about, and act on, matters relating to health.

Our values: Collaborate, Lead, Transform, Diversify.

- *Collaborate: A charge to seek out new perspectives, to listen as much as we talk, and to build authentic, sustainable relationships.*
- *Lead: A pledge to march on the front lines of progress with passion, tenacity, and a strong sense of direction.*
- *Transform: A vow to invest our time, effort and resources in challenging, improving—and when necessary—the complete rebuilding of programs and systems that do not serve us all.*
- *Community: A commitment to representation, health equity, and accountability.*

Accreditation

University Accreditation

The University of Texas Health Science Center at Houston is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, masters, doctoral, and professional degrees. Degree-granting institutions also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of The University of Texas Health Science Center at Houston may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges,1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (http://www.sacscoc.org).

School of Public Health Accreditation

More information on any of the following accreditations can be found on the School of Public Health Accreditation website (https://sph.uth.edu/about/accreditation/).

Council on Education for Public Health (CEPH)

Since 1969, UTHealth School of Public Health has been accredited by the Council on Education for Public Health (CEPH) every seven years, and was most recently accredited in 2020.

Applied and Natural Science Accreditation Commission of ABET

The Industrial Hygiene curriculum is an optional special program of the Master in Public Health (MPH) in Environmental Health. The master's level Industrial Hygiene curriculum is accredited by the Applied and Natural Science Accreditation Commission of ABET (http://www.abet.org/). For more information about this program, see the Special Programs section (p. 41).

Academy of Nutrition and Dietetics The Accreditation Council for Education in Dietetic

The Dietetic Internship Program, an optional special program of the MPH in Health Promotion/ Health Education, is fully accredited by the Academy of Nutrition and Dietetics. This program is also approved by The Accreditation Council for Education in Dietetic. For more information about this program, see the Special Programs section.

Accreditation Council for Graduate Medical Education (ACGME)

The Occupational and Environmental Medicine Residency Program, an optional special program of the MPH in Environmental Health, is accredited by the Accreditation Council for Graduate Medical Education (ACGME). For more information about this program, see the Special Programs section.

Commission on Accreditation of Healthcare Management (CAHME)

The MPH in Healthcare Management is accredited by the Commission on Accreditation of Healthcare Management Education (CAHME). For more information about this program, see the MPH in Healthcare Management course of study.

The Master of Public Health (MPH) degree program satisfies the academic requirement for certification by the American Board of Preventive Medicine in the areas of public health, occupational medicine, aerospace medicine, and preventive medicine; the National Board of Public Health Examiners; and the National Commission for Health Education Credentialing.

School Administration and Faculty

School Leadership

Eric Boerwinkle, PhD
Dean
M. David Low Chair in Public Health
Kozmetsky Family Chair in Human Genetics

Susan Emery, PhD
Senior Associate Dean of Academic and Research Affairs

Guy S. Parcel Chair in Public Health

Cynthia Bihm, MBA
Associate Dean, Management

Aanand D. Naik, MD
Associate Dean, Learning Health Systems
Chair, Department of Management, Policy and Community Health

Melissa Valerio-Shewmaker, PhD
Associate Dean, Faculty Affairs

Kimberly Baker, PhD
Assistant Dean, Practice

Sarah Donahue, MPH
Assistant Dean, Academic Affairs and Student Services

Melissa Peskin, PhD
Assistant Dean of Students

Theresa Tran, MD
Assistant Dean, Clinical Population Health and Advocacy

Bijal Balasubramanian, PhD, MPH, MBBS
Regional Dean, Dallas

Deanna Hoelscher, PhD
Regional Dean, Austin

Christine Markham, PhD
Chair, Department of Health Promotion and Behavioral Sciences

Kristina D. Mena, MSPH, PhD
Regional Dean, El Paso
Chair, Department of Environmental and Occupational Health Sciences

Alanna Morrison, PhD
Chair, Department of Epidemiology, Human Genetics and Environmental Sciences

Jack Tsai, PhD
Regional Dean, San Antonio

Hulin Wu, PhD
Chair, Department of Biostatistics and Data Science

Faculty Directory

UTHealth Houston School of Public Health faculty listings can be found on the SPH Faculty Directory (https://sph.uth.edu/faculty/) website.

Tuition and Fees

Tuition and fees are subject to change and become effective on the date enacted. The Texas Legislature does not set the specific amount for any particular student fee. Student fees are authorized by state statute; the specific fee amounts and the determination to increase fees are made by the university administration and The University of Texas System Board of Regents.

Required Fees

Information regarding fees that are assessed to all students across all UTHealth Houston schools can be found on the Office of Bursar website under Required Fees, see All UTHealth Schools (https://www.uth.edu/bursars/student-resources/tuition-fees/required-fees/all-schools-2024-2025/). Required fees that apply to School of Public Health students are all listed under Required Fees, see SPH (https://www.uth.edu/bursars/student-resources/tuition-fees/required-fees/school-of-public-health-2024-2025/).

- Computer Resource Fee: $62/semester
- Course Fees:
  - PHM 2155 Environmental Sampling Analysis, Lab Fee: $10
  - PH 5031 Garden for Health: $75
  - PH 5031 Garden for Health: $75
- Evacuation/Repatriation Insurance (assessed to international students who do not elect to carry the student Health Insurance Policy, annual cost $96):
  - Fall: $32
  - Spring: $40
  - Summer: 24
- Graduation Fee*: $150
- SPH Library and Writing Services Fee: $60/semester
- Liability Insurance:
  - Fall Semester: $5.25
  - Spring Semester: $5.25
  - Summer Semester: $4.00
- Portfolio Fee: $50
- Program Fee: Dietetic Internship (Spring) (PH 9997, section 800 & 850): $3,500 each section
- Program Fee: Archer Fellowship Program (Summer): $3,900
- Student Orientation Fee (assessed upon matriculation): $50
- Seat Deposit: $200
- Technology Resource Fee: $200/semester

*A graduation fee of $150 payable at registration for the final academic term is required of all students.

Health insurance is required of all UTHealth Houston students. If students have a health insurance policy, they may provide proof of comparable insurance to Auxiliary Enterprises no later than the 12th class to have this charge waived. Information regarding student health insurance can be found at the Auxiliary Enterprise website (https://www.uth.edu/auxiliary-enterprises/insurance/).

The current Tuition and Fee Schedules for UTHealth Houston can be found on the Bursar's Office Student Resource Hub website (https://www.uth.edu/bursars/student-resources/).

Admissions

The following sections describe the application procedures, application deadlines and admissions procedures. For more information, see the School of Public Health Admissions (https://sph.uth.edu/enroll/admissions/) website.

Application Procedures and Deadlines

Application Procedures

All applications to UTHealth Houston School of Public Health are received and processed by the centralized application service, School of Public Health Application Service (SOPHAS) (https://sophas.aspph.org/) or SOPHAS Express (https://sophasexpress.liaisoncas.com/applicant-ux/#/login). This application service is intended to streamline the application process as applicants

are able to upload one set of application materials, including institutional transcripts, reference letters, statement of purpose and objectives and standardized test scores, if applicable. All supporting documentation detailed below is required of those applicants submitting their applications through either SOPHAS or SOPHAS Ex-press, unless otherwise noted.

Degree-seeking Students

The degree-seeking application process is used for students seeking admission into one of the UTHealth Houston School of Public Health degree programs. All degree-seeking applications, including supporting documentation, are received and processed by SOPHAS (https://sophas.aspph.org/). Detailed instructions for submission of applications using SOPHAS are described on the SOPHAS (https://sophas.aspph.org/) website.

Applicants to dual degree programs apply to each institution independently of the respective complementary dual degree program. More information about dual degree programs can be found in the dual degree programs section of this catalog.

Applicants seeking readmission should refer to *Policy 403 Readmission to a Degree Program* under the Academic Standards, Policies and Procedures (p. 9) section of this catalog.

Non-degree Seeking Students

The non-degree application process is used for students seeking admission into one of the UTHealth Houston School of Public Health non-degree programs, non-degree graduate certificate programs, or pre-approved re-admission. All non-degree applications, including supporting documentation, are received and processed by SOPHAS Express (https://sophasexpress.liaisoncas.com/applicant-ux/#/login). Detailed instructions for submission of applications using SOPHAS Express are described on the SOPHAS Express (https://sophasexpress.liaisoncas.com/applicant-ux/#/login) website.

Required Application Materials for All Applicants

The following contains the elements of the application materials required when submitting materials to either SOPHAS (https://sophas.aspph.org/) or SOPHAS Express (https://sophasexpress.liaisoncas.com/applicant-ux/#/login). More information about required application materials can be found on the Admissions website.

1. Personal Statement and Objectives

Applicants should describe their interests in public health in the personal statement and objectives section of the application. The essay should address educational goals specific to the chosen program of study. Applicants should also describe career goals as well as any experience relating to the health field, research, community service, and leadership positions. Applicants are encouraged to describe how significant life experiences have influenced their motivation, qualifications, or academic record. The personal statement and objectives are central to the admissions decision and is read by the admissions committee. **Note: Personal statement and objectives are screened for plagiarism. Evidence of plagiarism will result in an automatic denial of admission.*

2. Evidence of Proficiency

Evidence of proficiency in basic mathematical or other quantitative skills, documented through transcripts, publications, or a statement describing how this proficiency was achieved, or will be achieved, prior to enrollment.

3. Application Fee

Students apply through either SOPHAS (degree-seeking applicants) or SOPHAS Express (certificate or non-degree-seeking applicants). The application fee through SOPHAS is based upon a sliding scale determined by the number of schools and programs to which the applicant is intending to apply. The cost for a SOPHAS application is $145 for the first school or program to which the student applies. Any additional schools or programs to which a student chooses to apply will cost $55 per designation, even if the application is submitted later in the application cycle. The cost for a SOPHAS Express application is $55 per program. More information about SOPHAS fees can be found here (https://help.liaisonedu.com/SOPHAS_Applicant_Help_Center/Starting_Your_SOPHAS_Application/Getting_Started_with_Your_SOPHAS_Application/03_Application_Fees/) and SOPHAS Express fees found here (https://help.liaisonedu.com/SOPHAS_Express_Applicant_Help_Center/Starting_Your_SOPHAS_Express_Application/Getting_Started_with_Your_SOPHAS_Express_Application/03_Application_Fees/#:%7E:text=SOPHAS%20Express%20charges%20a%20processing,and%20how%20to%20pay%20it).

4. Official Transcripts

Transcripts must include both grades and credit hours. International applicants are required to submit World Education Services (WES) evaluations of their transcripts to SOPHAS. See *Transcript Credential Evaluation* for more information.

Degree-seeking applicants: Applicants should submit official transcripts covering all periods of postsecondary enrollment in all accredited institutions of higher education attended. Copies of transcripts sent by the applicant are not considered. Applicants should request that all institutions attended send official, original transcripts directly to SOPHAS to one of the appropriate addresses:

For regular mail, please send to:
SOPHAS Transcript Processing Center
P.O. Box 9111
Watertown, MA 02471-9111

*For overnight delivery **only**, please send to:*
SOPHAS c/o Liaison International
311 Arsenal Street
Watertown, MA 02472
Phone: 617-612-2090

Information on sending official US transcripts electronically can be found online here (https://help.liaisonedu.com/SOPHAS_Applicant_Help_Center/Sending_Your_Official_Transcripts_and_Test_Scores_to_SOPHAS/).

Non-degree seeking applicants: Applicants should upload unofficial transcripts covering all periods of postsecondary enrollment in all accredited institutions of higher education. In the event the applicant is admitted, they will also need to provide official, original transcripts directly to the UTHealth Office of the Registrar.

5. Transcript Credential Evaluation

Transcripts for an educational credential evaluation and determination of United States equivalency is required from applicants who hold degrees from institutions outside of the United States. The minimum requirement is to submit a credential evaluation that demonstrates the applicant holds, at a minimum, the equivalent of a bachelor's degree or a professional degree from an accredited institution from the foreign country. A Course-by-Course International Credential Advantage Package (ICAP) with a GPA calculation is required. This can be accomplished by submitting transcripts to:

World Education Services (WES)
WES Global Documentation Centre
PO Box 2008 STN Main
Newmarket, ON, L3Y 0G5

World Education Services Contact Information:
Phone: (212) 966-6311
Email: info@wes.org
World Education Services Website (http://www.wes.org/)

Final transcript credential evaluation results must be submitted directly to SOPHAS by WES.

6. Letters of Recommendation

Applicants are required to submit letter(s) of recommendation from individual(s) qualified to evaluate the applicant's academic or professional performance, ability, motivation, and character. Academic letters of reference are preferred. All submitted letters should be on official letterhead.

Degree-seeking applicants: At least three letters of recommendation are required.

Non-degree seeking applicants: At least one letter of recommendation is required.

7. Entrance Examinations

Degree-seeking applicants: Entrance exam scores (GRE/GMAT/MCAT) are optional for all MPH and MS programs. For all doctoral programs, students are encouraged to submit entrance exam scores; however, the following programs require applicants to submit these scores:

- DrPH in Community Health Practice
- PhD in Epidemiology
- PhD in Environmental Sciences, Environmental Disease Prevention Track
- PhD in Environmental Sciences, Total Worker Health® Track
- PhD in Health Economics and Health Services Research
- PhD in Healthcare Management and Policy

Entrance exam score is but one of several factors considered in the aggregate during the admission process. The GRE is administered at many universities across the United States and in many foreign cities. Only scores received directly from the Educational Testing Service (https://www.ets.org/) will be considered. Applicants should submit GRE scores to SOPHAS using the reporting code 4479.

Official GMAT scores should be mailed to:

ATTN: Admissions
UTHealth Houston School of Public Health
1200 Pressler Street, RAS E-201
Houston, TX 77030

Non-degree seeking applicants: Non-degree applicants applying through SOPHAS Express are not required to submit entrance examination records.

Exemptions to the Entrance Exam requirement:

- Applicants holding previously-earned doctoral-level degrees from accredited U.S. universities may request an exemption;
- Applicants to dual degree programs that have a doctoral component (e.g., MD/MPH, PhD/MPH, Pharm D/MPH, or JD/MPH) are exempt from the GRE requirement, provided they hold an offer of admission to the partnering participating medical, graduate, pharmacy or law school.
- Applicants holding an international medical degree and holding Educational Commission for Foreign Medical Graduates certification may request a waiver provided they are currently practicing medicine or in an active residency program in the United States at the time of applying.
- MPH applicants who previously completed the UTHealth Houston School of Public Health General Public Health Certificate with a cumulative UTHealth Houston School of Public Health GPA of 3.4 or higher.
- Doctoral (DrPH or PhD) applicants who previously completed a UTHealth Houston School of Public Health master's program (MPH or MS) with a cumulative UTHealth Houston School of Public Health GPA or 3.4 or higher.

Waivers and exemption inquiries can be emailed to SPHAdmissionsTestWaivers@uth.tmc.edu; requests should include supplemental documentation for consideration.

8. Additional Supporting Materials

Any published papers, reports, or other materials believed to provide information on an applicant's capability and performance should be included in the application.

Degree-seeking applicants: Degree-seeking applicants should submit any additional supporting documents to SOPHAS and should follow the SOPHAS application instructions for guidance.

Non-degree-seeking applicants: Non-degree-seeking applicants should submit any additional supporting documents to SOPHAS Express and should follow the SOPHAS Express application instructions for guidance.

Additional Required Materials for International Applicants

9. English Proficiency Exams

International applicants are required to take the Test of English as a Foreign Language (TOEFL) (https://www.ets.org/toefl.html) or the International English Testing System (IELTS) (https://ielts.org/ielts-usa/) unless specifically exempted.

Exemptions to the TOEFL or IELTS exam requirement:

- If you are a Permanent Resident or Citizen of the United States;
- If you earned a bachelor's, master's or doctoral degree from the United States;
- If the degree reviewed by the World Education Services (WE) Transcript Evaluation indicates that the mode of instruction was in English (3 or more years).
- If you earned a degree from an English-speaking country – Graduation with a diploma or degree (attended for at least 3 years or a standard period of attendance as required by the country; Bachelor's, Master's or Doctoral degree) from an accredited school from a recognized English-speaking country as listed below:
  - Antigua
  - Australia
  - Bahamas
  - Barbados
  - Bermuda
  - British Virgin Islands

- Canada
- Cayman Islands
- Falkland Islands
- Gambia
- Ghana
- Grenada
- Guyana
- Ireland
- Jamaica
- Kenya
- Liberia
- New Zealand
- Nigeria
- Sierra Leone
- St. Helena
- St. Kitts & Nevis
- St. Vincent
- Trinidad & Tobago
- Turk & Caico Islands
- Uganda
- United Kingdom (UK)
- US Virgin Islands
- Zambia
- Zimbabweu

Additional exemptions may be granted on a case-specific basis for those who do not meet the above criteria. Waivers and exemption inquiries can be emailed to SPHAdmissionsTestWaivers@uth.tmc.edu; requests should include supplemental documentation for consideration.

Minimum scores required:
For admission consideration, a minimum acceptable score on the internet-based TOEFL is 95, and a minimum acceptable overall score on the IELTS is 7.0. Test scores are considered valid for two (2) years from the test date. Applicants may submit scores to SOPHAS using the reporting code 5688 (TOEFL); no department code is needed. Official IELTS scores should be mailed to:

ATTN: Admissions
UTHealth Houston School of Public Health
1200 Pressler Street, RAS E-201
Houston, TX 77030

Application Deadline Dates for All Applicants

Degree-seeking applicants: Completed applications, with all supporting documents, must be received by:

- October 1 – Spring semester priority deadline for scholarship consideration & final deadline
- December 1 – Fall semester priority deadline for scholarship consideration
- February 1 – Fall semester deadline for Dietetic Intern applicants
- April 1 – Fall/ Summer semester, all other applicants' final deadline

Non-degree seeking applicants: Completed applications, with all supporting documents, must be received by:

- November 1 – Spring semester
- April 1 – Summer semester
- July 1 – Fall semester

Applicants will be notified by e-mail of the Admissions Committee's decision within approximately 2-8 weeks of the date the application is completed and verified via SOPHAS, provided that all supporting materials are received by the application deadline.

Admissions Process

Applicants are required to elect a single degree program designation when applying. Designations are listed by available program modality and location. The faculty or faculty subcommittee of the appropriate program and campus review each application and all supporting documentation. Factors believed to contribute to the academic success of students and their subsequent contributions to the knowledge base and practice of public health are considered in each admissions action. The following criteria are evaluated through the application, transcripts, letters of recommendation, essay/personal statement, and CV/Resume. These criteria include:

- Career goals: particularly the intent to practice public health in underserved and vulnerable communities
- Community service: particularly service to diverse communities in need
- Educational goals: should be consistent with the chosen area of study
- Motivation: description of any special obstacles or challenges that have been overcome to achieve goals thus far
- Prior academic preparation: depth, breadth, and performance
- Relevant work experience: particularly public health practice or research related to underserved and vulnerable communities
- Official scores on entrance exams and English proficiency exams (if needed)
- Theses, publications, and other scholarly works: supplemental documents provided by applicant

Applicants may be contacted for personal interviews, and prospective students are encouraged to visit the School and discuss their proposed program with faculty and staff. The School's contact information can be found on the UTHealth Houston School of Public Health (https://sph.uth.edu/campuses/houston/) website. Admissions inquiries can also be emailed directly to SPHAdmissions@uth.tmc.edu.

applyUTH (https://uthidp.uth.edu/nidp/saml2/sso/?id=Campus-Affiliate-LOA2-DUO&sid=0&option=credential&sid=0) is available for applicants to check on the status of their application and supporting documents. Enrolled students will use myUTH (https://uthidp.uth.edu/nidp/saml2/sso/?id=Campus-Affiliate-LOA2-DUO&sid=1&option=credential&sid=1) to access their official grades, register for classes, view and pay fees, check on the status of financial aid applications, submit address changes, and request official UTHealth transcripts. Policies related to transfer credits, maximum credits for enrollment in one term, and a criminal background check can be found in the Academic Policies section.

Direct Admission to a PhD Program

The School offers direct admission to the PhD in Biostatistics and PhD in Epidemiology programs. Additional admission requirements for these programs can be found in the PhD in Biostatistics, Direct Admission and

PhD in Epidemiology, Direct Admission sections below. Students are required to meet all other admission requirements for a PhD program.

Conditional Admission to Doctoral Programs

With the exception of applicants admitted directly to a PhD program, applicants to doctoral programs are expected to hold a master's degree in the relevant discipline. Applicants with a prior master's degree, but with deficits (i.e., no MPH or lack of master's level discipline courses for a PhD) may be admitted with the conditions of completing required leveling courses. Once a student has completed the required leveling courses listed in the admissions letter, with a grade of at least a "B," the conditions will be removed from the student's record. Conditions must be met by the timeline mentioned in the admissions letter. Students who fail to complete the conditions will be discontinued from the doctoral program. Credit hours toward a doctoral degree program's graduation requirement begin to accrue at the time of enrollment in the degree program as follows:

- No credit hours for the leveling courses will be applied toward a doctoral degree but will be listed on the student's official transcript.
- DrPH students must have previous evidence of all five core MPH courses.

Academic Affairs and Student Services

The UTHealth Houston School of Public Health Office of Academic Affairs and Student Services serves to assist students from admittance to graduation.

Career and Alumni Services

Career and alumni services is housed within the Office of Public Health Practice and Engagement and provides information, service, training and support to students and alumni that can help them explore their values, interests, and skills; build their professional network; and stay engaged with the UTHealth Houston School of Public Health.

Financial Assistance

UTHealth Houston School of Public Health offers a number of endowed scholarships. Graduate scholarships are awarded on the basis of scholastic excellence and adequate preparation for graduate study in the student's chosen field, as shown by the student's academic record. Scholarship eligibility criteria include admission into a degree program; enrollment in coursework leading to the degree; reasonable progress in the degree program; good academic standing; GPA; and in some cases test scores; references; and personal statements. There are additional specific qualifications for scholarships in various areas of study. Students are encouraged to contact the UTHealth Houston School of Public Health Office of Academic Affairs and Student Services to obtain information about eligibility criteria and scholarships awarded in the student's area of study. Scholarships may be available based on funding; availability may change, amount may change, and only competitive scholarships of $1,000 or more will be eligible for resident tuition. For more information about financial assistance opportunities, see the UTHealth Houston Office of Student Financial Services (https://www.uth.edu/sfs/) website and the UTHealth Houston School of Public Health Financial Assistance (https://sph.uth.edu/enroll/finance/) website.

Selection Process

Awards of traineeships and scholarships are made by the UTHealth Houston School of Public Health Scholarship and Traineeship Committee, which is composed of faculty members and administrative staff. In awarding scholarships, the committee considers the following as appropriate to achieve the donor's scholarship intent: faculty recommendations, academic performance, financial need, research interests, and other professional and personal achievements

Fellowships

A limited number of fellowships are available through the research centers of UTHealth Houston School of Public Health. Applications for these fellowships is made directly to the centers. Selection criteria include those listed above, and the recipients are chosen by the faculty in the centers.

Library & Graduate Communication Center

The mission of the UTHealth Houston School of Public Health Library & Graduate Communication Center is to provide primary information support services for the education, research, and community health services programs of the faculty, students, and staff. Writing Support Services offers public health communication skills training, with a focus on writing. Instruction is provided in the areas of English as a Second Language (ESL), Academic and Scientific Writing.

The UTHealth Houston School of Public Health Library & Graduate Communication Center is a member of the Texas Health Science Libraries Consortium (THSLC), which is the collaboration of health science libraries in the Houston-Galveston area. The THSLC leads and encourages collaboration through shared digital library environments and resources to provide access to the world of information for its educational, clinical, and research communities. For more information, see the Library & Graduate Communication Center (https://sph.uth.edu/research/library/) website.

Student Organizations

The Student Association at UTHealth Houston School of Public Health is based at the Houston campus and acts as the official student governance organization to represent students with school administration. All students are included in this organization.

Student Communication

Email accounts constitute the official mode of communication linking students, faculty, and/or administration. Consequently, students are responsible for maintaining the UTHealth Houston e-mail account assigned to them and activated upon payment of tuition and fees, and are responsible for regularly checking e-mail messages.

Academic Standards, Policies and Procedures

Students are charged with knowledge of and compliance with all UTHealth Houston School of Public Health policies below. All of the following policies can be found on the mySPH Policies (https://uthtmc.sharepoint.com/sites/SPH-mySPH/SitePages/Policies.aspx) webpage. Students are expected to sign a pledge adhering to the school's honor code (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Reference.UTSPH_Honor_Code.pdf) during new student orientation.

Academic Policies

Policy 100 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.100_Student_Academic_Grievance_Process_and_Flowchart.pdf), Student Academic Grievance Process
Policy 102 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.102_Doctoral_Committees_Structure.pdf), Doctoral Committee Structures
Policy 103 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.103_Drop_Date_Deadline_for_Courses.pdf), Drop Date Deadline for Courses
Policy 104 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.104_MPH_and_MS_Committee_Structures.pdf), MPH and MS Committee Structures
Policy 105 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.105_Registration_Maximum_Credits_in_One_Term.pdf), Registration Maximum Credits in One Term
Policy 106 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.106_Thesis_Dissertation_Data_and_Publication_Authorship.pdf), Thesis Dissertation Data and Publication Authorship
Policy 107 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.107_Academic_Remediation_Plan_and_Probation_Steps.pdf), Academic Remediation Plan and Probation Steps
Policy 108 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.108_Test_Security_Policy.pdf), Test Security Policy
Policy 109 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.109_Student_Research_Thesis_Dissertation_Proposal_Approval.pdf), Student Research Thesis/Dissertation Proposal Approval

Administrative Policies

Policy 200 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.200_Student_Evaluation_Process.pdf), Student Evaluation Process
Policy 201 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.201_Course_Grading.pdf), Course Grading
Policy 202 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.202_Maximum_Students_in_a_Course.pdf), Maximum Students in a Course

Degree Requirements Policies

Policy 300 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.300_Breadth_And_Minor_Requirements_for_Doctoral_Students.pdf), Breadth and Minor Requirements for Doctoral Students
Policy 301 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.301_Conditional_Admission_to_Doctoral_Programs.pdf), Conditional Admission to Doctoral Programs
Policy 302 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.302_Direct_Admission_from_a_Bachelors_Degree_to_the_PhD_Program.pdf), Direct Admission from a Bachelor's Degree to the PhD Program
Policy 303 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.303_Epidemiology_Course_Requirement.pdf), Epidemiology Course Requirement
Policy 307 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.307_Preliminary_Exam_Admission_to_Candidacy_and_Dissertation_Defense.p
Preliminary Examination; Admission to Candidacy and Dissertation Defense
Policy 308 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.308_Transfer_of_Credit_Hours.pdf), Transfer of External Credits, Course Substitutions and Waivers

Enrollment Policies

Policy 400 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.400_Auditing_Courses.pdf), Auditing Courses
Policy 401 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.401_Continuous_Enrollment_for_Students_Enrolled_in_Thesis_and_Dissertati
Continuous Enrollment for Students Enrolled in Thesis and Dissertation Research
Policy 402 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.402_Enrollment_Requirements_Degree_Time_Limits_and_Leaves_of_Absence
Enrollment Requirements, Degree Time Limits, and Leaves of Absence
Policy 403 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.403_Readmission_to_a_Degree_Program.pdf), Readmission to a Degree Program
Policy 404 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.404_Transfer_of_Students_Between_the_UTHealth_SPH_Campuses.pdf), Transfer of Students between the UTHealth SPH Campuses
Policy 405 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.405_Verification_of_Degrees_for_International_Applicants.pdf), Verification of Degrees for International Applicants
Policy 406 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.406_Teaching_or_Graduate_Assistant_Enrollment_Status_Requirement.pdf), Teaching of Graduate Assistant Enrollment Status Requirement

Policy 100, Student Academic Grievance Process

The School of Public Health expects its students to put forth their best effort and assume the primary responsibility for meeting their academic and professional goals, but recognizes that there may be instances when students raise academic grievances. Students should first attempt to resolve their academic grievance informally, such as meeting with their faculty member, their faculty advisor, and/or the department Chair. When these informal methods do not resolve the student's grievance, students may request a review and recommendation from the Academic Grievance Committee through its Academic Grievance Resolution Process.

For the complete policy statement, see Policy 100, Student Academic Grievance Process (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.100_Student_Academic_Grievance_Process_and_Flowchart.pdf).

Policy 201, Course Grading

Letter grades ("A," "B," "C," or "F") are given for all MPH core courses. Elective courses may be letter-graded or graded on the basis of pass/fail ("P" or "F") at the discretion of the instructor. Grades in pass/fail courses will not be included in the GPA calculation. A GPA will be calculated from all letter-graded courses. In computing GPA per hour, the following scores are used: A = 4 points; B = 3 points; C = 2 points; F = 0 points. The GPA is calculated by multiplying the grade points by the number of credit hours for each course. Repeated courses will be listed on the transcript along with the original course. However, please note the following stipulations:

- Students have the opportunity to retake a course only one time for recalculation of the GPA. GPA recalculations are not automatic. The GPA will be calculated on the letter-graded course only using the grade from the repeated course.
- A third attempt is rarely approved, and will only be considered if the first two attempts were failures. Students may petition to the Office of Academic Affairs and Student Services to retake a course a third time.
- The final attempt will be the grade calculated into the GPA.
- Students who do not request a GPA recalculation for a repeated course will have both course grades calculated into the GPA.

An Incomplete ("I") will revert to an "F" if the coursework is not successfully completed after one semester. However, at the course instructor's discretion, a grade may be entered to replace the "F" when the work from the incomplete is completed. A "W" grade is assigned when a student withdraws from a course.

For the complete policy statement, see Policy 201, Course Grading (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.201_Course_Grading.pdf).

Policy 308, Transfer of External Credits, Course Substitutions and Waivers

For students entering fall 2018 and thereafter, up to nine (9) graduate semester credit hours earned at other accredited institutions may be transferred and applied to UTHealth School of Public Health graduation requirements if approved by the UTHealth Houston School of Public Health Office of Academic Affairs and Student Services and the student's faculty advisor. Transfer of external credit hours, course waivers and substitutions may only apply towards degree required leveling, elective, minor, or breadth coursework not linked to program required competencies. Major required courses cannot be waived or substituted. These hours must not have been applied toward another awarded degree. See Policy 308 for detailed information and processes.

For dual degree programs, shared credit hours are earned in courses that are part of an agreed upon curriculum. Up to 12 completed credit hours applied toward the MPH degree requirements can be from the partner institution provided that the course has been reviewed and recommended by the student's advisory committee and approved by the UTHealth Houston School of Public Health Office of Academic Affairs and Student Services. This applies to all concurrent/dual degree programs and external transfer credits. Students should contact the program coordinator for the dual degree program for further information.

General non-degree and certificate students can transfer up to 16 semester credit hours of UTHealth Houston School of Public Health coursework if accepted into a degree program, a grade of "A" or "B" is earned in the course, and the course is completed within five (5) years prior to matriculation into the degree program. Credit hours earned as part of a master's degree program do not count toward a doctoral degree program.

For the complete policy statement, see Policy 308, Transfer of External Credits, Course Substitutions and Waivers (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.308_Transfer_of_Credit_Hours.pdf).

Policy 402, Enrollment Requirements, Degree Time Limits, and Leaves of Absences

A student is classified as "full-time" if enrolled in at least nine (9) semester credit hours during the fall or spring semesters, at least six (6) semester credit hours during the summer.

Required Enrollment. Enrollment is required in the semester in which the research proposal is submitted and continuously through the semester in which all requirements for graduation are completed. Enrollment is required during the semester in which the preliminary examination is taken and in the semester in which the student is involved in a practicum/internship. Enrollment is required in the semester in which students graduate. Students must maintain enrollment so that any absence from the degree program does not exceed one (1) calendar year (three (3) consecutive semesters) unless a formal leave of absence is granted.

Time Limits for Degrees and Extensions. Students are expected to complete master's degree programs (MPH and MS) within five (5) years and doctoral degree programs (DrPH and PhD) within seven (7) years. In case of extenuating circumstances, a student may request a one-year extension. The possibility of a second year of extension exists under extraordinary circumstances. Students who do not graduate within the approved time limit will be dismissed from the program and must be readmitted in order to complete the degree program in effect at the time of readmission.

Non-Enrollment. UTHealth Houston School of Public Health recognizes that in some instances, students may need to take time away from their studies to attend other important aspects and events in their lives. If such events are limited to a single semester, the student may choose not to enroll for that semester without unduly slowing the degree program. Students who may need to be away for more than one (1) semester, should seriously consider requesting a Leave of Absence (LOA) in order to preserve continuing student status. If the student does not request or is not granted a LOA and does not enroll for one calendar year (three (3) consecutive semesters) the student is automatically dismissed from the School and will need to seek readmission to return to their degree program.

Leave of Absence (LOA). Students who anticipate interrupting their degree program for more than two (2) semesters should consider requesting a LOA. The LOA "stops the clock" on the student's degree program and does not add to the timeline for completing the degree. The LOA is granted for one (1) calendar year. A second year may be granted. Students who need to be away from the school for longer periods should consider withdrawing from the degree program and applying for readmission when their situation improves. The student may enroll in classes at any time during the LOA if his/her situation changes and the LOA is no longer needed.

For the complete policy statement, see Policy 402, Enrollment Requirements, Degree Time Limits, and Leaves of Absence (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.402_Enrollment_Requirements_Degree_Time_Limits_and_Leaves_of_Absence

UTHealth Houston Handbook of Operating Procedures (HOOP)

The university's policies connect the university's mission to the everyday actions of its community, clarify the university's expectations of its individual members, mitigate institutional risk, enhance efficiency and support the university's compliance with laws and regulations. Two policies are highlighted below, however, students are charged with knowledge of and compliance with all UTHealth Houston regulations set forth in the UTHealth Houston Handbook of Operating Procedures (https://www.uth.edu/hoop/) (HOOP).

HOOP Policy 101, Disability and Pregnancy Accommodation

UTHealth Houston is committed to providing reasonable accommodation to all members of the University community and to individuals who access services or programs of the University who have or had an impairment that substantially limits a major life activity. Reasonable accommodation may be provided to an individual with a disability to enable the individual to participate in University academic programs, services, and activities, so long as it does not create undue hardship or fundamentally alter the essential elements of a program or position.

Students seeking disability-related accommodation must contact University Relations & Equal Opportunity (UREO) to initiate the accommodation process. Accommodation requests are considered on a case-by-case basis considering the student's individual limitations, accommodation needs, and the operational realities of the university. If the requestor is determined to be a qualified individual, the requestor, the designated Section 504 Coordinator and applicable faculty will engage in an interactive process facilitated by UREO to determine if it is possible to grant reasonable accommodation.

Accommodations are not retroactive, and require advance notice to implement. To allow adequate time to evaluate the required documentation, engage in the interactive process, and make arrangements for any accommodation to be provided, requestors are strongly urged to contact UREO as soon as possible.

The school is not required to grant accommodations that constitute a fundamental alteration of the program or course. Specifically, the school does not have to modify a requirement, including attendance, that is essential to the educational purpose or objective of a program or class. Decisions regarding essential requirements of a course or program will be made by a group of people who are trained, knowledgeable, and experienced in the area through a careful, thoughtful, and rational review of the academic program and its requirements. Decision-makers will consider a series of alternatives for the essential requirements, as well as whether the essential requirement(s) in question can be modified for a specific student with a disability.

For additional information on the disability accommodation process, please see HOOP Policy 101, Disability and Pregnancy Accommodation (https://www.uth.edu/hoop/policy.htm?id=1448050).

A list of UTHealth Houston 504 Coordinator's by school are found at https://www.uth.edu/hoop/section-504-coordinators.htm.

Contact Information:

Office of University Relations and Equal Opportunity
7000 Fannin, Suite 150
Houston, Texas 77030
Phone: 713-500-2255
Email: call@uth.tmc.edu
Website: https://go.uth.edu/equalopportunity (https://go.uth.edu/equalopportunity/)

HOOP Policy 186, Student Conduct and Discipline

All students are required to obey federal, state, and local laws and to comply with the University of Texas System Board of Regents Rules and Regulations, the rules and regulations of The University of Texas Health Science Center at Houston, and directives issued by administrative officials of the University or UT System in the course of their authorized duties. Students are also required to obey standards of conduct appropriate for the academic institution. Any student who engages in conduct that violates the Regents' Rules and Regulations, University or UT System rules, or federal, state, or local laws is subject to disciplinary action.

For additional information on the student conduct and discipline process, please see HOOP Policy 186, Student Conduct and Discipline (https://www.uth.edu/hoop/policy.htm?id=1448220).

Term and Course Structure

Term Structure

Course credits correspond with contact hours per week per semester as shown in the chart below.

Credit Hours	Total Contact Hours	Fall Semester 15 weeks	Spring Semester 15 weeks	Summer Semester 12-week session	Summer Session 6-week session
1	15	1 hour/ week	1 hour/ week	1.25 hours/ week	2.5 hours/ week
2	30	2 hours/ week	2 hours/ week	2.5 hours/ week	5 hours/ week
3	45	3 hours/ week	3 hours/ week	3.75 hours/ week	7.5 hours/ week
4	60	4 hours/ week	4 hours/ week	5 hours/ week	10 hours/ week

Course Structure

A course prefix, catalog number and section number represents the course modality, level and academic department as described in the chart below. All courses are graduate level courses. Students should seek advice from their faculty advisor and refer to their degree planner when selecting coursework to ensure courses will be applied toward their degree. Availability of courses is contingent upon sufficient registration.

Course Prefix	Definition
PH	Available to both master and doctoral-level students
PHM	Available to master-level students*
PHD	Available to doctoral-level students

* PHM courses do not count towards the minimum required credits for doctoral programs.

Catalog Number	Academic Department
1000 – 1499	Health Promotion and Behavioral Sciences
1600 – 1999	Biostatistics and Data Science
2100 – 2499	Environmental and Occupational Health Sciences
2500 – 2999	Epidemiology
3000 – 3999	Management, Policy, and Community Health
5000 – 9999	Interdepartmental

Grading Type	Grading Component
L	Letter-graded. Courses without an 'L' designation have a pass/fail grading component.

Technical Requirements

Student Technical Requirements

Students at UTHealth Houston School of Public Health must have a personal computer (i.e. laptop or tablet) available to them as a graduate student. For software not provided through the virtual computer lab, the school provides reduced software prices through the UT Bookstore (https://www.bkstr.com/utmedicalstore/shop/electronics/software/?cm_sp=GlobalJanBTSFY22-_-MultiClickPrimarySoftware-_-1393) for certain required software titles, including Windows Operating System, MacOS, Microsoft Office, and certain statistical software products required to use during study. For compatibility purposes, students should have access to a personal computer running the latest version of either the Windows Operating System or Macintosh Operating system. However, students should note that the most commonly used platform is the Windows Operating System.

All students are provided with a UTHealth Houston user account, which offers access to a Web-based electronic mail application (Outlook), an online learning management system (Canvas), the ability to connect personal wireless computers within campuses, and a file repository and sharing system.

All students **need** to have a computer with the following minimum requirements and recommendations:

- Operating System: Windows 10 or higher, Mac OS X 11.1 (Big Sur) or higher
- Web Camera: Resolution at least 1280 x 720, should also include a microphone
- Memory (RAM): 8 GB minimum, 16 GB or more is recommended
- Browser: Edge Chromium, Chrome, Firefox
- Internet Speeds: Preferred: DSL and Cable connectivity form outside the campus. Dialup and ISDN services will not provide enough bandwidth for most applications to function properly.
- Antivirus Software: You must have Antivirus software. Windows 10 has built-in anti-virus software (Defender). Sophos Antivirus for Mac users is free.
- Proctor Software: You can test your system's compatibility with our proctor solution here (http://www.proctoru.com/testitout/).
- Other Software: Access to most course software through a virtual computer lab environment is provided. This system is called Parallels. You can gain access to the software and instructions for configuring the software on the "Students" section of the IT Services website. Parallels software clients are available for both Windows and Mac operating systems. Additionally, Microsoft Office is the primary application tool used by all faculty. Regardless of your operating system, you will be most compatible with your faculty if you have Microsoft Office installed.

Programs of Study

Each program has its own course of study located. To skip to a specific course of study, select one of the programs below.

Degrees

Master of Public Health

- Master of Public Health (p. 14)
- MPH in Community Health Practice (p. 15)
- MPH in Environmental Health (p. 15)
- MPH in Epidemiology (p. 16)
- MPH in Health Promotion/Health Education (p. 16)
- MPH in Health Promotion/Health Education: Dietetic Internship (p. 17)
- MPH in Health Services Organization (p. 18)
- MPH in Healthcare Management (p. 18)
- MPH in Public Health (Customized) (p. 19)

Master of Science

- Master of Science (p. 20)
- MS in Biostatistics and Data Science (p. 20)

Doctor of Public Health

- Doctor of Public Health (p. 21)
- DrPH in Community Health Practice (p. 22)
- DrPH in Health Promotion/Health Education (p. 22)

Doctor of Philosophy

- Doctor of Philosophy (p. 23)
- PhD in Behavioral Sciences and Health Promotion (p. 24)
- PhD in Biostatistics and Data Science (p. 25)
- PhD in Biostatistics and Data Science: Direct Admission (p. 25)
- PhD in Environmental Sciences: Environmental Disease Prevention Track (p. 26)
- PhD in Environmental Sciences: Total Worker Health Track (p. 27)
- PhD in Epidemiology (p. 28)
- PhD in Epidemiology: Direct Admission (p. 28)
- PhD in Management and Policy Studies: Health Economics/Health Services Research Track (p. 29)
- PhD in Management and Policy Studies: Healthcare Management/Health Policy Track (p. 30)

Minors

- Minors: (p. 30)
  - Minor in Behavioral Science
  - Minor in Biostatistics
  - Minor in Epidemiology
  - Minor in Environmental Sciences

- Minor in Health Economics
- Minor in Health Policy
- Minor in Health Services Research
- Minor in Healthcare Management

Graduate Certificates

- Certificate in Advanced Data Science (p. 32)
- Certificate in Advanced Planning and Evaluation for Health Promotion Programs (p. 33)
- Certificate in Advanced Quantitative Methods for Behavioral Sciences (p. 33)
- Certificate in Applied Biostatistics in Public Health (p. 33)
- Certificate in Culinary Nutrition and Public Health (p. 34)
- Certificate in Data Science (p. 34)
- Certificate in Dissemination and Implementation Science (p. 34)
- Certificate in Genomics and Bioinformatics (p. 35)
- Certificate in Global Health (p. 35)
- Certificate in Health Disparities (p. 36)
- Certificate in Health Promotion Program Planning and Evaluation (p. 36)
- Certificate in Healthcare Administration (p. 37)
- Certificate in Infectious Disease Epidemiology (https://catalog.uth.edu/public-health/programs/graduate-certificates/infectious-disease-epi/)
- Certificate in Introduction to Quantitative Methods for Behavioral Sciences (p. 37)
- Certificate in Leadership Theory and Practice (p. 37)
- Certificate in Maternal and Child Health (p. 38)
- Certificate in Nutrition and Public Health (p. 38)
- Certificate in Physical Activity and Public Health (p. 39)
- Certificate in Public Health (p. 39)
- Certificate in Public Health Informatics (p. 39)
- Certificate in Public Health Law Research and Policy Surveillance (p. 40)

Master of Public Health

The Master of Public Health (MPH) degree, a minimum 45 semester credit hours, is the fundamental professional degree, required by many supervisory and managerial positions in public health and recommended for others.

Degree Requirements

- Satisfactory completion of a prescribed course of study of at least one (1) academic year and a minimum of 45 semester credit hours. Only three (3) credit hours of practicum and three (3) credit hours of an integrative learning experience count toward the minimum of 45 semester credit hours. Therefore, at least 39 credit hours of didactic courses other than practicum or an integrative learning experience must be successfully completed;
- Satisfactory completion of PH 101 Foundations in Public Health (online, not-for-credit course);
- Satisfactory completion of a planned, supervised, and evaluated practicum; and
- Satisfactory completion of an integrative learning experience that demonstrates a substantial knowledge of public health.

Prescribed Course of Study

Major requirements are listed within the departmental sections of this catalog. Degree requirements may be altered in successive catalogs. Students are bound by the requirements of the catalog in force at the time of their admission or readmission.

Core Requirements for MPH Students

The following courses satisfy the MPH core public health requirement:

Code	Title	Hours
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
PHM 1690L	Introduction to Biostatistics in Public Health	4
PHM 2110L	Public Health Ecology & the Human Environment	3
PHM 2612L	Epidemiology I	3
PHM 3715L	Management & Policy Concepts in Public Health	3
PHM 5015L	Introduction to Qualitative Research in Public Health	2
Total Hours		**18**

Practicum

The practicum, or applied practice experience, is an application of learning to a "real world" setting and is a CEPH requirement for completion of the MPH degree. All practicums consist of an organized internship at an extramural agency or organization engaged in work related to public health. Alternatively, the practicum may be done intramurally if the project interacts with practice agencies.

Integrative Learning Experience (ILE)

The ILE is a CEPH requirement for completion of the MPH degree. It requires the synthesis and integration of knowledge and skills acquired in the degree program and their application to some aspect of professional practice. An ILE can be completed through one of the following avenues: completion of the department's Capstone course; completion of an original research thesis; or completion of an independent project. In all ILE options, students investigate public health issues and generate a high-quality written product. If students chose to complete an original research thesis, they will be required to follow all standard research thesis procedures.

Available Programs:

The School of Public Health offers the following Master of Public Health programs:

- MPH in Community Health Practice (p. 15)
- MPH in Public Health (Customized) (p. 19) for Dual Degree Programs (p. 19)
- MPH in Environmental Health (p. 15)
- MPH in Epidemiology (p. 16)
- MPH in Health Promotion/Health Education (p. 16)
- MPH in Health Promotion/Health Education, Dietetic Internship (p. 17)
- MPH in Healthcare Management (p. 18)
- MPH in Health Services Organization (p. 18)

MPH in Community Health Practice

The MPH in Community Health Practice is a minimum 45 semester credit hours and focuses on the application of public health sciences at the community level, and emphasizes systematic analysis and appropriate use of quantitative and qualitative health data. Faculty and students are concerned with the assessment of population health, the planning, implementation and evaluation of health programs in community settings, and appraisal of community-level effects of health policies and programs.

Special Entrance Requirements

Applicants to the MPH program should hold an undergraduate and/or graduate degrees in one of a variety of areas, including the social and behavioral sciences, business, the biological and medical sciences, law, and/or quantitative methods. For more information, see the Admissions (p. 5) section.

Course of Study

The following courses are required for an MPH in Community Health Practice:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Public Health Core Courses		
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
PHM 1690L	Introduction to Biostatistics in Public Health	4
PHM 2110L	Public Health Ecology & the Human Environment	3
PHM 2612L	Epidemiology I	3
PHM 3715L	Management & Policy Concepts in Public Health	3
PHM 5015L	Introduction to Qualitative Research in Public Health	2
Major Courses		
PH 1112L	Community Assessment Methods in Public Health	3
PHM 3620L	Principles and Practice of Public Health	4
PHM 3630	Health Program Planning, Implementation, and Evaluation	3
PHM 3800L	Working with Diverse Communities	3
PHM 3922	Economic and Social Determinants of Health	3
Elective Courses		
Select 5 credits		5
Applied Practice Experience		
PH 9997	Practicum	3
Integrative Learning Experience [2]		
PHM 3996L	Capstone for MPACH Students	3
or PHM 9998	Integrative Learning Experience/Thesis Research	
Total Hours		**45**

[1] Online, not-for-credit course

[2] Students may choose to complete the Integrative Learning Experience through a departmental Capstone course (PHM 3996L Capstone for MPACH Students), an independent ILE or traditional academic thesis (PHM 9998 Integrative Learning Experience/Thesis Research).

For a sample course of study, see the MPH in Community Health Practice degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.MPH.CHP.2024-2025.docx).

MPH in Environmental Health

The MPH in Environmental Health is a minimum of 45 semester credit hours and provides a foundation in environmental and occupational health sciences, in addition to the skills needed to function as a practitioner in a variety of public health settings. Students are prepared to assume positions in public health practice in government or the private sector.

Special Entrance Requirements

Applicants to the MPH program should have successfully completed coursework in mathematics, chemistry, and biological sciences. Applicants typically hold a bachelor's or higher degree in the physical, chemical, or biological sciences; engineering; nursing; or medicine from a regionally accredited institution of higher education. Applicants with majors from other disciplines who satisfy the undergraduate course-work requirements will be considered. For more information, see the Admissions section (p. 5).

Course of Study

The following courses are required for an MPH in Environmental Health:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Public Health Core Courses		
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
PHM 1690L	Introduction to Biostatistics in Public Health	4
PHM 2110L	Public Health Ecology & the Human Environment	3
PHM 2612L	Epidemiology I	3
PHM 3715L	Management & Policy Concepts in Public Health	3
PHM 5015L	Introduction to Qualitative Research in Public Health	2
Major Courses		
PH 2175L	Toxicology I: Principles of Toxicology	3
PH 2205L	Health & Safety Program Management	3
PHM 2135L	Risk Analysis: Principles and Practice	3
Select one of the following:		3
PH 2150	Air Environment	
PHM 2230L	Water Environment	
PH 2245	Fundamentals of Industrial Hygiene	
Electives		
Select 9 credits [2]		9
Applied Practice Experience		
PH 9997	Practicum	3
Integrative Learning Experience [3]		
PHM 2496	Capstone for EOHS Students	3
or PHM 9998	Integrative Learning Experience/Thesis Research	
Total Hours		**45**

[1] Online, not-for-credit course
[2] Students should consult with their advisor when selecting elective courses. Students are required to complete at least three (3) credit hours of EOHS coursework (2000-2499) as part of their of electives. Total elective credits will be dependent on the selected required course chosen to ensure students complete the minimum 45 credit hours required for the degree.
[3] Students may choose to complete the Integrative Learning Experience through a departmental Capstone course (PHM 2496 Capstone for EOHS Students), an independent ILE or traditional academic thesis (PHM 9998 Integrative Learning Experience/Thesis Research).

For a sample course of study, see the MPH in Environmental Health degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.MPH.EOHS_IH_OCM.2023-2024.docx).

Special Programs

The MPH in Environmental Health is associated with two separate special programs: Industrial Hygiene and the Occupational and Environmental Medicine Residency Program. For more information about these optional curriculums, see the Special Programs (p. 41) section.

MPH in Epidemiology

The MPH in Epidemiology is a minimum of 45 semester credit hours designed to provide a breadth of achievement in the five core disciplines of public health, as well as additional knowledge and skills in epidemiology. The goal of this program is to prepare students to put epidemiologic concepts and methods into public health practice, conduct research studies in public health, and interpret scientific evidence relevant to public health.

Special Entrance Requirements

Applicants to the MPH program should hold a bachelor's degree in the biomedical or social sciences from a regionally accredited university or school. Experience in public health practice is also considered favorably. For more information, see the Admissions (p. 5) section.

Course of Study

The following courses are required for an MPH in Epidemiology:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	
Public Health Core Courses		
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
PHM 1690L	Introduction to Biostatistics in Public Health	4
PHM 2110L	Public Health Ecology & the Human Environment	3
PHM 2612L	Epidemiology I	3
PHM 3715L	Management & Policy Concepts in Public Health	3
PHM 5015L	Introduction to Qualitative Research in Public Health	2
Major Courses		
PH 1700L	Intermediate Biostatistics	3
PH 2615L	Epidemiology II	3
PH 2710L	Epidemiology III	3
Emphasis Area [2]		
Select 6 credit hours of selected epidemiology coursework (2500-2999) in Public Health Practice or Public Health Research		6
Electives		
Select 6 credits		6
Applied Practice Experience		
PH 9997	Practicum	3
Integrative Learning Experience [3]		
PHM 2996	Capstone for EPID Students	3
or PHM 9998	Integrative Learning Experience/Thesis Research	
Total Hours		**45**

[1] Online, not-for-credit course
[2] Students should consult with their advisor when selecting which track to complete.
- Public Health Practice: Students who elect to complete an emphasis area in public health practice should work with their advisor when selecting coursework appropriate for their academic and professional goals.
- Public Health Research: Students who elect to complete an emphasis area in public health research should work with their advisor when selecting coursework appropriate for their academic and professional goals. Students are strongly encouraged to enroll in PH 2858L Quantitative Analysis for Public Health Research and Practice. Students who elect to complete public health research coursework are expected to complete a traditional academic thesis as their integrative learning experience.

[3] Students may choose to complete the Integrative Learning Experience through a departmental Capstone course (PHM 2996 Capstone for EPID Students) or an independent ILE or traditional academic thesis (PHM 9998 Integrative Learning Experience/Thesis Research).

For a sample course of study, see the MPH in Epidemiology degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.MPH.EPID.2024-2025.docx).

MPH in Health Promotion/Health Education

The MPH in Health Promotion/Health Education is a minimum of 45 semester credit hours and is the basic professional degree and integrates the core public health disciplines with behavioral and social sciences. The curriculum emphasizes intervention methods for health promotion development and evaluation in a variety of settings.

Special Entrance Requirements

Applicants to the MPH program should hold an undergraduate and/or graduate degrees in one of a variety of areas, including the social and behavioral sciences, business, the biological and medical sciences, law, and/or quantitative methods. For more information, see the Admissions (p. 5) section.

Course of Study

The following courses are required for an MPH in Health Promotion/Health Education:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Public Health Core Courses		
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
PHM 1690L	Introduction to Biostatistics in Public Health	4
PHM 2110L	Public Health Ecology & the Human Environment	3
PHM 2612L	Epidemiology I	3
PHM 3715L	Management & Policy Concepts in Public Health	3
PHM 5015L	Introduction to Qualitative Research in Public Health	2
Major Courses		
PHM 1111L	Health Promotion Theory and Methods	4
PH 1112L	Community Assessment Methods in Public Health	3
PHM 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	3
PHM 1120L	Program Evaluation	3
PH 1433	Research Seminar in Health Promotion and Behavioral Sciences	1
Elective Courses		
Select 7 credits		7
Applied Practice Experience		
PH 9997	Practicum	3
Integrative Learning Experience [2]		
PHM 1496	Capstone for HPBS Students	3
or PHM 9998	Integrative Learning Experience/Thesis Research	
Total Hours		**45**

1 Online, not-for-credit course

2 Students may choose to complete the Integrative Learning Experience through a departmental Capstone course (PHM 1496 Capstone for HPBS Students) or an independent ILE or traditional academic thesis (PHM 9998 Integrative Learning Experience/Thesis Research).

For a sample course of study, see the MPH in Health Promotion/Health Education degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.MPH.HPHE.2024-2025.docx).

MPH in Health Promotion/Health Education: Dietetic Internship

The MPH in Health Promotion & Health Education, Dietetic Internship is a minimum 45 semester credit hours and is the fundamental degree in public health nutrition. Students delve into this area of concentration through didactic work, supervised practice, and their final specialty practice rotation with staff relief in an area of public health nutrition selected by each intern.

This program provides students with an opportunity to complete an MPH with an emphasis in Health Promotion/Health Education while simultaneously completing the requirements of an accredited Dietetic Internship program. Graduates of the Dietetic Internship are prepared to practice as entry-level dietitians, are eligible to take the Registration Examination for Dieticians and are qualified to apply for dietetic licensure through the Texas Department of State Health Services. The Dietetic Internship Program is administered through the Michael & Susan Dell Center for Healthy Living (https://sph.uth.edu/research/centers/dell/). This is a two-year program with a program fee of $7,000. For more information see the School of Public Health Dietetic Internship Program (https://sph.uth.edu/research/centers/dell/dietetic-internship-program/) website.

Course of Study

The following courses are required for an MPH in Health Promotion/Health Education, Dietetic Internship:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Public Health Core Courses		
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
PHM 1690L	Introduction to Biostatistics in Public Health	4
PHM 2110L	Public Health Ecology & the Human Environment	3
PHM 2612L	Epidemiology I	3
PHM 3715L	Management & Policy Concepts in Public Health	3
PHM 5015L	Introduction to Qualitative Research in Public Health	2
Major Courses		
PHM 1111L	Health Promotion Theory and Methods	4
PHM 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	3
PHM 1229	Medical Nutrition Therapy Simulation Lab	2
PHM 1231L	Advanced Medical Nutrition Therapy	3
PHM 1232L	Public Health Nutrition Practice	3
PH 5040L	Nutrition Research Methods	1
PH 5030	Diabetes Seminar	1
PH 5031	Garden for Health [2]	2
PH 5032	Culinary Medicine [2]	2
Applied Practice Experience		
PH 9997	Practicum (section 800, first year) [3]	1
PH 9997	Practicum (section 850, second year) [3]	2
Integrative Learning Experience [4]		
PHM 1496	Capstone for HPBS Students (Special Topic: Seed-to-Plate Prevention)	3
or PHM 9998	Integrative Learning Experience/Thesis Research	
Total Hours		**45**

1 Online, not-for-credit course

2 Course Fee: $75.00

3 Program fee: $3,500 each section

4 Students may choose to complete the Integrative Learning Experience through a departmental Capstone course (PHM 1496 Capstone for HPBS Students (Special Topic: Seed-to-Plate Prevention)) or

a traditional academic thesis (PHM 9998 Integrative Learning Experience/Thesis Research).

For a sample course of study, see the MPH in Health Promotion/Health Education, Dietetic Internship degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.MPH.HPHE_DI.2024-2025.docx).

MPH in Healthcare Management

The MPH in Healthcare Management is a minimum 45 semester credit hours and is designed to provide students with a solid foundation in management in an interdisciplinary public health environment and a basis for understanding key managerial functions within the broad spectrum of public health systems. Students gain an appreciation of all aspects of management, including organizational theory, finance, operations management, law and strategy, which will help to improve organizational and community decision-making. A distinctive characteristic of this healthcare management degree program is recognition of the importance of linking private-sector healthcare institutional management with public-sector healthcare management and related community initiatives.

Special Entrance Requirements

Applicants to the MPH program should hold an undergraduate and/or graduate degrees in one of a variety of areas, including the social and behavioral sciences, business, the biological and medical sciences, law, and/or quantitative methods. For more information, see the Admissions (p. 5) section.

Course of Study

The following courses are required for an MPH in Healthcare Management:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Public Health Core Courses		
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
PHM 1690L	Introduction to Biostatistics in Public Health	4
PHM 2110L	Public Health Ecology & the Human Environment	3
PHM 2612L	Epidemiology I	3
PHM 3715L	Management & Policy Concepts in Public Health	3
PHM 5015L	Introduction to Qualitative Research in Public Health	2
Major Courses		
PHM 3718L	Accounting for Healthcare Management	2
PHM 3720L	Healthcare Finance	2
PH 3735L	Healthcare Strategic Management	3
PH 3736L	Healthcare Payment Systems and Policy	3
PH 3738L	Legal Issues in Healthcare	3
PHM 3744L	Organizational Behavior and Human Resource Management in Health Services Organizations	3
PHM 3746L	Evaluation & Improvement of Healthcare Quality	3
PH 3747L	Healthcare Operations Management	2
Applied Practice Experience		
PH 9997	Practicum	3
Integrative Learning Experience		
PHM 3996L	Capstone for MPACH Students [2]	3
or PHM 9998	Integrative Learning Experience/Thesis Research	
Total Hours		**45**

1. Online, not-for-credit course
2. Students may choose to complete the Integrative Learning Experience through a departmental Capstone course (PHM 3996L Capstone for MPACH Students) or an independent ILE or traditional academic thesis (PHM 9998 Integrative Learning Experience/Thesis Research).

For a sample course of study, see the MPH in Healthcare Management degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.MPH.HCM.2024-2025.docx). (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.MPH.HCM.2024-2025.docx)

MPH in Health Services Organization

The MPH in Health Services Organization is a minimum 45 semester credit hours and emphasizes the planning, management, and evaluation of health systems, services, technologies, and policy. The curriculum includes health economics, decision analysis, health services research, public health and legislative processes, survey research, outcomes research, quantitative methods, evaluation research, health disparities and vulnerable populations, health administration, economic and social determinants of health, utilization of health services, and ethical and legal aspects of public health.

Special Entrance Requirements

Applicants to the MPH program should hold an undergraduate and/or graduate degrees in one of a variety of areas, including the social and behavioral sciences, business, the biological and medical sciences, law, and/or quantitative methods. For more information, see the Admissions (p. 5) section.

Course of Study

The following courses are required for an MPH in Health Services Organizations:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Public Health Core Courses		
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
PHM 1690L	Introduction to Biostatistics in Public Health	4
PHM 2110L	Public Health Ecology & the Human Environment	3
PHM 2612L	Epidemiology I	3
PHM 3715L	Management & Policy Concepts in Public Health	3
PHM 5015L	Introduction to Qualitative Research in Public Health	2
Major Courses		
PHM 3910	Health Economics	3

PH 3915	Methods for the Economic Evaluation of Health Programs	3
PH 3920	Health Service Delivery and Performance	3
Select 3 credits of the following:		3
PHM 3746L	Evaluation & Improvement of Healthcare Quality	
PH 3940	Health Care Outcomes and Quality Research	
Select 3 credits of the following:		3
PH 3815	Health Policy Analysis	
PHD 3930	Econometrics in Public Health	
Select 3 credits of the following:		3
PHM 3810	Health Policy in The United States	
PH 3818	Texas Health Policy: Emerging Issues and New Approaches	
Select 3 credits of the following:		3
PH 3815	Health Policy Analysis	
PHD 3922	Economic and Social Determinants of Health	
PHD 3926L	Health Survey Research Design	
PHD 3930L	Econometrics in Public Health	
PHD 3931	Advanced Econometrics	
PH 3736L	Healthcare Payment Systems and Policy	
Applied Practice Experience		
PH 9997	Practicum	3
Integrative Learning Experience [2]		
PHM 3996L	Capstone for MPACH Students	3
or PHM 9998	Integrative Learning Experience/Thesis Research	
Total Hours		**45**

1 Online, not-for-credit course

2 Students may choose to complete the Integrative Learning Experience through a departmental Capstone course (PHM 3996L Capstone for MPACH Students) or an independent ILE or traditional academic thesis (PHM 9998 Integrative Learning Experience/Thesis Research).

For a sample course of study, see the MPH in Health Services Organizations degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.MPH.HSO.2024-2025.docx).

MPH in Public Health (Customized)

The Master of Public Health Customized plan offers student the flexibility to complete interdisciplinary coursework relevant to their academic and professional interests. Students will work with their advisor to select a minimum of five (5) competencies to be met in an advanced public health area. These competencies are in addition to the MPH core competencies.

Course of Study

The following courses are required for a Customized MPH:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Public Health Core Courses		
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
PHM 1690L	Introduction to Biostatistics in Public Health	4
PHM 2110L	Public Health Ecology & the Human Environment	3
PHM 2612L	Epidemiology I	3
PHM 3715L	Management & Policy Concepts in Public Health	3
PHM 5015L	Introduction to Qualitative Research in Public Health	2
Advanced Public Health Coursework		
Select 9 credits from the approved Advanced Public Health Coursework List [2]		9
Elective Courses		
Select 12 credits		12
Applied Practice Experience		
PH 9997	Practicum	3
Integrative Learning Experience [3]		
Select 3 credits of an approved ILE course		3
Total Hours		**45**

1 Online, not-for-credit course

2 See Advanced Public Health Coursework List below

3 Students may choose to complete the Integrative Learning Experience through one of the following departmental Capstone courses if they meet the prerequisite and CEPH competency prerequisites (PHM 1496 Capstone for HPBS Students, PHM 2496 Capstone for EOHS Students, PHM 2996 Capstone for EPID Students, PHM 3996L Capstone for MPACH Students or PHM 5096 Capstone for Customized Students) or an independent ILE or traditional academic thesis (PHM 9998 Integrative Learning Experience/Thesis Research).

Advanced Public Health Courses

Customized MPH students are required to select a minimum of nine (9) credit hours of approved Advanced Public Health Coursework from the below list of courses.

Code	Title	Hours
PHM 1111L	Health Promotion Theory and Methods	4
PH 1112L	Community Assessment Methods in Public Health	3
PHM 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	3
PHM 1120L	Program Evaluation	3
PHM 1229	Medical Nutrition Therapy Simulation Lab	2
PHM 1231L	Advanced Medical Nutrition Therapy	3
PHM 1232L	Public Health Nutrition Practice	3
PH 1700L	Intermediate Biostatistics	3
PH 1820L	Applied Linear Regression	3
PH 1821L	Applied Multivariate Analysis for Biostatistics	3
PH 1830L	Categorical Data Analysis	3
PH 1910L	Probability and Distribution Theory	3
PH 1911L	Statistical Inference	3
PHM 2135L	Risk Analysis: Principles and Practice	3
PH 2175L	Toxicology I: Principles of Toxicology	3
PH 2205L	Health & Safety Program Management	3
PHM 2230L	Water Environment	3

PH 2615L	Epidemiology II	3
PH 2710L	Epidemiology III	3
PHM 2740L	Cardiovascular Disease Epidemiology and Prevention	3
PH 2765L	Pediatric Epidemiology	3
PH 2795	Disease Detectives: International Epidemic Investigations	3
PH 2858L	Quantitative Analysis for Public Health Research and Practice	3
PHM 3620L	Principles and Practice of Public Health	4
PHM 3630	Health Program Planning, Implementation, and Evaluation	3
PHM 3718L	Accounting for Healthcare Management	2
PHM 3720L	Healthcare Finance	2
PH 3735L	Healthcare Strategic Management	3
PH 3736L	Healthcare Payment Systems and Policy	3
PHM 3744L	Organizational Behavior and Human Resource Management in Health Services Organizations	3
PHM 3746L	Evaluation & Improvement of Healthcare Quality	3
PH 3747L	Healthcare Operations Management	2
PHM 3800L	Working with Diverse Communities	3
PHM 3810	Health Policy in The United States	3
PHM 3910	Health Economics	3
PH 3915	Methods for the Economic Evaluation of Health Programs	3
PH 3920	Health Service Delivery and Performance	3
PHM 3922	Economic and Social Determinants of Health	3
PH 5040L	Nutrition Research Methods	1

For a sample of the course of study, see the Customized MPH degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.MPH.Customized.2021-2022.docx).

Master of Science

The Master of Science (MS) degree, a minimum of 36 semester credit hours, signifies academic accomplishment in a public health discipline and is available to those who plan careers in academia and research.

Degree Requirements

- Satisfactory completion of a prescribed course of study of at least one (1) academic year and a minimum of at least 36 semester credit hours. A maximum of six (6) credit hours of thesis count toward the minimum of 36 credit hours. If the student chooses to elect a practicum, no more than three (3) credit hours of practicum and three (3) credit hours of thesis count toward the minimum of 36 credit hours. Therefore, at least 30 credit hours of didactic courses other than practicum and/or thesis must be successfully completed;
- Satisfactory completion of PH 101 Foundations in Public Health (online, not-for-credit course);
- Satisfactory completion of one epidemiology course, if one is not already covered in the major area;
- Satisfactory completion of a research thesis; and
- Satisfactory delivery of an oral presentation of their thesis defense. All completed theses will be made available to the general public.

Prescribed Course of Study

Major requirements are listed within the departmental sections of this catalog. Degree requirements may be altered in successive catalogs. Students are bound by the requirements of the catalog in force at the time of their admission or readmission.

Practicum

The practicum, or applied practice experience, is an application of learning to a “real world” setting. All practicums consist of an organized internship at an extramural agency or organization engaged in work related to public health. Alternatively, the practicum may be done intramurally if the project interacts with practice agencies. Although not a requirement, MS students are encouraged to include a practicum in their degree plan.

Academic Thesis

Students are required to complete a research thesis deemed by the faculty to be of excellent quality and demonstrate an appropriate depth of knowledge in the field of study. If approved by the student’s advisory committee, a student may elect to include an article of publishable quality consistent with the standards of a peer-reviewed journal. The article is a part of the final submission to the Office of Research and contains all supporting elements of an acceptable research thesis. More information about a student’s advisory committee can be found in the Academic Policies (p. 9) section.

Available Programs:

The School of Public Health offers the following MS program:

- MS in Biostatistics (p. 20)

MS in Biostatistics and Data Science

The MS in Biostatistics and Data Science degree program is a minimum 36 semester credit hours, and provides training in research design, basic statistical theory, data analysis, computer applications, and statistical consultation. Graduates of the program are prepared to assume statistical posts in government, private health agencies, or in health research programs. The program emphasizes fundamental statistical theory and methods and provides the basis for doctoral level biostatistical studies.

Special Entrance Requirements

Applicants to the MS program should hold an undergraduate degree that emphasizes the development of strong quantitative skills through multivariate calculus and at least one semester of linear algebra. Examples are degree programs in mathematical, physical, biological, or social sciences. Advanced mathematical training and knowledge of computer programming are highly desirable. For more information, see the Admissions (p. 5) section.

Course of Study

The following courses are required for the MS in Biostatistics and Data Science:

Code	Title	Hours
Required for all School of Public Health Students		
PH101	Foundations in Public Health [1]	0
Leveling and Other Required Courses [2]		**0**

PHM 1690L	Introduction to Biostatistics in Public Health	
PH 1630L	Introduction to R Programming for Biostatistics and Data Science	
PH 1631L	Introduction to Python Programming for Biostatistics and Data Science	
Major Courses		
PH 1700L	Intermediate Biostatistics	3
PH 1820L	Applied Linear Regression	3
PH 1821L	Applied Multivariate Analysis for Biostatistics	3
PH 1830L	Categorical Data Analysis	3
PH 1910L	Probability and Distribution Theory	3
PH 1911L	Statistical Inference	3
PH 1975L	Introduction to Data Science	3
PH 1976L	Fundamentals of Data Analytics and Predictions	3
Electives		
Select 9 credits [3]		9
Thesis		
PHM 9998	Integrative Learning Experience/Thesis Research	3
Total Hours		**36**

1 Online, not-for-credit course

2 Leveling courses do not count toward the total number of credits for the degree program.

3 Students must complete a 3 credit hour epidemiology course of their choice (2500-2999). Students are encouraged to complete elective coursework in biostatistics (1600-1999; not already on the degree planner). Students should consult with their advisor when selecting elective courses. Students may also elect to complete a minor outside of their department. Students who opt to complete a minor should consult with their advisor and the minor's department for requirements.

For a sample course of study, see the MS in Biostatistics and Data Science degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.MS.BIOS.2024-2025.docx).

Doctor of Public Health

The Doctor of Public Health (DrPH) degree signifies distinguished scholarly accomplishment and is available to those who plan careers in advanced professional practice, academia, or community-based research.

Degree Requirements

- Satisfactory completion of a prescribed course of study of at least one (1) academic year and a minimum of at least 54 semester credit hours. Only three (3) credit hours of practicum and six (6) credit hours of dissertation count toward the minimum of 54 credit hours. Therefore, at least 45 credit hours of didactic courses other than practicum or dissertation must be successfully completed.
- Satisfactory completion of PH 101 Foundations in Public Health (online, not-for-credit course);
- Satisfactory completion of a minor area of study;
- Satisfactory completion of one epidemiology course, if one is not already covered in the major, minor, or breadth areas;
- Satisfactory completion of a planned, supervised, and evaluated practicum;
- Satisfactory performance on a preliminary examination as described by the degree program;
- Satisfactory defense of the dissertation proposal and completion of an original research dissertation.

Prescribed Course of Study

Individual major requirements are listed within each program page. Degree requirements may be altered in successive catalogs. Students are bound by the requirements of the catalog in force at the time of their admission or readmission.

Minor and Breadth

Students in the DrPH program are required to complete a minor and a breadth area of study. Students should consult with their advisor when choosing a minor to align with their academic goals. DrPH programs have a pre-designed breadth already built into the degree requirements and students are not required to complete an additional breadth. For more information about the minor and breadth requirement for DrPH students, see the Academic Polices (p. 9) section.

Preliminary Exam

The preliminary examination will be taken after the courses prescribed by the degree program have been successfully completed. If a student is unable to successfully complete (i.e., demonstrate competence in) the preliminary examination after two attempts, the student will be dismissed from the DrPH program. That student may be provided an opportunity to complete the MPH degree program (if the student does not already possess a MPH degree), but the opportunity is not automatic, and acceptance into the MPH program is decided collectively by departmental faculty. For more information, see the Academic Policies (p. 9) section.

Practicum

The practicum, or applied practice experience, is an application of learning to a "real world" setting and is a CEPH requirement for completion of the DrPH degree. All practicums consist of an organized internship at an extramural agency or organization engaged in work related to public health. Alternatively, the practicum may be done intramurally if the project interacts with practice agencies. The DrPH practicum ensures that students have significant advanced-level practice experiences collaborating with practitioners, allowing opportunities to develop leadership competencies and contribute to the field.

Dissertation

Students are required to complete an original research dissertation that makes a substantial contribution to knowledge in public health. This requirement will be fulfilled when an oral defense of the dissertation research proposal and the final dissertation have been successfully completed, the document has been approved and signed by all members of the dissertation committee, and a copy has been filed in the Dean's Office.

Available Programs:

The School of Public Health offers the following Doctor of Public Health Programs:

- DrPH in Community Health Practice (p. 22)
- DrPH in Health Promotion/Health Education (p. 22)

DrPH in Community Health Practice

The DrPH in Community Health Practice is a minimum of 54 semester credit hours and offers interdisciplinary training for students who wish to practice at an advanced level in public health. Students are trained to engage in community-driven, grassroots and inter-sectoral applied research with a focus on addressing social inequity and systems-level change through the adoption of a transdisciplinary framework.

Special Entrance Requirements

Applicants to the DrPH program should have a prior MPH degree or its equivalent. Preferred applicants are those with public health work experience and those who have completed coursework in quantitative methods or who can provide evidence of quantitative abilities. All DrPH students are expected to have completed PH 1700L Intermediate Biostatistics or its equivalent. In exceptional cases, applicants without the required academic background in public health may be accepted on the condition of additional coursework in public health. For more information, see the Admissions (p. 5) section.

Course of Study

The following courses are required for a DrPH in Community Health Practice:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	
Leveling Courses [2]		
PHM 1690L	Introduction to Biostatistics in Public Health	
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	
PHM 2612L	Epidemiology I	
PHM 3715L	Management & Policy Concepts in Public Health	
Before Preliminary Exam		
PHD 1120L	Program Evaluation	3
PH 2615L	Epidemiology II	3
PHD 3620L	Principles & Practice of Public Health	4
PHD 3801L	Community Grant Writing	1
PHD 3631L	Community Engagement/ Community-Based Participatory Research	3
PHD 3625L	Practice-based Methods and Design	3
PHD 3800L	Working with Diverse Communities	3
Major Courses		
PHD 3950	Applied Leadership Studies in Public Health	3
PHD 3830	Ethics and Policy	3
PHD 1118L	Qualitative Methods	3
PH 1700L	Intermediate Biostatistics	3
PHD 5500	Principles of Adult and Community Education for Public Health	2
PH 3835	Public Health Advocacy	1
Select one of the following:		3
PHD 3918L	Geographic Information Systems Science	
PHD 3926L	Health Survey Research Design	
PH 3738L	Legal Issues in Healthcare	
Minor [3]		**9**
Applied Practice Experience		
PH 9997	Practicum	3
Integrative Learning Experience		
PHD 9999	Dissertation Research	4
Total Hours		**54**

1. Online, not-for-credit course
2. Academic credits from leveling courses do not count toward the total required number of credits for the degree program.
3. Students are required to select a minor outside of their department.

For sample course of study, see the DrPH in Community Health Practice degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.DrPH.CHP.2024-2025.docx).

DrPH in Health Promotion/Health Education

The DrPH in Health Promotion/Health Education is a minimum of 54 semester credit hours. It is designed to train students for leadership roles as public health professionals in governmental and non-governmental agencies, health departments, or for work in the research or academic setting, and emphasizes working alongside communities in the development, implementation and evaluation of theory-based public health interventions in public settings. An important component of this degree program is the ability to communicate findings to the public and policymakers, and students are expected to contribute to and apply scientific discoveries in public health settings through research.

Special Entrance Requirements

Applicants to the DrPH program should hold an earned master's degree or equivalent in public health with a substantial behavioral sciences component. Preferred applicants are those who have leadership experience through paid employment or volunteer work. In exceptional cases, applicants without the required academic background in public health may be accepted on the condition of additional coursework in public health. Applicants are asked to submit a writing sample that demonstrates competence in written communication for academic work. Theses, publications, or other academic work are preferred. Applicant should be the sole or first author on the submitted work. For more information, see the Admissions (p. 5) section.

Course of Study

The following courses are required for a DrPH in Health Promotion & Health Education:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	
Leveling and Other Required Courses [2]		**0**
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	
PHM 1690L	Introduction to Biostatistics in Public Health	
PHM 2612L	Epidemiology I	
Before Preliminary Exam		
PHD 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	3

PHD 1120L	Program Evaluation	3
PHD 1122L	Health Promotion Theories for Individuals and Groups: Part I	3
PHD 1123L	Community Health Promotion Theory and Practice	3
PHD 1420L	Quantitative Research Design for Behavioral Sciences	3
PHD 1421L	Quantitative Analysis for Behavioral Sciences	3
PH 1433	Research Seminar in Health Promotion and Behavioral Sciences	1
After Preliminary Exam		
PHD 1118L	Qualitative Methods	3
PHD 1121L	Advanced Quantitative Analysis for Behavioral Sciences	3
PHD 1450	Dissemination & Implementation Research and Practice	1
PHD 5500	Principles of Adult and Community Education for Public Health	2
PHD 3950	Applied Leadership Studies in Public Health	3
PHD 3801L	Community Grant Writing	1
PHD 3631L	Community Engagement/ Community-Based Participatory Research	3
PH 3835	Public Health Advocacy	1
Epidemiology Course Requirement [3]		**3**
Minor [4]		**9**
Applied Practice Experience		
PH 9997	Practicum	3
Integrative Learning Experience		
PHD 9999	Dissertation Research	3
Total Hours		**54**

[1] Online, not-for-credit course

[2] Academic credits from leveling courses do not count toward the total required number of credits for the degree program.

[3] All students are required to complete an Epidemiology course during their course of study. Please read carefully the following scenarios:

- If a student took PHM 2612L Epidemiology I at the UTHealth School of Public Health as a master's (MPH or MS) student, the required epidemiology course is **not** Needed, and the student may apply these credits towards electives or dissertation hours. Note that only six (6) credit hours of dissertation research can be counted toward the total required credits of the degree program.
- If a student **has** taken Epidemiology I, but it was taken at another institution, the student **must** take another epidemiology course at UTHealth School of Public Health to meet the School's epidemiology requirement. The student may elect to complete the epidemiology requirement as part of an epidemiology minor.
- If a student has **not** taken Epidemiology I at a prior institution, the student must take PHM 2612L Epidemiology I as a leveling course. The required epidemiology course requirement will then be 39 waived, and the student may apply these credits towards electives or dissertation hours. Note that only six (6) dissertation hours can be counted toward the degree planner.

[4] Students are required to complete a minor outside of their department. A minor in Epidemiology is strongly encouraged.

For a sample course of study, see the DrPH in Health Promotion/Health Education degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.DrPH.HPHE.2023-2024.docx).

Doctor of Philosophy

The Doctor of Philosophy (PhD) degree in a public health discipline represents outstanding scholarly achievement and signifies a capacity for independent study.[1]

Degree Requirements

- For students with a master's degree, satisfactory completion of a prescribed course of study of at least one (1) academic year and a minimum of at least 48 semester credit hours. A maximum of six (6) semester credit hours of dissertation count toward the minimum 48 credit hours. If the student chooses to elect a practicum, no more than three (3) credit hours of practicum and three (3) credit hours of dissertation count toward the minimum of 48 credit hours. Therefore, at least 42 credit hours of didactic courses other than practicum or dissertation must be successfully completed.[1]
- Satisfactory completion of PH 101 Foundations in Public Health (online, not-for-credit course);
- Satisfactory completion of two minor areas of study or one minor area of study and one breadth area;
- Satisfactory completion of one epidemiology course, if one is not already covered in the major, minor, or breadth areas;
- Satisfactory performance on a preliminary examination as described by the degree program;
- Satisfactory defense of the dissertation proposal and completion of an original research dissertation.

[1] For students with a bachelor's degree admitted as a direct-admit, satisfactory completion of a prescribed course of study of at least one (1) academic year and a minimum of at least 72 semester credit hours is required.

Prescribed Course of Study

Major requirements are listed within the departmental sections of this catalog. Degree requirements may be altered in successive catalogs. Students are bound by the requirements of the catalog in force at the time of their admission or readmission.

Minor and Breadth

Students in the PhD program are required to complete either two minors or one minor and one breadth area of study. Students should consult with their advisor when choosing a minor and/or breadth to align with their academic goals. For more information about the minor and breadth requirement for PhD students, see the Academic Polices (p. 9) section.

Preliminary Exam

The preliminary examination will be taken after the courses prescribed by the degree program have been successfully completed. If a student is unable to successfully complete (i.e., demonstrate competence in) the preliminary examination after two attempts, the student will be dismissed from the PhD program. For students with a bachelor's degree, the opportunity to complete a MS degree program is not automatic, and

acceptance into the MS program is decided by departmental faculty. For more information, see the Academic Policies (p. 9) section.

Practicum

The practicum, or applied practice experience, is an application of learning to a "real world" setting. All practicums consist of an organized internship at an extramural agency or organization engaged in work related to public health. Alternatively, a practicum may be done intramurally if the project interacts with practice agencies. Although not a requirement, PhD students are encouraged to include a practicum in their degree plan.

Dissertation

Students are required to complete an original research dissertation that makes a substantial contribution to knowledge in public health. This requirement will be fulfilled when an oral defense of the dissertation research proposal and the final dissertation have been successfully completed, the document has been approved and signed by all members of the dissertation committee, and a copy has been filed in the Dean's Office.

Available Programs:

The School of Public Health offers the following Doctor of Philosophy programs:

- PhD in Behavioral Sciences and Health Promotion (p. 24)
- PhD in Biostatistics (p. 25)
- PhD in Biostatistics: Direct Admission (p. 25)
- PhD in Environmental Health: Environmental Disease Prevention Track (p. 26)
- PhD in Environmental Health: Total Worker Health Track (p. 27)
- PhD in Epidemiology (p. 28)
- PhD in Epidemiology: Direct Admission (p. 28)
- PhD in Management and Policy Studies: Health Economics and Health Services Research Track (p. 29)
- PhD in Management and Policy Studies: Healthcare Management and Health Policy Track (p. 30)

[1] For students with a bachelor's degree admitted as a direct-admit, satisfactory completion of a prescribed course of study of at least one (1) academic year and a minimum of at least 72 semester credit hours is required.

PhD in Behavioral Sciences and Health Promotion

The PhD in Behavioral Sciences and Health Promotion is a minimum 48 semester credit hours and focuses on behavioral and socioecological aspects of public health and the development and evaluation of health promotion interventions. It primarily prepares scholars to integrate and develop state-of-the-art social and behavioral science theory, design, and analytic approaches to examine current problems in public health while working alongside communities. The emphasis in this degree program is preparation for independent research and teaching, and an important component of this degree program is the ability to contribute to scientific literature.

Special Entrance Requirements

Applicants to the PhD program should hold an earned master's degree in a social or behavioral sciences or an earned master's degree in public health with research experiences, thesis experience, and/or coursework related to social and behavioral sciences or an earned master's degree in another field and at least 12 hours of upper-division undergraduate or graduate coursework in social or behavioral sciences. In exceptional cases, applicants without this experience may be accepted on the condition of completing additional graduate work in the behavioral or social sciences. Applicants are asked to submit a writing sample that demonstrates competence in written communication for academic work. Theses, publications, or other academic work are preferred. For more information, see the Admissions (p. 5) section.

Course of Study

The following courses are required for a PhD in Behavioral Sciences and Health Promotion:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Before Preliminary Exam and Other Required Courses		
PHD 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	3
PHD 1122L	Health Promotion Theories for Individuals and Groups: Part I	3
PHD 1227L	Health Promotion Theories for Individuals and Groups: Part II	3
PHD 1420L	Quantitative Research Design for Behavioral Sciences	3
PHD 1421L	Quantitative Analysis for Behavioral Sciences	3
PH 1433	Research Seminar in Health Promotion and Behavioral Sciences	1
PHM 2612L	Epidemiology I	3
After Preliminary Exam		
PHD 1118L	Qualitative Methods	3
PHD 1435	Health Promotion and Behavioral Sciences Doctoral/Post-Doctoral Research Seminar	2
PHD 1440	Proposal Writing for Health Promotion and Behavioral Sciences	3
Minor [2]		**9**
Public Health Methods Breadth		
PHD 1130L	Applied Measurement Theory	3
Select 6 credits of additional methods coursework		6
Dissertation		
PHD 9999	Dissertation Research	3
Total Hours		**48**

[1] Online, not-for-credit course

[2] Students are required to select a minor outside of their department.

For a sample course of study, see the PhD in Behavioral Sciences and Health Promotion degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.PhD.BSHP.2024-2025.docx).

PhD in Biostatistics and Data Science

The PhD in Biostatistics and Data Science degree program is a minimum 48 semester credit hours and emphasizes advanced statistical theory and application, statistical consulting and independent research and prepares students to be independent investigators in the development and application of biostatistical analyses to problems of human health and disease. Graduates of the program go on to assume senior statistical posts in governmental or private health research agencies, or pursue careers in teaching and research.

Special Entrance Requirements

Applicants to the PhD program should have mathematical training beyond the introductory calculus level, including advanced calculus and linear algebra. Preference will be given to applicants with coursework in more advanced mathematics as well as statistics. They should hold degrees in areas that emphasize the development of strong quantitative skills, such as, degrees in mathematical, biomedical, physical, or social sciences. For more information, see the Admissions section (p. 5).

Course of Study

The following courses are required for the PhD in Biostatistics and Data Science:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Leveling Courses [2]		**0**
PH 1630L	Introduction to R Programming for Biostatistics and Data Science	
PH 1631L	Introduction to Python Programming for Biostatistics and Data Science	
PH 1700L	Intermediate Biostatistics	
PH 1820L	Applied Linear Regression [3]	
PH 1821L	Applied Multivariate Analysis for Biostatistics [3]	
PH 1830L	Categorical Data Analysis [3]	
PH 1910L	Probability and Distribution Theory [3]	
PH 1975L	Introduction to Data Science	
PH 1976L	Fundamentals of Data Analytics and Predictions	
Major Courses		
PH 1831L	Survival Analysis [3]	3
PH 1911L	Statistical Inference [3]	3
PHD 1915L	Linear Models I [3]	3
PH 1916L	Generalized Linear Models	3
PHD 1930L	Statistical Computing	3
PHD 1950L	Stochastic Processes in Biostatistics I [3]	3
PH 1988	Biostatistics Seminar	1
Minor [4]		**9**
Second Minor or Breadth [4]		**9**
Electives [5]		**5**
Research Practice Experience		
PHD 1995	Research Practice Experience for Biostatistics Students	3
Dissertation		
PHD 9999	Dissertation Research	3
Total Hours		**48**

1. Online, not-for-credit course
2. Academic credits from leveling courses do not count towards the total required number of credits for the degree program.
3. Students must successfully complete each course prior to sitting for the preliminary exam.
4. Students are required to elect a minor outside of their department. Students should consult with their advisor and the minor's department for requirements. Students may choose to complete a breadth or second minor. Students who do not elect an epidemiology minor must complete a three (3) credit hour epidemiology course as part of the breadth (2500-2999). Students who do complete an epidemiology minor must complete a three (3) credit hours course outside of both epidemiology and biostatistics for the breadth. Students who choose to complete a breadth should consult with their advisor to determine which courses are most appropriate for their academic and professional goals. Students who choose to complete a second minor should consult with their advisor and the minor's department for requirements.
5. Students are required to complete a minimum of 5 credit hours of electives from any biostatistics course above the 1700L level that is not already required on the degree planner. Students should consult with their advisor when selecting elective courses coursework appropriate for the student's research and career goals.

For sample course of study, see the PhD in Biostatistics and Data Science degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20%26%20Planners/Planner.PhD.BIOS.2024-2025.docx).

PhD in Biostatistics and Data Science: Direct Admission

The PhD in Biostatistics and Data Science: Direct Admission degree program is a minimum 72 semester credit hours and emphasizes advanced statistical theory and application, statistical consulting and independent research and prepares students to be independent investigators in the development and application of biostatistical analyses to problems of human health and disease. Graduates of the program go on to assume senior statistical posts in governmental or private health research agencies, or pursue careers in teaching and research.

Special Entrance Requirements

The Department of Biostatistics and Data Science may admit students holding a BA or BS degree (or foreign equivalent) directly into the PhD program. A student requesting direct admission to the PhD program is expected to have a bachelor's degree that emphasizes the development of strong quantitative skills, such as degrees in mathematical, biomedical, or physical sciences. The successful applicant will have mastered multivariable calculus and linear algebra. Applicants with degrees that are not in one of these areas who have the requisite statistical training may be admitted to the PhD program. All admissions require approval of faculty.

Course of Study

The following courses are required for the PhD in Biostatistics and Data Science: Direct Admission:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Leveling Courses [2]		**0**
PH 1630L	Introduction to R Programming for Biostatistics and Data Science	
PH 1631L	Introduction to Python Programming for Biostatistics and Data Science	
Master's Equivalent Coursework		
PH 1700L	Intermediate Biostatistics	3
PH 1820L	Applied Linear Regression [3]	3
PH 1821L	Applied Multivariate Analysis for Biostatistics [3]	3
PH 1830L	Categorical Data Analysis [3]	3
PH 1910L	Probability and Distribution Theory [3]	3
PH 1975L	Introduction to Data Science	3
PH 1976L	Fundamentals of Data Analytics and Predictions	3
Major Courses		
PH 1831L	Survival Analysis [3]	3
PH 1911L	Statistical Inference [3]	3
PHD 1915L	Linear Models I [3]	3
PH 1916L	Generalized Linear Models	3
PHD 1930L	Statistical Computing	3
PHD 1950L	Stochastic Processes in Biostatistics I [3]	3
PH 1988	Biostatistics Seminar	1
Minor [4]		**9**
Second Minor or Breadth [4]		**9**
Electives [5]		**8**
Research Practice Experience		
PHD 1995	Research Practice Experience for Biostatistics Students	3
Dissertation		
PHD 9999	Dissertation Research	3
Total Hours		**72**

1. Online, not-for-credit course
2. Academic credits from leveling courses do not count towards the total required number of credits for the degree program.
3. Students must successfully complete each course prior to sitting for the preliminary exam.
4. Students are required to elect a minor outside of their department. Students should consult with their advisor and the minor's department for requirements. Students may choose to complete a breadth or second minor. Students who do not elect an epidemiology minor must complete a three (3) credit hour epidemiology course as part of the breadth (2500-2999). Students who do complete an epidemiology minor must complete a three (3) credit hours course outside of both epidemiology and biostatistics for the breadth. Students who choose to complete a breadth should consult with their advisor to determine which courses are most appropriate for their academic and professional goals. Students who choose to complete a second minor should consult with their advisor and the minor's department for requirements.
5. Students are required to complete a minimum of 8 credit hours of electives from any biostatistics course above the 1700L level that is not already required on the degree planner. Students should consult with their advisor when selecting elective courses coursework appropriate for the student's research and career goals.

For sample course of study, see the PhD in Biostatistics and Data Science: Direct Admission degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20%26%20Planners/Planner.PhD.BIOS.2024-2025%28DirectAdmit%29.docx).

PhD in Environmental Sciences: Environmental Disease Prevention Track

The PhD in Environmental Sciences is a minimum of 48 semester credit hours and offers in-depth didactic and research training for students who want to focus their careers in academic, governmental, or other research institutions, and/or in high-level policy/regulatory positions. The Environmental Disease Prevention Track will provide students experience in identifying and measuring disease agents in various environments, and opportunities to develop ways to mitigate associated public health risks.

Special Entrance Requirements

Applicants to the PhD program should have a prior MS or equivalent degree in Environmental Health Sciences or a related field from an accredited institution of higher education. In addition, applicants are expected to have successfully completed coursework in calculus, organic chemistry, physics, and biological sciences. For more information, see the Admissions section (p. 5).

Course of Study

The following courses are required for a PhD in Environmental Science, Environmental Disease Prevention Track:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Leveling Courses [2]		**0**
PH 1700L	Intermediate Biostatistics	
PHM 2110L	Public Health Ecology & the Human Environment	
PH 2175L	Toxicology I: Principles of Toxicology	
PHM 2612L	Epidemiology I	
Major Courses		
PHD 2105L	Environmental and Occupational Health Sciences Doctoral Seminar [3]	2
PHD 2106L	Introduction to Doctoral Research Methods in Environmental and Occupational Health Sciences	2
PH 2245	Fundamentals of Industrial Hygiene	4
Environmental Disease Prevention Track Courses		
PHD 2135L	Risk Analysis: Principles and Practice	3
PH 2177	Toxicology II: Toxic Agents and the Environment	3
PH 2926	Fundamentals and Applications of GIS	3
PHD 2155	Environmental Sampling Analysis	4
PH 2150	Air Environment	3

or PHD 2230L	Water Environment	
Minor in Epidemiology		
PH 2615L	Epidemiology II	3
PH 2710L	Epidemiology III	3
Select one of the following:		3
PHWD 2108L	Applied Epidemiological Analysis	
PHD 2360L	Occupational Epidemiology	
PHD 2362L	Environmental Epidemiology	
Person-Centered Well-Being Breadth		
PHD 2845L	Nutritional Epidemiology	3
Select one of the following:		3
PH 2735L	Physical Activity and Health: Epidemiology and Mechanisms	
PH 5400	Physical Activity Assessment & Surveillance	
PH 5401L	Physical Activity & Public Health Practice	
Select one of the following:		3
PH 2780L	Genetic Epidemiology	
PH 2815L	Genetics and Human Disease	
PH 2970L	Foundations of Public Health Genetics	
Select one of the following:		3
PH 1241	Disability and Public Health	
PHD 3922	Economic and Social Determinants of Health	
PH 5220	Gender and Leadership	
Dissertation		
PHD 9999	Dissertation Research	3
Total Hours		**48**

1 Online, not-for-credit course
2 Academic credits from leveling courses do not count towards the total required number of credits for the degree program.
3 Taken twice

For a sample course of study, see the PhD in Environmental Science, Environmental Disease Prevention Track degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.PhD.EOHS_EDP.2024-2025.docx).

PhD in Environmental Sciences: Total Worker Health Track

The PhD in Environmental Sciences is a minimum of 48 semester credit hours and offers in-depth didactic and research training for students who want to focus their careers in academic, governmental, or other research institutions, and/or in high-level policy/regulatory positions. The **Total Worker Health Track** is an addition to the NIOSH-funded Education and Research Center (ERC) Southwest Center for Occupational and Environmental Health (SWCOEH). Graduates will be able to conduct research that characterizes worker well-being, as well as implement policies and practices that improve worker health.

Special Entrance Requirements

Applicants to the PhD program should have a prior MS or equivalent degree in Environmental Health Sciences or a related field from an accredited institution of higher education. In addition, applicants are expected to have successfully completed coursework in calculus, organic chemistry, physics, and biological sciences. For more information, see the Admissions section (p. 5).

Course of Study

The following courses are required for a PhD in Environmental Science, Total Worker Health Track:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Leveling Courses [1]		**0**
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	
PH 1700L	Intermediate Biostatistics	
PHM 2110L	Public Health Ecology & the Human Environment	
PH 2175L	Toxicology I: Principles of Toxicology	
PHM 2612L	Epidemiology I	
Major Courses		
PHD 2105L	Environmental and Occupational Health Sciences Doctoral Seminar [3]	2
PHD 2106L	Introduction to Doctoral Research Methods in Environmental and Occupational Health Sciences	2
PH 2245	Fundamentals of Industrial Hygiene	4
Total Worker Health Track Courses		
PH 2205L	Health & Safety Program Management	3
PH 2241L	Fundamentals of Occupational Safety	3
PH 2256	Occupational Health Psychology	2
PH 2270L	Total Worker Health and Worker Well-being	2
PHD 2271	Total Worker Health Field Experience	3
PHD 2360L	Occupational Epidemiology	3
Minor in Health Promotion and Behavioral Sciences		
PHD 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	3
PHD 1120L	Program Evaluation	3
PHD 1118L	Qualitative Methods	3
or PHD 1123L	Community Health Promotion Theory and Practice	
Worker-Centered Well-Being Breadth		
Select 12 credits of the following:		12
PH 1236	Issues in Aging	
PH 1410L	Addiction and Society	
PH 2246L	Principles of Occupational Ergonomics	
PHD 2835	Injury Epidemiology	
PHD 2845L	Nutritional Epidemiology	
PHD 2362L	Environmental Epidemiology	
PHD 3810	Health Policy in The United States	
PHD 3910	Health Economics	
PH 3915	Methods for the Economic Evaluation of Health Programs	
PH 5220	Gender and Leadership	
PH 5400	Physical Activity Assessment & Surveillance	
or PH 5401L	Physical Activity & Public Health Practice	
or PH 2735L	Physical Activity and Health: Epidemiology and Mechanisms	

Dissertation		
PHD 9999	Dissertation Research	3
Total Hours		**48**

1 Online, not-for-credit course
2 Academic credits from leveling courses do not count towards the total required number of credits for the degree program.
3 Taken twice

For a sample course of study, see the PhD in Environmental Health, Total Worker Health Track degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.PhD.EOHS_TWH.2024-2025.docx).

PhD in Epidemiology

The PhD in Epidemiology is a minimum of 48 semester credit hours and represents a mastery of epidemiologic concepts, theories and methodology; and a significant capacity for independent study. The doctoral program is research-intensive, and is designed for students who plan to go on to academic (university-based) or research careers in epidemiology and disease control.

Special Entrance Requirements

Applicants to the PhD program should hold an MS or MPH in Epidemiology from a regionally accredited university or college or have other accomplishments, which indicate readiness for doctoral study in epidemiology. GRE scores are required. See the 'Application Process & Deadline Dates' and 'Admissions Process' sections for more information. For more information, see the Admissions (p. 5) section.

Course of Study

The following courses are required for a PhD in Epidemiology:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Leveling Courses [2]		**0**
PHM 1690L	Introduction to Biostatistics in Public Health	
PH 1700L	Intermediate Biostatistics	
PHM 2612L	Epidemiology I	
PH 2615L	Epidemiology II	
PH 2710L	Epidemiology III	
Major Courses		
PHD 2711L	Epidemiology IV [3]	3
PHD 2712L	Experimental Methods in Epidemiology [3]	3
PHD 2990	Epidemiology Seminar	1
PHD 2720L	Epidemiologic Proposal Development	3
PH 1830L	Categorical Data Analysis	3
or PH 1831L	Survival Analysis	
Minor		**9**
Second Minor or Breadth		**9**
Elective Courses		**14**
Dissertation		
PHD 9999	Dissertation Research	3
Total Hours		**48**

1 Online, not-for-credit course
2 Academic credits from leveling courses do not count towards the total required number of credits for the degree program.

For a sample course of study, see the PhD in Epidemiology degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20%26%20Planners/Planner.PhD.EPID.2024-2025.docx).

PhD in Epidemiology: Direct Admission

The PhD in Epidemiology (Direct Admission) is a minimum of 72 semester credit hours and represents a mastery of epidemiologic concepts, theories and methodology; and a significant capacity for independent study. The doctoral program is research-intensive, and is designed for students who plan to go on to academic (university-based) or research careers in epidemiology and disease control.

Special Entrance Requirements

The Department of Epidemiology may admit students holding a BA or BS degree (or foreign equivalent) directly into the PhD program. A student requesting direct admission to the PhD program is expected to have either a bachelor's degree that demonstrates the development of strong scientific and analytical skills, a professional doctoral degree in a medical field, or a doctoral degree in a field not directly related to medicine or public health that is coupled with evidence of adequate preparation in biological sciences and mathematics. In addition, evidence of academic achievement that includes completion of advanced courses in biological sciences, at least two semesters of college-level calculus (or the equivalent) and at least one course in statistics.

Direct Admit Course of Study

The following courses are required for a direct admit PhD in Epidemiology:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Master's Equivalent Coursework		
PHM 1690L	Introduction to Biostatistics in Public Health	4
PH 1700L	Intermediate Biostatistics	3
PHM 2612L	Epidemiology I	3
PH 2615L	Epidemiology II	3
PH 2710L	Epidemiology III	3
Major Courses		
PHD 2711L	Epidemiology IV [3]	3
PHD 2712L	Experimental Methods in Epidemiology [3]	3
PHD 2990	Epidemiology Seminar	1
PHD 2720L	Epidemiologic Proposal Development	3
PH 1830L	Categorical Data Analysis	3
or PH 1831L	Survival Analysis	
Minor		**9**

Second Minor or Breadth		**9**
Elective Courses		**22**
Dissertation		
PHD 9999	Dissertation Research	3
Total Hours		**72**

[1] Online, not-for-credit course

For a sample course of study, see the PhD in E (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.PhD.HCMHP.2024-2025.docx)pidemiology: Direct Admission degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.PhD.EPID.2024-2025(DirectAdmit).docx).

PhD in Management and Policy Studies: Health Economics/Health Services Research Track

The PhD program in Management and Policy Studies, Health Economics/Health Services Research is a minimum 48 semester credit hours and emphasizes the study of cost, access, outcomes, and quality within health care systems. Students focus on understanding decision-making processes among consumers, providers, institutions, and policy makers, and pursue advanced study that leads to original research.

Special Entrance Requirements

Applicants to the PhD program must have an appropriate post-bachelor's degree in the social sciences, economics, policy, law, management, clinical sciences or public health. Also, applicants must have an advanced knowledge of quantitative methods; preferred applicants have strong math and/or statistics backgrounds. For more information, see the Admissions (p. 5) section.

Course of Study

The following courses are required for a PhD in Management and Policy Studies, Health Economics/Health Services Research Track:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	0
Leveling and Other Required Courses [2]		
ECON 6485	Microeconomic Analysis [3]	
POLC 6312	Public Finance [3]	
ECON 6465	Econometrics [4]	
ECON 7351	Development Economics: Microeconomic Issues	
ECON 515	Labor Economics	
Before Preliminary Exam		
PHD 3910	Health Economics	3
PH 3915	Methods for the Economic Evaluation of Health Programs	3
PH 3920	Health Service Delivery and Performance	3
PHD 3926L	Health Survey Research Design	3
PHD 3930	Econometrics in Public Health	3
PH 3940	Health Care Outcomes and Quality Research	3
Epidemiology Course Requirement [5]		
PHM 2612L	Epidemiology I	3
Select one of the following Track Areas:		**6**
Health Economics Track		
PHD 3935	Advanced Health Economics	
Health Services Research Track		
PHD 3945	Adv Hlth Services Research Methods	
Select 3 credits of the following:		
PH 3736L	Healthcare Payment Systems and Policy	
PHD 3810	Health Policy in The United States	
PHD 3812	Comparative Health Systems	
PH 3815	Health Policy Analysis	
PH 3818	Texas Health Policy: Emerging Issues and New Approaches	
PHD 3922	Economic and Social Determinants of Health	
PHD 3931	Advanced Econometrics	
PHD 3935	Advanced Health Economics	
PH 3941	Claims Data in Healthcare Research	
PHD 3945	Adv Hlth Services Research Methods	
Minor [6]		**9**
Breadth or second minor [6]		**9**
Dissertation		
PHD 9999	Dissertation Research	3
Total Hours		**48**

[1] Online, not-for-credit course

[2] Academic credits from leveling courses do not count towards the total required credits for the degree program.

[3] Offered by the University of Houston. Students are eligible to enroll through the Gulf Coast Consortium Agreement.

[4] Offered by Rice University. Students are eligible to enroll through the Gulf Coast Consortium Agreement.

[5] All students are required to complete an Epidemiology course during their course of study. If students choose to complete PHM 2612L Epidemiology I, the credit hours will not count toward the total credit hours required for this doctoral degree. The epidemiology requirement can be fulfilled if the student takes an epidemiology course through the minor and/or breadth requirements. Students are required to complete the minimum 48 credit hour requirement for their degree.

[6] Students are encouraged to select methodology courses appropriate for their dissertation topic.

- Students who elect to complete two minors must complete at least one minor outside of the department of MPCH.
- Students who elect to complete one minor and one breadth:
  Students who elect a primary minor within the MPCH department must complete at least two courses of the breadth outside of the department
  Students who elect a primary minor outside of the MPCH department may complete breadth coursework in any department.

For a sample course of study, see the PhD in Management and Policy Studies, Health Economics/Health Services Research Track degree planner (https://web.sph.uth.edu/student-forms/

Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.PhD.HEHSR.2024-2025.docx).

PhD in Management and Policy Studies: Healthcare Management/ Health Policy Track

The PhD in Management and Policy Studies, Healthcare Management/ Health Policy Track is a minimum 48 semester credit hours and emphasizes the development and evaluation of health policy, leadership development within healthcare organizations, understanding the complexities of healthcare delivery while addressing costs and quality, and develops researchers who can ask relevant questions, identify answers and drive policy and organizational change.

Special Entrance Requirements

Applicants to the PhD program must have an appropriate post-bachelor's degree in the social sciences, policy, law, management, clinical sciences or public health. Also, applicants must have an advanced knowledge of quantitative methods; preferred applicants with strong math and/ or statistics backgrounds. For more information, see the Admissions (p. 5) section.

Course of Study

The following courses are required for PhD in Management and Policy Studies, Healthcare Management/Health Policy Track:

Code	Title	Hours
Required for all School of Public Health Students		
PH 101	Foundations of Public Health [1]	
Leveling Courses [2]		
PH 1700L	Intermediate Biostatistics	
Before Preliminary Exam		
PHD 3731L	Research Design and Inquiry	3
PHD 3743L	Adv Organ and Mgmt Theory	3
PHD 3810	Health Policy in The United States	3
PH 3815	Health Policy Analysis	3
PHD 3846L	Quality Management Improvement in Healthcare Doctoral	3
PHD 3946L	Strategy, Governance and Leadership	3
Required Epidemiology Course [3]		
PHM 2612L	Epidemiology I	3
Emphasis Area		
Select one of the following Emphasis Areas:		6
Healthcare Management		
Select 6 credits of the following:		
PHD 3721L	Healthcare Finance	
PH 3736L	Healthcare Payment Systems and Policy	
PH 3738L	Legal Issues in Healthcare	
PHD 3812	Comparative Health Systems	
PH 3825	Public Health Law	
PHD 3910L	Health Economics	
PHD 3922	Economic and Social Determinants of Health	
PH 3940	Health Care Outcomes and Quality Research	
Health Policy		
Select 6 credits of the following:		
PHD 3812	Comparative Health Systems	
PH 3818	Texas Health Policy: Emerging Issues and New Approaches	
PH 3825	Public Health Law	
PHD 3830	Ethics and Policy	
PH 3736L	Healthcare Payment Systems and Policy	
PH 3915	Methods for the Economic Evaluation of Health Programs	
PH 3998	Special Topics in Management, Policy and Community Health (ST: Advanced Policy Studies with Topical Content)	
Minor [4]		**9**
Breadth or second minor [4]		**9**
Dissertation		
PHD 9999	Dissertation Research	3
Total Hours		**48**

1. Online, not-for-credit course
2. Academic credits from leveling courses do not count towards the total required credits for the degree program.
3. All students must complete one epidemiology course (2500-2999). If students choose to complete PHM 2612L Epidemiology I, the credit hours will not count toward the total credit hours required for this doctoral degree. The epidemiology requirement can be fulfilled if the student takes an epidemiology course through the minor and/or breadth requirements. Students are required to complete the minimum 48 credit hour requirement for their degree.
4. Students are encouraged to select methodology courses appropriate for their dissertation topic.
   - Students who elect to complete two minors must complete at least one minor outside of the department of MPCH.
   - Students who elect to complete one minor and one breadth:
     Students who elect a primary minor within the MPCH department must complete at least two courses of the breadth outside of the department
     Students who elect a primary minor outside of the MPCH department may complete breadth coursework in any department.

For a sample course of study, see the PhD in Management and Policy Studies, Healthcare Management/Health Policy Track degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.PhD.HCMHP.2024-2025.docx).

Minors

The School of Public Health offers the following minor areas of study.

Minor in Behavioral Sciences

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

Code	Title	Hours
Theory Courses		
PHD 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	
PHD 1122L	Health Promotion Theories for Individuals and Groups: Part I	
PHD 1123L	Community Health Promotion Theory and Practice	
PHD 1227L	Health Promotion Theories for Individuals and Groups: Part II	
Methods Courses		
PHD 1118L	Qualitative Methods	
PH 1119L	Qualitative Analysis	
PHD 1120L	Program Evaluation	
PHD 1121L	Advanced Quantitative Analysis for Behavioral Sciences	
PH 1321L	Social Networks and Health	
PH 1323L	Applied Methods for Longitudinal and Ecological Momentary Assessment (EMA) Data	
PH 1324L	Applied Discrete Data Analysis using Stata	
PHD 1130L	Applied Measurement Theory	
PHD 1132	Latent Variable Models and Factor Analysis	
PHD 1420L	Quantitative Research Design for Behavioral Sciences	
PHD 1421L	Quantitative Analysis for Behavioral Sciences	
PHD 1431	Tools and Methods for Systematic Review	

Minor in Biostatistics

The department offers a minor course of study (nine (9) semester credit hours) in biostatistics. Students are required to complete the following courses.

Code	Title	Hours
Master's Students		
PHM 1690L	Introduction to Biostatistics in Public Health	
PH 1700L	Intermediate Biostatistics	
At least one Biostatistics elective above PH 1700L. [1]		

Code	Title	Hours
Doctoral Students		
PHM 1690L	Introduction to Biostatistics in Public Health [2]	
PH 1700L	Intermediate Biostatistics	
Two Biostatistics electives above PH 1700L. [1]		

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

2 PHM 1690L Introduction to Biostatistics in Public Health is a prerequisite to PH 1700L Intermediate Biostatistics but may be waived depending on the student's background.

Minor in Epidemiology

The department offers a minor course of study (nine (9) semester credit hours) in epidemiology. Students are required to complete the following courses.

Code	Title	Hours
Masters Students		
PHM 2612L	Epidemiology I	
Select 6 credits of epidemiology electives		

Code	Title	Hours
Doctoral Students		
PH 2615L	Epidemiology II	
PH 2710L	Epidemiology III	
Select 3 credits of epidemiology electives		

Minor in Environmental Sciences

The department offers a minor course of study (nine (9) semester credit hours) in environmental sciences. Students are required to complete the following courses.

Code	Title	Hours
Masters Students		
PHM 2110L	Public Health Ecology & the Human Environment	
Select 6 credits of environmental health electives [1]		

1 PH 2175L Toxicology I: Principles of Toxicology is recommended as an elective.

Code	Title	Hours
Doctoral Students [1]		
PHD 2135L	Risk Analysis: Principles and Practice	
Select one of the following:		
PHD 2106L	Introduction to Doctoral Research Methods in Environmental and Occupational Health Sciences	
PHD 2908L	Applied Epidemiological Analysis	
PHD 2360L	Occupational Epidemiology	
Select 3 credits of environmental health electives		

1 PHM courses do not count toward a doctoral minor.

Minor in Health Economics

The department offers a minor course of study (nine (9) semester credit hours) in health economics. Students are required to complete the following courses.

Code	Title	Hours
Select 9 credits of the following:		
PHD 3910	Health Economics	
PHD 3916	Decision Analysis in Public Health and Medicine	
PHD 3922	Economic and Social Determinants of Health	
PHD 3930	Econometrics in Public Health	
PHD 3931	Advanced Econometrics	
PHD 3935	Advanced Health Economics	

Minor in Health Policy

The department offers a minor course of study (nine (9) semester credit hours) in health policy. Students are required to complete the following courses.

Code	Title	Hours
Select 9 credits of the following:		
PH 3736L	Healthcare Payment Systems and Policy	
PH 3738L	Legal Issues in Healthcare	
PHD 3810	Health Policy in The United States	
PHD 3812	Comparative Health Systems	
PH 3815	Health Policy Analysis	
PH 3818	Texas Health Policy: Emerging Issues and New Approaches	
PHD 3830	Ethics and Policy	

Minor in Health Services Research

The department offers a minor course of study (nine (9) semester credit hours) in health services research. Students are required to complete the following courses.

Code	Title	Hours
Select 9 credits from the following:		
PHD 3916	Decision Analysis in Public Health and Medicine	
PH 3920	Health Service Delivery and Performance	
PHD 3926L	Health Survey Research Design	
PHD 3930	Econometrics in Public Health	
PH 3940	Health Care Outcomes and Quality Research	
PHD 3945	Adv Hlth Services Research Methods	

Minor in Healthcare Management

The department offers a minor course of study (nine (9) semester credit hours) in healthcare management. Students are required to complete the following courses.

Code	Title	Hours
Master's Students		
PHM 3718L	Accounting for Healthcare Management	
PHM 3720L	Healthcare Finance	
PHM 3744L	Organizational Behavior and Human Resource Management in Health Services Organizations	
PHM 3746L	Evaluation & Improvement of Healthcare Quality	
PH 3735L	Healthcare Strategic Management	
PH 3747L	Healthcare Operations Management	

Code	Title	Hours
Doctoral Students		
PHD 3743L	Organizational and Management Theory	
PHD 3846L	Quality Management Improvement in Healthcare Doctoral	
PHD 3946L	Strategy, Governance and Leadership	

Graduate Certificates

Graduate Certificates

A complete list of certificates is listed in the chart below. More information and course requirements can be found on the mySPH Graduate Certificates (https://uthealth.my.site.com/UTHealthCommunity/s/certificate-planners/) website.

Graduate certificates for non-degree seeking students provides the opportunity to take courses for credit at UTHealth Houston School of Public Health without pursuing a formal degree. Students are required to complete the application procedure as a non-degree student. For more information, see the Admissions (p. 5) section. Certificate courses may be applied toward the required credit hours of a degree program in the form of transfer credits. However, students interested in taking more than the maximum transfer credit hours are strongly advised to apply for admission to a degree program. For more information about transfer credits, see the Academic Policies (p. 9) section.

Degree-seeking students who are currently pursuing a graduate degree should formally elect their certificate through the UTHealth Houston School of Public Health Office of Academic Affairs and Student Services. All graduate certificates are available to all students at all campuses unless otherwise noted. Students should consult their advisors for course availability at their campus.

Available Programs:

The School of Public Health offers the following graduate certificate programs:

- Advanced Data Science (p. 32)
- Advanced Planning and Evaluation for Health Promotion Programs (p. 33)
- Advanced Quantitative Methods for Behavioral Sciences (p. 33)
- Applied Biostatistics in Public Health (p. 33)
- Culinary Nutrition and Public Health (p. 34)
- Data Science (p. 34)
- Dissemination and Implementation Science (p. 34)
- Genomics and Bioinformatics (p. 35)
- Global Health (p. 35)
- Health Disparities (p. 36)
- Health Promotion Program Planning and Evaluation (p. 36)
- Healthcare Administration (p. 37)
- Infectious Disease Epidemiology (https://uth-next.courseleaf.com/public-health/programs/graduate-certificates/infectious-disease-epi/)
- Introduction to Quantitative Methods for Behavioral Sciences (p. 37)
- Leadership Theory and Practice (p. 37)
- Maternal and Child Health (p. 38)
- Nutrition and Public Health (p. 38)
- Physical Activity and Public Health (p. 39)
- Public Health (p. 39)
- Public Health Informatics (p. 39)
- Public Health Law Research and Policy Surveillance (p. 40)

Certificate in Advanced Data Science

15 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate is designed for both students and working professionals who intend to elevate their knowledge and skill-set regarding data science processes and their application. This certificate is an extension of the established Data Science Certificate and consists of learning modules in data science crafted to meet the needs of students,

employers, and community partners. Topics include data mining, data science computing, and programming in Python and R.

Course of Study

The following courses are required for an Certificate in Advanced Data Science:

Code	Title	Hours
PH 1975L	Introduction to Data Science	3
PH 1976L	Fundamentals of Data Analytics and Predictions	3
PH 1977L	Data Science Computing	3
PH 1978L	Machine Learning in Practice	3
Select 3 credits of electives		3
Total Hours		**15**

For more information, see the Advanced Data Science Certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Advanced_Data_Science.docx).

Certificate in Advanced Planning and Evaluation for Health Promotion Programs

12 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate builds on the Health Promotion Program Planning and Evaluation certificate (see below) and is intended for professionals who are working or who plan to work in public health departments, government or non-profit organizations to obtain advanced skills in health promotion program planning and evaluation to improve health and eliminate health disparities. These courses provide advanced skills to develop and evaluate theory- and evidence-based multilevel health promotion programs, select appropriate research designs, and apply statistical analyses to translate research to practice for evidence-based decision-making.

Course of Study

The following courses are required for an Certificate in Advanced Planning and Evaluation for Health Promotion Programs:

Code	Title	Hours
PHD 1122L	Health Promotion Theories for Individuals and Groups: Part I	3
PHD 1420L	Quantitative Research Design for Behavioral Sciences	3
PHD 1421L	Quantitative Analysis for Behavioral Sciences	3
PHD 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	3
Total Hours		**12**

For more information, see the Advanced Planning and Evaluation for Health Promotion Programs certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Advanced_Planning_and_Evaluation_Health_Promotion_Programs.docx).

Certificate in Advanced Quantitative Methods for Behavioral Sciences

15 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate builds on the Introduction to Quantitative Methods for Behavioral Sciences certificate and provides advanced training in research design and quantitative methods relevant to practitioners and researchers working in the fields of health promotion, social and behavioral sciences and preventative medicine. The course offerings in this certificate are designed to provide education in advanced design and analysis methods. This certificate will be suitable for students who have prior experience or training through multivariate linear and logistic regression modeling.

Course of Study

The following courses are required for an Certificate in Advanced Quantitative Methods for Behavioral Sciences:

Code	Title	Hours
PHD 1121L	Advanced Quantitative Analysis for Behavioral Sciences	3
PHD 1130L	Applied Measurement Theory	3
PH 1324L	Applied Discrete Data Analysis using Stata	3
Select six credits from the following:		6
PHD 1132	Latent Variable Models and Factor Analysis	
PH 1321L	Social Networks and Health	
PH 1323L	Applied Methods for Longitudinal and Ecological Momentary Assessment (EMA) Data	
PHD 1431	Tools and Methods for Systematic Review	
Total Hours		**15**

For more information, see the Advanced Quantitative Methods for Behavioral Sciences certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Advanced_Quantitative_Methods_Behavioral_Sciences.docx).

Certificate in Applied Biostatistics in Public Health

12 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate is designed to provide students or professionals basic quantitative and analytic skills for working in public health or health-care related industries. The goal is to train public health professionals the basic analysis skills and critical thinking for performing analysis as part of public health research.

Course of Study

The following courses are required for an Certificate in Applied Biostatistics:

Code	Title	Hours
Leveling Course [1]		**0**
PHM 1690L	Introduction to Biostatistics in Public Health	

Required Courses		
PH 1700L	Intermediate Biostatistics	3
PH 1820L	Applied Linear Regression	3
PH 1830L	Categorical Data Analysis	3
PH 1831L	Survival Analysis	3
Total Hours		**12**

[1] Credit hours from a leveling course are not counted in the minimum credits required for the completion of the certificate program.

For more information, see the Applied Biostatistics in Public Health certificate planner (https://sph.uth.edu/degree-finder/Planner.Certificate.Applied_Biostatistics_in_Public_Health%20(1).docx).

Certificate in Culinary Nutrition and Public Health

12 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate is designed to prepare those in the public health and health care workforce to understand the role of nutrition in disease prevention and health promotion, nutrition assessment, nutritional physiology, nutritional health policy, and culinary medicine.

Course of Study

The following courses are required for an Certificate in Culinary Nutrition and Public Health:

Code	Title	Hours
PHM 1232L	Public Health Nutrition Practice	3
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
PH 1237	Obesity, Nutrition, & Physical Activity	1
PH 5031	Garden for Health	2
PH 5032	Culinary Medicine	2
PH 5040L	Nutrition Research Methods	1
Total Hours		**12**

For more information, see the Culinary Nutrition and Public Health certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Culinary_Nutrition.docx).

Certificate in Data Science

9 semester credit hours for degree-seeking students

13 semester credit hours for non-degree-seeking students

This certificate is intended for professionals working in health care or industries related to public health research and biostatistics, and consists of coursework in data science, data analytics and predictions, analytic methods, and data management.

Course of Study

The following courses are required for an Certificate in Data Science:

Code	Title	Hours
Degree-Seeking Students Certificate Requirements		
PH 1700L	Intermediate Biostatistics	3
PH 1975L	Introduction to Data Science	3
PH 1976L	Fundamentals of Data Analytics and Predictions	3
Total Hours		**9**

Code	Title	Hours
Non-Degree-Seeking Student Certificate Requirements		
PHM 1690L	Introduction to Biostatistics in Public Health	4
PH 1700L	Intermediate Biostatistics	3
PH 1975L	Introduction to Data Science	3
PH 1976L	Fundamentals of Data Analytics and Predictions	3
Total Hours		**13**

For more information, see the Data Science certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Data_Science.docx).

Certificate in Dissemination and Implementation Science

15 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate introduces the concepts of dissemination and implementation to students and other health professionals. The concepts learned while pursuing this certificate will assist researchers and practitioners in translating and testing research advances in public health and healthcare delivery to effective and efficient interventions in multiple settings.

Course of Study

The following courses are required for an Certificate in Dissemination and Implementation Science:

Code	Title	Hours
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
or PHD 1122L	Health Promotion Theories for Individuals and Groups: Part I	
PHM 3744L	Organizational Behavior and Human Resource Management in Health Services Organizations	3
or PHD 3743L	Adv Organ and Mgmt Theory	
PHD 1450	Dissemination & Implementation Research and Practice	1
PHD 1451	Dissemination & Implementation Research and Practice Part II	2
PH 1498	Special Topics in Health Promotion and Behavioral Sciences (ST: Designing and Tailoring Implementation Strategies)	3
Select 3 credits of electives [1]		3
Total Hours		**15**

[1] Students are required to complete three credits of the following:
Electives for those primarily interested in practice:

- PH 3998 Special Topics in Management, Policy and Community Health (ST: Facilitator Roles and Skills)
- PH 3735L Healthcare Strategic Management
- PH 3920 Health Service Delivery and Performance
- PHM 1120L Program Evaluation or PHD 1120L Program Evaluation
- PHM 3746L Evaluation & Improvement of Healthcare Quality

Electives for those primarily interested in research:

- PHM 5015L Introduction to Qualitative Research in Public Health
- PHD 1130L Applied Measurement Theory
- PHD 3631L Community Engagement/ Community-Based Participatory Research

For more information, see the Dissemination and Implementation Science certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Dissemination_and_Implementation_Science.docx).

Certificate in Genomics and Bioinformatics

12 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate is intended for professionals in academic, clinical, and research settings who are now or soon to be faced with genomic and related data. The goal is to enable a generation of investigators and academicians capable of integrating genomic and related high-dimensional data seamlessly into population and personalized health.

Course of Study

The following courses are required for an Certificate in Genomics and Bioinformatics:

Code	Title	Hours
PH 2970L	Foundations of Public Health Genetics	3
or PH 2815L	Genetics and Human Disease	
PH 2782L	Practical Computational Genetics and Bioinformatics	3
PH 2830L	Clinical Genetics in Epidemiology	3
PH 2780L	Genetic Epidemiology	3
Total Hours		**12**

For more information, see the Genomics and Bioinformatics certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Genomics_Bioinformatics.docx).

Certificate in Global Health

12 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate is intended for students interested in exploring how globalization is affecting the determinants of health, the health status of the population, and the capacity of nation-states to deal with the determinants of health and disease. The goal is to prepare students for positions that involve public health decision-making and research in a changing world.

Course of Study

The following courses are required for an Certificate in Global Health:

Code	Title	Hours
Degree-Seeking Students Certificate Requirements		
PH 5610	Global Health Overview	3
PH 5612	Global Health Seminar	1
Select 8 credits of electives		8
Total Hours		**12**

Code	Title	Hours
Elective list for degree-seeking students		
PHM 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	3
or PHD 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	
PHM 1116	Introduction to Intervention Mapping	2
or PHD 1116	Introduction to Intervention Mapping	
PHM 1120L	Program Evaluation	3
or PHD 1120L	Program Evaluation	
PH 1228	Food Policy	3
PH 2926	Fundamentals and Applications of GIS	3
PH 2132L	Infection Control and Biosafety	3
PHM 2230L	Water Environment	3
or PHD 2230L	Water Environment	
PHM 2280L	Environmental Microbiology	3
PH 2809L	Immunology	3
PH 2615L	Epidemiology II	3
PH 2730L	Epidemiology and Control of Infectious Diseases	3
PH 2742L	Epidemiology of Mental Health	3
PH 2795	Disease Detectives: International Epidemic Investigations	3
PH 2800L	Tropical Infectious Diseases	3
PH 2808L	Overview of Tropical Medicine	2
PHM 3630	Health Program Planning, Implementation, and Evaluation	3
PHD 3812	Comparative Health Systems	3
PHM 3922	Economic and Social Determinants of Health	3
or PHD 3922	Economic and Social Determinants of Health	
PHD 3926L	Health Survey Research Design	3
PH 3998	Special Topics in Management, Policy and Community Health (ST: Public Health and Human Rights)	1-4
PH 5098	Special Topics in Interdivisional Courses (ST: The History and Culture of Disease and Healing)	3
PH 5613	Critical Cinema for Public Health	2
INTL 4055	Global Health Governance, Diplomacy, and Leadership [1]	

[1] Course available through The University of Texas Medical Branch.

Code	Title	Hours
Non-Degree-Seeking Student Certificate Requirements		
Leveling Course		
PHM 2612L	Epidemiology I	
Required Courses		
PH 5610	Global Health Overview	3
PH 5612	Global Health Seminar	1
Select 8 credits of electives		8
Total Hours		**12**

Code	Title	Hours
Elective list for non-degree seeking students		
PH 1228	Food Policy	3
PH 2926	Fundamentals and Applications of GIS	3
PH 2132L	Infection Control and Biosafety	3
PHM 2230L	Water Environment	3
or PHD 2230L	Water Environment	
PH 2280L	Environmental Microbiology	3
PH 2809L	Immunology	3
PH 2730L	Epidemiology and Control of Infectious Diseases	3
PH 2742L	Epidemiology of Mental Health	3
PH 2795	Disease Detectives: International Epidemic Investigations	3
PH 2800L	Tropical Infectious Diseases	3
PHD 3812	Comparative Health Systems	3
PHM 3922	Economic and Social Determinants of Health	3
or PHD 3922	Economic and Social Determinants of Health	
PH 5098	Special Topics in Interdivisional Courses (ST: The History and Culture of Disease and Healing)	3

For more information, see the Global Health certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Global_Health.docx).

Certificate in Health Disparities

12 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate provides an orientation for individuals who are working in public health or health care and seeking to focus their work to the recognition, description and elimination of health disparities that have been defined as differences in "the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates."

Course of Study

The following courses are required for an Certificate in Health Disparities:

Code	Title	Hours
PH 5102	Health Disparities Core Seminar	1
PHM 3800L	Working with Diverse Communities	3
or PHD 3800L	Working with Diverse Communities	
PHM 3922	Economic and Social Determinants of Health	3
or PHD 3922	Economic and Social Determinants of Health	
PH 1352L	Racism, Equity & Public Health	2
Select 3 credits of the following:		3
PH 1112L	Community Assessment Methods in Public Health	
PH 1236	Issues in Aging	
PH 1237	Obesity, Nutrition, & Physical Activity	
PH 1241	Disability and Public Health	
PH 1251	Seminar on the Health of Sexual and Gender Minority Persons	
PH 1321L	Social Networks and Health	
PH 1410L	Addiction and Society	
PH 2491	Public Health Preparedness & Disaster Response	
or PH 2991	Public Health Preparedness & Disaster Response	
PH 2742L	Epidemiology of Mental Health	
PH 2730L	Epidemiology and Control of Infectious Diseases	
PHD 3631L	Community Engagement/ Community-Based Participatory Research	
PH 5220	Gender and Leadership	
Total Hours		**12**

For more information, see the Health Disparities certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Health_Disparities.docx).

Certificate in Health Promotion Program Planning and Evaluation

15 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate is designed to prepare those in the public health workforce to identify behavioral and environmental determinants of health that are modifiable, and to plan and evaluate effective health promotion programs and policies to promote healthy lifestyles and prevent disease in diverse populations and settings.

Course of Study

The following courses are required for an Certificate in Health Promotion Program Planning and Evaluation:

Code	Title	Hours
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
PHM 2612L	Epidemiology I	3
PH 1112L	Community Assessment Methods in Public Health	3
PHM 1120L	Program Evaluation	3
PHM 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	3
Total Hours		**15**

For more information, see the Health Promotion Program Planning and Evaluation certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Health_Promotion_Program_Planning_and_Evaluation.docx).

Certificate in Healthcare Administration

15 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate is intended for professionals working in healthcare management and students enrolled in post-baccalaureate degree programs in complementary graduate level disciplines such as business, health care, public policy, public administration, or health sciences. This certificate is designed to meet the needs of students, employers, and community partners.

Course of Study

The following courses are required for an Certificate in Healthcare Administration:

Code	Title	Hours
PHM 3715L	Management & Policy Concepts in Public Health	3
PH 3736L	Healthcare Payment Systems and Policy	3
Select 3 credits of the following:		3
PHM 3746L	Evaluation & Improvement of Healthcare Quality	
PHD 3846L	Quality Management Improvement in Healthcare Doctoral	
Select 3 credits of the following:		3
PHM 3910	Health Economics	
or PHD 3910	Health Economics	
PHM 3720L	Healthcare Finance	
PHM 3718L	Accounting for Healthcare Management	
Select 3 credits of the following:		3
PH 3735L	Healthcare Strategic Management	
PHD 3946L	Strategy, Governance and Leadership	
Total Hours		**15**

For more information, see the Healthcare Administration certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Healthcare_Administration.docx).

Certificate in Introduction to Quantitative Methods for Behavioral Sciences

13 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate provides introductory training in research design and quantitative methods relevant to practitioners and researchers working in the fields of health promotion, social and behavioral sciences and preventative medicine. The course offerings in this certificate are designed to provide an introduction to basic design and analysis concepts. This will be suitable for certificate students entering with little or no prior quantitative methods experience.

Course of Study

The following courses are required for an Certificate in Quantitative Methods for Behavioral Sciences:

Code	Title	Hours
PH 1700L	Intermediate Biostatistics	3
PHD 1121L	Advanced Quantitative Analysis for Behavioral Sciences	3
PHD 1420L	Quantitative Research Design for Behavioral Sciences	3
PHD 1421L	Quantitative Analysis for Behavioral Sciences	3
PH 1124	Introduction to Data Management in Stata	1
Total Hours		**13**

For more information, see the Introduction to Quantitative Methods for Behavioral Sciences certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Introduction_Quantitative_Methods.docx).

Certificate in Leadership Theory and Practice

12 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate provides students with the theories behind leadership excellence as well as discussion on current leadership issues. It helps train present and future public health leaders in personal leadership qualities and skills needed for effective leadership including systems thinking; team work, cultural humility, strategic planning, and other leadership skills.

Course of Study

The following courses are required for an Certificate in Leadership Theory and Practice:

Code	Title	Hours
PH 5200	Foundations of Leadership in Public Health	3
Select 9 credits of the following:		9
PH 3616	Thinking for the Future	
PH 3738L	Legal Issues in Healthcare	
PH 3825	Public Health Law	
PHD 3743L	Adv Organ and Mgmt Theory	
PHM 3800L	Working with Diverse Communities	
or PHD 3800L	Working with Diverse Communities	
PHD 3946L	Strategy, Governance and Leadership	
PHD 3950	Applied Leadership Studies in Public Health	
PH 3999	IS: Management, Policy and Community Health	
PHM 5210	Selected Readings in Leadership Studies	
or PHD 5210	Selected Readings in Leadership Studies	
PH 5220	Gender and Leadership	
Total Hours		**12**

For more information, see the Leadership Theory and Practice certificate planner (https://web.sph.uth.edu/student-

forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Leadership_Theory_and_Practice.docx).

Certificate in Maternal and Child Health

12 semester credit hours for degree-seeking students

15 semester credit hours for non-degree-seeking students

This certificate is designed to equip students with skills to professionally promote and enhance the health of women, children, and their communities on a local, state, federal, and international level, while working as advocates in health care organizations, academic institutions, and other public and private organizations. An in-depth diverse curriculum provides skills development in reproductive, perinatal, child, and adolescent health.

Course of Study

The following courses are required for an Certificate in Maternal and Child Health:

Code	Title	Hours
Degree-Seeking Students Certificate Requirements		
PH 5301	Maternal and Child Health Core Training Seminar I	3
PH 5311	Maternal and Child Health Core Training Seminar II	3
Select 6 credits from the approved elective list		6
Total Hours		**12**

[1] Degree-seeking students elect a member of the Maternal and Child Health Certificate faculty who agrees to serve on the student's advisory committee. If a practicum, culminating experience (i.e. capstone, ILE, or thesis), and/or dissertation is required for the student's degree, the focus must be relevant to maternal and child health. The faculty member representing the Maternal and Child Health Certificate will determine if the student has met the requirements of the certificate program.

Code	Title	Hours
Non-Degree-Seeking Student Certificate Requirements		
Leveling Course		
PHM 2612L	Epidemiology I	3
Required Courses		
PH 5301	Maternal and Child Health Core Training Seminar I	3
PH 5311	Maternal and Child Health Core Training Seminar II	3
Select 6 credits from the approved elective list		6
Total Hours		**15**

Elective Options

Students are required to complete a minimum of six credit hours from the following list.

Code	Title	Hours
PHM 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	3
or PHD 1113L	Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping)	
or PHM 1116	Introduction to Intervention Mapping	
or PHD 1116	Introduction to Intervention Mapping	
PHM 1120L	Program Evaluation	3
or PHD 1120L	Program Evaluation	
PHM 1232L	Public Health Nutrition Practice	3
PH 1237	Obesity, Nutrition, & Physical Activity	1
PH 1238	Adolescent Sexual Health	3
PHD 1239L	Theories of Child and Adolescent Development	3
PH 1424L	Social Justice and Public Health	3
PH 1499	IS: Health Promotion and Behav Science (Consortium course on Disparities in America: Working Toward Social Change)	3
PH 2615L	Epidemiology II	3
PH 2735L	Physical Activity and Health: Epidemiology and Mechanisms	3
PH 2765L	Pediatric Epidemiology	3
PH 2767	Pediatric Behavioral Epidemiology	3
PH 2775L	Epidemiologic Methods in Racial and Ethnic Disparities	3
PH 2830L	Clinical Genetics in Epidemiology	3
PHM 2845L	Nutritional Epidemiology	3
or PHD 2845L	Nutritional Epidemiology	
PH 2998	Special Topics in Epidemiology (ST: Vaccines and Immunization Programs)	3
PHM 3630	Health Program Planning, Implementation, and Evaluation	3
PHM 3800L	Working with Diverse Communities	3
PHM 3810	Health Policy in The United States	3
or PHD 3810	Health Policy in The United States	
PH 3818	Texas Health Policy: Emerging Issues and New Approaches	3
PHM 3922	Economic and Social Determinants of Health	3
or PHD 3922	Economic and Social Determinants of Health	
PH 1112L	Community Assessment Methods in Public Health	3
PH 5102	Health Disparities Core Seminar	1
PH 5610	Global Health Overview	3

For more information, see the Maternal & Child Health certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Maternal_Child_Health.docx).

Certificate in Nutrition and Public Health

13 semester credit hours

Available to degree-seeking students.

This certificate provides opportunities and training for students to focus on dietary assessment methodology, nutritional epidemiology, food policy and systems, behavioral nutrition interventions, and medical nutrition therapy. The goal is to prepare students to understand the role of nutrition in disease prevention and health promotion, dietary

assessment, nutritional epidemiologic methods, nutritional physiology, and food and nutrition policy.

Course of Study

The following courses are required for an Certificate in Nutrition and Public Health:

Code	Title	Hours
PH 1233L	Introduction to Public Health Nutrition	3
PHM 2845L	Nutritional Epidemiology	3
or PHD 2845L	Nutritional Epidemiology	
PH 5040L	Nutrition Research Methods	1
PHM 1232L	Public Health Nutrition Practice	3
Select 3 credits of the following:		3
PH 1237	Obesity, Nutrition, & Physical Activity	
PH 1228	Food Policy	
PH 5031	Garden for Health	
PH 5032	Culinary Medicine	
Total Hours		**13**

For more information, see the Nutrition and Public Health certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Nutrition_and_Public_Health.docx).

Certificate in Physical Activity and Public Health

9 semester credit hours

Available to degree-seeking students.

This certificate provides opportunities and training for students to focus on physical activity assessment, epidemiologic methods, intervention planning, physiologic mechanisms and health outcomes, and policy development. This certificate also focuses on the possible causes and consequences of physical inactivity on health in individuals and populations and provides hands-on opportunities for skills development in the areas of measurement, intervention, and environmental and policy change.

Course of Study

The following courses are required for an Certificate in Physical Activity and Health:

Code	Title	Hours
PH 2735L	Physical Activity and Health: Epidemiology and Mechanisms	3
PH 5400	Physical Activity Assessment & Surveillance	3
PH 5401L	Physical Activity & Public Health Practice	3
Total Hours		**9**

For more information, see the Physical Activity & Public Health certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Physical_Activity_and_Health.docx).

Certificate in Public Health

15 minimum semester credit hours

Available to non-degree seeking students.

This certificate is intended for public health practitioners and individuals who are interested in increasing their basic public health knowledge or are considering a graduate degree in the field. These courses cover the core content of the disciplines that are basic to public health.

Course of Study

The following courses are required for an Certificate in Public Health:

Code	Title	Hours
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	3
PHM 1690L	Introduction to Biostatistics in Public Health	3-4
or PH 1700L	Intermediate Biostatistics	
PHM 2110L	Public Health Ecology & the Human Environment	3
PHM 2612L	Epidemiology I	3
PHM 3715L	Management & Policy Concepts in Public Health	3
Total Hours		**15**

For more information, see the Public Health certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Public_Health.docx).

Certificate in Public Health Informatics

16 semester credit hours

Available to non-degree seeking students.

This certificate is a joint program between McWilliams School of Biomedical Informatics at UTHealth Houston and UTHealth Houston School of Public Health and was created to address the growing emphasis of public health informatics at the national level and the increased market demand.

Course of Study

The following courses are required for an Certificate in Public Health Informatics:

Code	Title	Hours
PHM 1690L	Introduction to Biostatistics in Public Health	4
PHM 2612L	Epidemiology I	3
BMI 5300	Introduction to Biomedical Informatics	3
BMI 5380	Principles and Foundations of Public Health Informatics	3
Select 3 credits of the following:		3
BMI 5313	Foundations of Electronic Health Records and Clinical Information Systems	
BMI 5381	Methods in Public Health Informatics	
BMI 5382W	Synthesis Project in Public Health Informatics	
PHM 1110L	Health Promotion and Behavioral Sciences in Public Health	

PHM 2110L	Public Health Ecology & the Human Environment	
PHM 3715L	Management & Policy Concepts in Public Health	
Total Hours		**16**

For more information, see the Public Health Informatics certificate planner. (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Public_Health_Informatics.docx)

Certificate in Public Health Law Research and Policy Surveillance

15 semester credit hours

Available to degree-seeking and non-degree seeking students.

This certificate program is designed to train governmental, health care, and public health professionals to engage in public health policy research, analysis and practice as policy researchers and legal epidemiologists, with skills that bridge public health law.

Course of Study

The following courses are required for an Certificate in Public Health Law Research and Policy Surveillance:

Code	Title	Hours
PH 3738L	Legal Issues in Healthcare	3
PH 3732L	Research Methods in Public Health Law	3
PH 3733L	Law and Policy	3
PH 3734L	Public Health Policy Surveillance and Legal Epidemiology	3
PH 3999	IS: Management, Policy and Community Health [1]	3
Total Hours		**15**

[1] Students enrolling in an independent study course are required to complete the independent study plan form and obtain approval prior to enrolling. The independent study may be either a population health law research project or an internship with an agency, non-profit, or other organization where certificate students will apply skills learned in the certificate courses to public health policy questions of their choice.

For more information, see the Public Health Law Research and Policy Surveillance certificate planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Certificate%20Planners/Planner.Certificate.Public_Health_Research_and_Policy_Surveillance.docx).

Accelerated Master's

Accelerated Master's Programs

Undergraduate students matriculating at a partnering school or college external to UTHealth Houston School of Public Health will have the opportunity to earn both a Bachelor's degree and a master's degree in public health through UTHealth Houston School of Public Health over the course of approximately five (5) years. These Accelerated Master's programs integrate graduate certificate coursework into the student's undergraduate program during their final year of undergraduate study. Students apply as non-degree seeking students for enrollment in a graduate certificate during their undergraduate program. Once students graduate with their Bachelor's degree, and receive admission to a graduate program at UTHealth Houston School of Public Health, their certificate courses can apply toward, and advance completion of, a graduate public health degree. These educational agreements are listed as Accelerated Master's Programs. UTHealth Houston School of Public Health holds the following program agreements with the following educational entities. More information can be found on the Graduate Certificates (https://sph.uth.edu/degree-finder/) website.

Degree Program	Location
Austin College: Public Health Certificate	Sherman, TX
Rice University: Public Health Certificate	Houston, TX
Schreiner University: Public Health Certificate	San Antonio, TX
St. Mary's University: Public Health Certificate	San Antonio, TX
Sul Ross State University: Public Health Certificate	Alpine, TX
Texas A&M International University: Public Health Certificate	Laredo, TX
Texas Southern University: Public Health Certificate; Data Science Certificate; Applied Biostatistics Certificate	Houston, TX
The University of North Texas at Dallas: Public Health Certificate	Dallas, TX
The University of Texas at Austin: Public Health Certificate	Austin
The University of Texas at San Antonio: Public Health Certificate	San Antonio, TX
The University of Texas Rio Grande Valley: Public Health Certificate	Edinburg, TX
University of Houston: Public Health Certificate	Houston, TX
UTHealth Houston School of Dentistry, Dental Hygiene Program: Public Health Certificate	Houston, TX

Dual and Pathway Programs

Dual and pathway degree programs at UTHealth Houston School of Public Health are designed so the curricula of both degrees are integrated to the greatest extent possible. Through these programs, students are able to complete two degrees in a shorter time period than pursuing both separately as some specified courses can count toward both degrees. Students interested in a dual degree program must apply and receive admission to each institution, respectively, according to the application procedures and meet the requirements of each institution. For more information, see the Admissions Process (p. 5) section.

The maximum number of transfer (i.e. shared) credits that can apply to a degree program at UTHealth Houston School of Public Health, as part of a dual degree program, is outlined in Policy 308 (https://web.sph.uth.edu/student-forms/Student%20Resources/Policies/Policy.308_Transfer_of_Credit_Hours.pdf) Transfer of Credit Hours. Students should contact the program coordinator for the dual degree program for further information. More information about the following

dual and pathway degree programs can be found on the Dual Degree Programs (https://sph.uth.edu/degree-finder/) website.

Degree Program	Location
DDS/MPH Program	
UTHealth Houston School of Dentistry	Houston
DMD/MPH Program	
Texas Tech University Health Sciences Center El Paso School of Dental Medicine	El Paso
JD/MPH Program	
St. Mary's University School of Law	San Antonio
The University of Houston Law Center	Houston
MBA/MPH Program	
The University of Texas at El Paso Woody L. Hunt College of Business	El Paso
The University of Texas Permian Basin College of Business	Statewide
The University of Texas at San Antonio Alvarez College of Business	San Antonio
MD/MPH Programs	
Baylor College of Medicine	Houston & Austin
McGovern Medical School at UTHealth Houston	Houston
Texas Tech University Health Sciences Center El Paso Paul L. Foster School of Medicine	El Paso
The University of Puerto Rico School of Medicine	Houston
The University of Texas at Austin Dell Medical School	Austin
The University of Texas Rio Grande Valley School of Medicine	Brownsville
University of Houston Tilman J. Fertitta Family College of Medicine	Houston
The University of Texas Health Science Center at San Antonio Long School of Medicine	San Antonio
MGPS/MPH Program	
The University of Texas at Austin Lyndon B. Johnson School of Public Affairs	Austin
M.Jur./MPH	
St. Mary's University School of Law	San Antonio
MPAff/MPH Program	
The University of Texas at Austin Lyndon B. Johnson School of Public Affairs	Austin
MS/MPH Program	
McWilliams School of Biomedical Informatics at UTHealth Houston	Statewide
MSSW/MPH Program	
The University of Texas at Austin Steve Hicks School of Social Work	Austin
The University of Texas Rio Grande Valley School of Social Work	Brownsville
MSW/MPH Program	
University of Houston Graduate College of Social Work	Houston
Pharm.D./MPH Program	
The University of Texas at Austin College of Pharmacy	Austin
PhD/MPH Program	
McWilliams School of Biomedical Informatics at UTHealth Houston	Houston

Special Programs

Current, degree-seeking students are eligible to participate in the following special programs to enhance their educational experience.

UT System Graduate Archer Fellowship Program

The Graduate Archer Fellowship Program (https://www.uth.edu/archer-fellowship/) was established in 2010 by The University of Texas System to bring graduate and medical students interested in policy and politics to our nation's capital to learn about the federal government and public service. Our Graduate Archer Fellows remain enrolled at UTHealth Houston and earn nine (9) hours of in-residence credit for their experience in D.C. Graduate Fellows intern full-time with an organization of their choosing based on their professional and academic goals and interests. In addition to receiving three (3) academic credits for the full-time internship, students take six (6) credit hours of courses focused on the federal policy process and work independently with experienced policy experts to develop their policy recommendations. UTHealth School of Public Health students in this program will earn 9 credit hours of coursework by enrolling in the following three courses. Archer Center Program Fee: $3,900.

Course of Study

Archer Center Fellows will complete the following 9 credit hours:

Code	Title	Hours
PH 5098	Special Topics in Interdivisional Courses (ST: Federal Policy Making)	3
PH 5098	Special Topics in Interdivisional Courses (ST: Archer Center Research)	3
PH 9997	Practicum (ST: Archer Center Internship)	3
Total Hours		**9**

Industrial Hygiene

Industrial hygiene is the science devoted to anticipating, recognizing, evaluating, and controlling environmental factors posing risk to workers and the community, which arise from the workplace. Applicants for the industrial hygiene curriculum must specifically complete organic chemistry, and physics is strongly preferred. The master's-level industrial hygiene curriculum for the MPH is accredited by the Applied and Natural Science Accreditation Commission of ABET (https://www.abet.org/). A high level of faculty/student interaction is emphasized and students typically gain practical experience through summer internships, which offer a wealth of opportunities for training in industrial settings, healthcare, petroleum and petrochemicals, agriculture, and public

and private business and government sectors. Industrial hygiene is a discipline within occupational health and safety (OHS), which is a professionally exciting and rewarding field of public health that includes all other aspects of public health such as epidemiology, health promotion, management, global health and wellness, and other disciplines. Being an OHS practitioner helps to save lives of working people and promotes a grounded quality of life for their families and communities. The interdisciplinary curriculum is based on a public health model for practice. Graduates are prepared to participate in a multi-disciplinary approach to planning, implementing, managing, and evaluating program and services for worker health and safety.

Course of Study

Students who elect to complete the optional Industrial Hygiene curriculum will complete a minimum of 54 credit hours for their MPH in Environmental Health (p. 15) program. Students in the Industrial Hygiene program will complete the following 17 credit hours of coursework, in lieu of electives:

Code	Title	Hours
PHM 2155	Environmental Sampling Analysis [1]	4
PH 2241L	Fundamentals of Occupational Safety	3
PH 2246L	Principles of Occupational Ergonomics	3
PH 2250	Occupational Health Controls	4
PH 2260	Occupational Health Field Trips	3
Total Hours		**17**

[1] Lab fee: $10.00

- Students must select PH 2245 Fundamentals of Industrial Hygiene (4 credits) from the three options listed under the major courses selections in the MPH course of student.

Residency Program in Occupational and Environmental Medicine

This two-year track trains practicing physicians to be qualified for careers in occupational and environmental medicine. This program includes one year of rigorous academic study and one year of experiential rotations to fulfill the requirements of the MPH. Students who successfully complete the coursework and rotations are eligible to apply for board certification in occupational medicine by the American Board of Preventive Medicine (ABPM). For more information, see the Occupational and Environmental Medicine (https://sph.uth.edu/research/centers/swcoeh/) website.

Course of Study

Students who elect to complete the Occupational Medicine Residency curriculum will complete a minimum of 50 credit hours for their MPH in Environmental Health (p. 15) program. Occupational Medicine Residents will complete the following 13 credit hours of coursework, in lieu of electives:

Code	Title	Hours
PH 2255	Clinical Occupational Medicine	4
PH 2260	Occupational Health Field Trips	3
PH 2265	Occupational Medicine Practice (taken twice)	4
PH 2270L	Total Worker Health and Worker Well-being	2
Total Hours		**13**

- Students must select PH 2245 Fundamentals of Industrial Hygiene (4 credits) from the three options listed under the major courses selections in the MPH course of student.

Academic Departments

Our five academic departments offer students the opportunity to pursue public health programs with a specialization in the following core areas of study.

Department of Biostatistics and Data Science

Biostatistics uses statistical tools and methods to make sense from the vast quantities of data generated by biomedical research and real-world practice. Through classroom instruction and hands-on experience, our students learn to operate in two roles, both as leaders in their field and as expert translators of data and statistics for their project partners and clients. Each role is equally important. As leaders in statistics, our students are primed and ready to use and develop state-of-the-art statistical methods to tackle challenging data problems from real-world projects. As project partners, our students learn to collaborate with biomedical and health science investigators to address scientific questions effectively using statistical and data science methods, and articulate findings to stakeholders in a way that is meaningful and actionable.

The Department of Biostatistics and Data Science offers the following programs of study:

- Biostatistics and Data Science (MS) (p. 20)
- Biostatistics and Data Science (PhD) (p. 25)
- Biostatistics and Data Science, Direct Admission (PhD) (p. 25)
- Biostatistics (Minor) (p. 30)
- Data Science (Certificate) (p. 34)
- Advanced Data Science (Certificate) (p. 32)
- Applied Biostatistics of Public Health (Certificate) (p. 33)

Department of Epidemiology

Epidemiology encompasses every facet of life that can affect a population's health. The fields covered by epidemiology offer a different angle from which to assess and tackle pressing health issues affecting communities and populations. Students learn to bring the full context into view in order to understand the patterns and relationships in chronic and infectious diseases and other health outcomes such as injuries, aging, cancer, cardiovascular disease, and mental health in populations.

Epidemiology students can immerse themselves in a variety of topics, including nutrition, physical activity, tobacco control, and genomic research, to help guide decisions regarding the prevention, diagnosis, and treatment of disease.

The Department of Epidemiology offers the following programs of study:

- Epidemiology (MPH) (p. 16)
- Epidemiology (PhD) (p. 28)
- Epidemiology, Direct Admission (PhD) (p. 28)
- Epidemiology (Minor) (p. 30)
- Genomics & Bioinformatics (Certificate) (p. 35)

- Infectious Disease Epidemiology (Certificate) (https://catalog.uth.edu/public-health/programs/graduate-certificates/infectious-disease-epi/)

Department of Environmental and Occupational Health Sciences

Environmental and occupational health scientists are at the forefront of today's most critical public health challenges. Whether addressing workplace safeguards during a pandemic or mitigating the threats of extreme weather, aging urban infrastructure, and food-borne outbreaks, those working in environmental health and occupational safety inform the health policies that impact where we live and work. Faculty expertise and leadership span industry, government and academia. Along with interactive curricula, students obtain hands-on learning and research opportunities that produce tangible results for contemporary public health problems. Specifically, our students investigate the relationship between environmental/occupational exposures and human health impacts to inform safe worksites and healthy communities. The environmental and occupational health degree programs are managed by the Department of Environmental & Occupational Health Sciences (EOHS).

The Department of Environmental & Occupational Health Sciences offers the following programs of study:

- Environmental Health (MPH) (p. 15)
  - Industrial Hygiene (Special Program) (p. 41)
  - Residency Program in Occupational and Environmental Medicine (Special Program) (p. 41)
- Environmental Sciences: Environmental Disease Prevention Track (PhD) (p. 26)
- Environmental Sciences: Total Worker Health Track (PhD) (p. 27)
- Environmental Sciences (Minor) (p. 30)

Department of Health Promotion and Behavioral Sciences

Health Promotion and Behavioral Sciences prepares students to work alongside communities to develop, implement and evaluate successful interventions. Students join our department because they believe that making healthy life choices attainable and appealing is the most effective way to prevent disease and injury. Many times this means combining evidence-informed theories that address public health challenges with the goals and values of the community to create better intervention outcomes. Our faculty literally wrote the book on developing successful interventions, a seminal work that's used in public health classrooms around the nation. Their expertise not only helps our students build valuable skill sets, such as how to undertake a needs assessment or evaluate a project's effectiveness but also encourages them to address their own biases and assumptions to achieve better, more sustainable health programs.

The Department of Health Promotion and Behavioral Sciences offers the following programs of study:

- Health Promotion/Health Education (MPH) (p. 16)
- Health Promotion/Health Education, Dietetic Internship (MPH) (p. 17)
- Health Promotion/Health Education (DrPH) (p. 22)
- Behavioral Sciences and Health Promotion (PhD) (p. 24)
- Behavioral Sciences (Minor) (p. 30)
- Health Promotion Program Planning and Evaluation (Certificate) (p. 36)
- Advanced Planning and Evaluation for Health Promotion Programs (Certificate) (p. 33)
- Introduction to Quantitative Methods in Behavioral Sciences (Certificate) (p. 37)
- Advanced Quantitative Methods in Behavioral Sciences (Certificate) (p. 33)
- Maternal & Child Health (Certificate) (p. 38)
- Culinary Medicine and Public Health (Certificate) (p. 34)
- Nutrition and Public Health (Certificate) (p. 38)

Department of Management, Policy, and Community Health

The Department of Management, Policy and Community Health provide instruction in the fields of health economics, health services research, health policy, health law, health management and administration, health planning, community health practice, public health leadership, population health, organization management, health disparities, economic and social determinants of health, and health and economic development. Equipping students with the tools to lead health departments, government agencies, healthcare organizations, research facilities, and culturally sensitive programs is the mission of this department.

The Department of Management, Policy and Community Health offers the following programs of study:

- Community Health Practice (MPH) (p. 15)
- Health Services Organizations (MPH) (p. 18)
- Healthcare Management (MPH) (p. 18)
- Community Health Practice (DrPH) (p. 22)
- Management and Policy Studies: Health Economics/Health Services Research (PhD) (p. 29)
- Management and Policy Studies: Healthcare Management/Health Policy (PhD) (p. 30)
- Community Health Practice (Minor) (p. 30)
- Health Economics (Minor) (p. 30)
- Health Policy (Minor) (p. 30)
- Health Services Research (Minor) (p. 30)
- Healthcare Management (Minor) (p. 30)
- Healthcare Administration (Certificate) (p. 37)
- Public Health Law Research and Policy Surveillance (Certificate) (p. 40)

Course Descriptions

Course descriptions are organized by the academic department that offers them. To skip to course descriptions for a specific department, select from one of the departments below.

Course descriptions in school catalogs and the Course Search *(*https://catalog.uth.edu/course-search/*) are correct at the time of publication. See* myUTH *(*https://uthidp.uth.edu/nidp/saml2/sso/?id=Campus-Affiliate-LOA2-DUO&sid=0&option=credential&sid=0*) for more recent course information and to register for courses.*

PH 101 Foundations of Public Health (not-for-credit)
This course is required for all students enrolled in a degree-seeking program. This course is an online, not-for-credit course that covers the Foundational Knowledge Competencies set forth by the Council on Education for Public Health (CEPH). Students will be added to the course in Canvas during their first semester and must complete the course within one year of matriculation.

Health Promotion and Behavioral Science Course Descriptions

PHM 1110L Health Promotion and Behavioral Sciences in Public Health (3 Credits)
After completing this MPH core course, students will be able to explain the contribution of health promotion and behavioral sciences to public health. Students will learn about commonly used theories and models, community engagement, health equity, needs assessment, and program design, implementation, and evaluation. Throughout the semester, students will improve communication skills while applying newly acquired knowledge related to public health problems. Letter Graded

PHM 1111L Health Promotion Theory and Methods (4 Credits)
This course introduces students to the application of selected behavioral science theories and concepts in health promotion directed to affect individual behavior change, and environmental and policy theories and concepts to affect changes in organizations, communities, and governments. Topics specific to environmental and policy change include organizational change theory, mass media, community organizations, diffusion of innovations, social networks, community development, community engagement, and public policy campaigns. Students are provided opportunities to demonstrate knowledge and gain experience in applying theory, in designing interventions, and in building coalitions to affect programs, policies, and environmental conditions. Prerequisites: PHM 1110L Letter Graded

PH 1112L Community Assessment Methods in Public Health (3 Credits)
This course will ground students in key concepts and methodologies related to community health needs assessment (CHNA), including the meaning of community and methods for assessment that span primary and secondary data collection. The students will learn to design a community assessment with partnering community agencies. The assessment process will be conceptualized as a research methodology and process for developing and prioritizing community health programs and policies for a stakeholder organization. The course also introduces new and non-traditional methods and technologies for CHNA. It covers practical assessment considerations such as social action, strategic and culturally appropriate communications, Community-based Participatory Research (CBPR) approaches, and supporting the community in action planning and implementation. Prerequisites: PHM 1110L Letter Graded

PHM 1113L Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping) (3 Credits)
This course integrates and extends the knowledge of behavioral science theory into planning models for health promotion programs that include conducting a needs and assets assessment, determination of priorities, setting goals, stating objectives, designing interventions, and developing an implementation and evaluation plan. The teaching methods emphasize group process skills through modeling and guided practice applied to the planning process. Student evaluations include a guided written health promotion project plan and participation in class and group assignments. Prerequisites: PHM 1110L & PHM 1111L & [PHM 2610 or PHM 2612L]; strongly recommend: PHM 1690L or PH 1700L Letter Graded

PHD 1113L Advanced Methods for Planning and Implementing Health Promotion Programs (Intervention Mapping) (3 Credits)
This course integrates and extends the knowledge of behavioral science theory into planning models for health promotion programs that include conducting a needs and assets assessment, determination of priorities, setting goals, stating objectives, designing interventions, and developing an implementation and evaluation plan. The teaching methods emphasize group process skills through modeling and guided practice applied to the planning process. Student evaluations include a guided written health promotion project plan and participation in class and group assignments. Prerequisites: [PHM 2610 or PHM 2612L] & [PHM 1111L or PHD 1122L]; strongly recommend: PHM 1690L or PH 1700L Letter Graded

PHM 1116 Introduction to Intervention Mapping (2 Credits)
This course integrates and extends the knowledge of behavioral science theory into planning models for health promotion programs that include conducting a needs and assets assessment, determination of priorities, setting goals, stating objectives, designing interventions, and developing an implementation and evaluation plan. The teaching methods emphasize group process skills through modeling and guided practice applied to the planning process. Students work on health problems of their choice. Student evaluations include a guided written health promotion project plan and participation in class and group assignments. Prerequisites: PHM 1110L & [PHM 2610 or PHM 2612L]; strongly recommend: PHM 1690L or PH 1700L Pass/Fail, F not in GPA

PHD 1116 Introduction to Intervention Mapping (2 Credits)
This course integrates and extends the knowledge of behavioral science theory into planning models for health promotion programs that include conducting a needs and assets assessment, determination of priorities, setting goals, stating objectives, designing interventions, and developing an implementation and evaluation plan. The teaching methods emphasize group process skills through modeling and guided practice applied to the planning process. Students work on health problems of their choice. Student evaluations include a guided written health promotion project plan and participation in class and group assignments. Prerequisites: [PHM 1110L or PHM 1111L or PHD 1122L] & [PHM 2610 or PHM 2612L]; strongly recommend: PHM 1690L or PH 1700L Pass/Fail, F not in GPA

PHD 1118L Qualitative Methods (3 Credits)
The course covers the underpinnings of qualitative research from the approaches, methods, and practice of data collection used in the conduct of qualitative inquiries to thematic analysis and write up. Students gain experiences in the design and practices of fieldwork including observation and mapping, developing interview and group discussion guides, and conducting interviews. They also learn to develop a codebook and basics of qualitative analysis as they prepare to disseminate their work in presentations and papers. Letter Graded

PH 1119L Qualitative Analysis (3 Credits)
Building on their coding and thematic analysis skills, this course introduces students to a range of qualitative analyses (e.g., narrative, discourse, constructivist grounded theory, framework and policy analyses) and appropriate ways to use them. Each student is guided through the process of identifying a qualitative data set and selecting an appropriate analysis approach for it. Students move from conducting their data analysis through writing up a draft manuscript. Classroom sessions include lectures, writing exercises, discussions, and presentations of analyses and findings. Prerequisites: PHD 1118L or PHM 5015 Letter Graded

PHM 1120L Program Evaluation (3 Credits)
This course introduces students to program evaluation, emphasizing a range of evaluation goals and designs and pre-pares students to develop a plan for the evaluation of a health program or policy. In this course, the evaluation plan structure focuses on three levels: (1) the design of a logic model; (2) program implementation and process; and (3) program impact and outcomes, including threats to validity and measurement issues. Program logic models guide the program evaluation process. Stakeholder involvement emphasizes collaborative approaches to promote evaluation plan feasibility and relevance. MPH students will work in small groups to identify a community-based program or policy as the basis for their work to enhance the "real world" experience. Prerequisites: [PHM 2610 or PHM 2612L] & [PHM 1110L or PHM 1111L] Letter Graded

PHD 1120L Program Evaluation (3 Credits)
This course introduces students to program evaluation, emphasizing a range of evaluation goals and designs and prepares students to develop a plan for the evaluation of a health program or policy. In this course, the evaluation plan structure focuses on three levels: (1) the design of a logic model; (2) program implementation and process; and (3) program impact and outcomes, including threats to validity and measurement issues. Program logic models guide the program evaluation process. Stakeholder involvement emphasizes collaborative approaches to promote evaluation plan feasibility and relevance. Doctoral students will work independently to develop an evaluation plan for a multi-level, community-based program or policy as the basis for their work; they will additionally learn the skills associated with designing a multi-level evaluation project to address a public health issue. This project will prepare doctoral students to explain how evaluation methods can address health issues at multiple levels. Prerequisites: [PHM 2610 or PHM 2612L] and [PHM 1110L or PHM 1111L] Letter Graded

PHD 1121L Advanced Quantitative Analysis for Behavioral Sciences (3 Credits)
The course will focus on statistical methods for research evaluation that extend basic principles of multiple regression, including limited dependent variables, mediation, moderation, and correlated data models (e.g. multilevel models); missing data models, including multiple imputation; study designs and methods that can enhance the internal validity of an evaluation and compensate for a lack of randomization and selection bias, including propensity scores. Class time will be used for lectures, and a semester project will provide an opportunity to apply the methods of this course to analyze real-world data. Prerequisites: PHD 1120L & PHD 1420L & [PHD 1421L or equivalent] & [Recommended: PHD 1130L]. If required courses were taken elsewhere or in departments other than HPBS, provide syllabi to instructor for approval. Letter Graded

PHD 1122L Health Promotion Theories for Individuals and Groups: Part I (3 Credits)
This course provides HPBS doctoral students with an overview of the application of selected behavioral science theories and models used in health education and health promotion programs directed toward individuals and groups. The goals for this class are to provide students opportunities to apply behavioral science theories and models to the development of interventions for health problems and to improve scientific writing skills. Students will demonstrate their ability to use theory for understanding a health issue and improve scientific writing skills through written assignments. Prerequisites: strongly recommend: PHM 1110L or PHM 1111L or equivalent Letter Graded

PHD 1123L Community Health Promotion Theory and Practice (3 Credits)
This course aims to build students' knowledge and skills in community health promotion research and practice via exploration and application of community and environmental-level health promotion theories, community health promotion planning models, and community/environmental-level health promotion change methods that include participatory problem solving, coalition building, and advocacy. Students will engage in diverse learning activities and the development of an NIH community health promotion research funding proposal. Prerequisites: PHM 1110L or equivalent Letter Graded

PH 1124 Introduction to Data Management in Stata (1 Credit)
This course is designed for masters or doctoral students who have no exposure to any statistical software, and want to gain hands-on familiarity with using statistical software (Stata), prior to taking a semester-long statistical analysis course, such as PHM 1690L or PHD 1421. Students will practice a variety of skills necessary to create a clean and annotated dataset prior to analysis of a specific research question, including reading external data files in Stata, cleaning and creating new variables, conducting preliminary descriptive analyses, and basic regression. Pass/Fail, F not in GPA

PHD 1132 Latent Variable Models and Factor Analysis (3 Credits)
This course helps students develop the skills and understanding necessary to use and apply several statistical techniques included under the umbrella of Latent Variable Analysis. The course covers Exploratory and Confirmatory Factor Analysis, Path Analysis, Structural Equation Modeling, Assessment of Measurement Invariance, and Latent Growth Curve Modeling. The course focuses on the application of these methods in public health, reading and understanding research studies that use these methods, and developing research reports and presentations from analyses they have conducted. Prerequisites: PH 1700L or PHD 1421L or consent of instructor. The completion of an applied multivariate statistics course is strongly recommended. Pass/Fail, F not in GPA

PHD 1130L Applied Measurement Theory (3 Credits)
This course introduces students to the basic aspects of psychometric theory, with an emphasis on the development of valid and reliable measurement scales. The course covers classical test theory; common scaling methods; analytic methods relevant to scale construction, including exploratory and confirmatory factor analysis; and survey construction, design, and administration. Students have an opportunity to become familiar with various statistical approaches and software used to assess psychometric properties of scales as well as with strategies for survey construction and administration. Prerequisites: PHD 1421L Letter Graded

PHD 1227L Health Promotion Theories for Individuals and Groups: Part II (3 Credits)
This course focuses on theories that will advance the students understanding of health behavior and their application to health behavior interventions. The course provides an overview of the philosophy of science, a review and critique of key health behavior theories and an in-depth exploration of the key conceptual building blocks making up these theories. This course complements PHD 1122L, Research Design I and II and is a requirement for all PhD students in Health Promotion and Behavioral Sciences. Prerequisites: PHD 1122L Letter Graded

PH 1228 Food Policy (3 Credits)
The purpose of this course is to identify the ways in which social, cultural, economic, commercial, and institutional factors promote or act as barriers to the design and implementation of equitable agriculture, food, and nutrition policies and programs, and the ways in which these policies and programs affect health. The course can serve as an elective for those interested in community-based health promotion, policy, and/or nutrition. Pass/Fail, F not in GPA

PHM 1229 Medical Nutrition Therapy Simulation Lab (2 Credits)
This course, in the simulation lab in Houston, will offer the student the opportunity to learn the Nutrition Care Process, which includes nutrition focused physical assessment and the assessment process of malnutrition. In a realistic treatment setting with a computer-controlled and instructor-manipulated manikin "patient," students will learn specific clinical skills leading to proficiency in clinical judgment and performance. Behavioral-based strategies for counseling relating to nutrition will also be included in this course. Prerequisites: Currently enrolled in Dietetic Internship Program-MPH/Dietetic Intern or MD/MPH. Pass/Fail, F not in GPA

PHM 1231L Advanced Medical Nutrition Therapy (3 Credits)
This advanced course focuses on the assessment, application, and nutritional management of persons with conditions requiring medical nutrition therapy in general medicine and critical care. Specialized nutritional needs and principles of clinical management are covered. Prerequisites: Consent of instructor Letter Graded

PHM 1232L Public Health Nutrition Practice (3 Credits)
This course presents an overview of the roles, responsibilities, skills, and career opportunities of the public health nutritionist. Topics include review of the nutrition education literature; development of behaviorally-based nutrition education materials for the community; identification of community nutrition-related assets and resources through a community assessment; development of behaviorally-based nutrition education materials for the community based on the needs assessment; evaluation of nutrition programs; nutrition policy, including food assistance programs; food and nutrition security; current public health nutrition issues; and the cultural aspects of food consumption. Applications of national dietary goals to various population groups are presented, with a focus on underserved populations and health equity. Letter Graded

PH 1233L Introduction to Public Health Nutrition (3 Credits)
This course is an overview of the predominant food and nutrition issues that affect the public health of developed countries, specifically the United States. Topics include national nutrition and dietary guidelines, dietary assessment, macronutrients, micronutrients, prevention of chronic diseases, food safety and sustainability, food insecurity, and current topics in public health nutrition. Dietary issues will be presented using a life cycle approach, in which the issues are introduced and developed within the framework of a specific age categories. Letter Graded

PH 1236 Issues in Aging (2 Credits)
This course is designed to expose students to different aspects of aging. The course content covers the biopsychosocial aspects including the biology of aging, healthy aging, physical activity and aging, cognitive, psychological, and social changes related to aging as well as a host of aging-related conditions. The recorded lectures provide content and context for the course material and learners are expected to demonstrate applied understanding through discussion boards and mastery via quizzes and exams. Pass/Fail, F not in GPA

PH 1237 Obesity, Nutrition, & Physical Activity (1 Credit)
This seminar course provides a forum for students to learn to critically review the research literature in the areas of obesity, nutrition, and physical activity. Topics will vary and will be driven by the current published literature and emerging areas of research. Seminars will be set up in an informal manner, with faculty leading the first session and students assuming the lead later in the semester. Review of papers will be accompanied by in-depth discussions focusing on study design and analysis and interpretation of results, as well as on the relationship of the paper to the existing body of knowledge. Pass/Fail, F not in GPA

PH 1238 Adolescent Sexual Health (3 Credits)
This course explores determinants, approaches, and controversies related to adolescent sexual health. The course reframes adolescent sexuality as a multi-faceted public health issue and provides a broad perspective on sexual health education, research, and advocacy. Topics include: prevalence of adolescent pregnancy, STIs, and HIV; holistic models of sexuality; sexual diversity; cultural determinants; mental health; sex in the media; sexual violence; contraceptives; legal and political issues; effective programming and its effect on youth; and managing controversy. The course provides didactic and dynamic opportunities for exploration of attitudes regarding sexuality and skills-building through experiential learning. Pass/Fail, F not in GPA

PHD 1239L Theories of Child and Adolescent Development (3 Credits)
The purpose of the course is to provide students with a foundation in historical and contemporary theories of developmental science and explores how these theories facilitate our understanding of normative development from infancy through adolescence. In addition, the course will utilize developmental theories to examine the factors contributing to public health problems affecting children and youth as well as the development and implementation of public health interventions serving these populations. Prerequisites: Must be a doctoral student Letter Graded

PH 1241 Disability and Public Health (3 Credits)
This course explores a variety of issues the affect the ability of individuals with disabilities to be healthy in the context of living with their disability. Today, about 61 million Americans live with disabilities, which represents 26% of the population, and this number is expected to increase. Unlike previous generations, the life expectancy of those living with a disability now approximates that of the general population, and passage of the Americans with Disabilities Act of 1990 has increased employment opportunities and participation in community life. In order to fully take advantage of these opportunities, people with disabilities need to remain healthy. Evidence, however, demonstrates that people with disabilities experience substantial health disparities, and that public health has mostly overlooked this underserved group. Topics to be covered include existing federal legislation protecting the rights of individuals with disabilities, surveillance, issues related to access and health care services, evidence regarding lifestyle behaviors and preventive health practices, and approaches for promoting health and reducing disease. Pass/Fail, F not in GPA

PH 1251 Seminar on the Health of Sexual and Gender Minority Persons (1 Credit)
This is a seminar course for students interested in the health of sexual and gender minorities. Through Canvas discussions, the course provides a venue for students to become familiar with the academic literature. Pass/Fail, F not in GPA

PH 1300 Public Health Communications (3 Credits)
In this course each student selects a significant public health challenge involving behavior and policy/environmental change that can be promoted and advocated through media communication. In collaborative teams, students learn how to define audiences and aims, set objectives, select strategies, and design products for an evidence-based multi-component communication plan - with guided practice of skills including news media engagement and public relations, writing and graphic arts for low-literacy audiences, constructing theory/evidence-based logic models, audience research and social marketing analysis, and use of new social and mobile media. Prerequisites: PHM 1110L or PHM 1111L or equivalent Pass/Fail

PH 1321L Social Networks and Health (3 Credits)
This course provides students an opportunity to gain understanding on conducting research that uses social network analysis, including major areas of health research. This course will provide students with practical applications of analytical techniques using appropriate software. Topics include theory, research design, data collection, sampling methods, and quantitative descriptions of networks, statistical modeling of networks, and example interventions relevant to various disciplines in public health. Prerequisites: [PHM 1690L or PH 1700L] & [PHM 2610 or PHM 2612L or PHD 1420L or PH 1421L] & [Recommended: a basic theoretical statistics or categorical data analysis or generalized linear model course] Letter Graded

PH 1323L Applied Methods for Longitudinal and Ecological Momentary Assessment (EMA) Data (3 Credits)
The prevalence of smart phones and electronic monitoring devices makes it possible to collect data in real-time and the natural environment (i.e., ecological momentary assessment). The resulting intensive longitudinal data have brought along methodological challenges. This course is the first of its kind offered in the UTHealth to equip SPH students with sufficient skills to handle not only conventional longitudinal data but also EMA data that are becoming more popular in public health research. This course will focus on software application, as well as presentation and interpretation of results. Prerequisites: PH 1700L Letter Graded

PH 1324L Applied Discrete Data Analysis using Stata (3 Credits)
This course provides students an opportunity to gain practical use and obtain discrete data analytic techniques, including data management and various regression methods for the analysis of categorical outcome variables using Stata statistical software. Topics include the logistic regression model, sampling methods, model building strategies, assessing model fit, multiple logistic regression, and Poisson regression, and some extensions of generalized linear model. This course will provide students with practical applications of these statistical methods using Stata commands. Prerequisites: [PH 1700L or PH 1421L or equivalent] & [Recommended: a basic theoretical statistics course] Letter Graded

PH 1352L Racism, Equity & Public Health (2 Credits)
This course provides an understanding of how racism impacts health, social determinants and other associated factors (sexism, ableism, classism, homophobia, ageism, colorism, etc.). Students will be able describe both historical and current implications for developing interventions and inclusive policies for healing racial trauma and addressing systemic health inequities. Prerequisites: PH 5102 Letter Graded

PH 1400 Planetary Health (1 Credit)
Public human health depends on the health of the planet. Earth's natural systems -the air, the water, the biodiversity, the climate are our life support systems. Yet climate change, biodiversity loss, scarcity of land and freshwater, pollution and other threats are degrading these systems. The emerging field of planetary health aims to understand how these changes threaten public health and how to protect ourselves and the rest of the biosphere. The goal of the course is to provide a forum in which current research in planetary health can be reviewed and critiqued. Topics will be variable and driven by interest of the students. Seminars will be set up in an informal manner, with faculty leading the first discussion and students assuming the lead later in the semester. Pass/Fail, F not in GPA

PH 1410L Addiction and Society (3 Credits)
This two-part seminar will examine substance use and addiction using two approaches: 1) historical and anthropological, and 2) psychological approaches. In the historical and anthropological part of the course, students will study social and structural influences on development and definition of substance use disorders (SUD), prevention, intervention, harm reduction, treatment, recovery and disparities. In the psychological part of the course, students will learn about diagnostic criteria for SUD, prevalence in the U.S., comorbidity with mental health issues, developmental processes from childhood to adulthood, genetic and neurocognitive basis, health policy, and health communication. Letter Graded

PHD 1420L Quantitative Research Design for Behavioral Sciences (3 Credits)
This course equips students with the skills to develop research questions appropriate to the behavioral sciences that can be translated into testable hypotheses and feasible, effective research designs. Students are exposed to a variety of research design elements through published journal articles, and are expected to learn to evaluate and compare the suitability of different study designs to test specific hypotheses. A key aspect of evaluating research design is identifying potential threats to internal and external validity, as well as examining statistically conclusion validity and construct/measurement validity that are present in greater or lesser degree in all research designs, including observational, experimental, and quasi-experimental designs. Assignments and exams will focus on developing the skills to construct valid research designs appropriate to the proposed research question. Prerequisites: consent of instructor Letter Graded

PHD 1421L Quantitative Analysis for Behavioral Sciences (3 Credits)
This course expands on the material covered in PHD 1420L and focuses on the choice and implementation of statistical analyses that assess differences between groups, associations among variables, and prediction of outcomes This course will cover descriptive statistics as well as statistical inference. Emphasis is placed on appropriate use of statistical software for conducting analyses to address research questions, interpreting the results from these analyses, and presenting the findings in both oral and written form. Students will also be involved in critiquing scientific journal articles that make use of these methods. Prerequisites: ([PHM 1690L or equivalent] & PHD 1420L) or consent of instructor Letter Graded

PH 1424L Social Justice and Public Health (3 Credits)
With people from multiple historically oppressed and marginalized groups as the focal point, this seminar examines how multiple social identities, including race/ethnicity; gender, sexual orientation, SES, and disability, intersect at the micro level of individual experience to reflect interlocking systems of privilege and oppression (i.e., racism, sexism, heterosexism, classism) at the macro social-structural level and produce disparate health outcomes. Discussion will center around theory and research from Disability studies, feminism, and Critical Race Praxis (PHCRP) to promote an understanding of how multiple identities and analytical categories intersect to create health disparities that require multifaceted policy and intervention approaches that address the ways that all facets of an individual's and community's identity intersect with social discrimination and in turn affect their health. The course explores local and global controversies and examines strategies to address them including community mobilization, coalition building, community-based participatory research, and community-level advocacy. Students will learn about action-oriented research methods, especially collecting digital storytelling narratives, which may be used to address social and environmental injustices and public health inequities. The course is designed to provide students with theoretical principles, methods, and skills essential to effectively work with communities. Prerequisites: PHD 1118L or PHM 5015L Letter Graded

PHD 1431 Tools and Methods for Systematic Review (2 Credits)
This course is designed to introduce students to best practices, resources, and methods for systematic reviews, and to guide students through the steps of a protocol. The course uses examples from a wide variety of protocols and completed reviews as well as exercises and readings. Course resources and materials are available throughout the semester to assist students in applying them to an Integrative Learning Experience or dissertation. Students who expect to continue with their own reviews and to receive further support should enroll in independent study with the instructor. Prerequisites: Must be a doctoral student Pass/Fail, F not in GPA

PH 1433 Research Seminar in Health Promotion and Behavioral Sciences (1 Credit)
This research seminar aims to enhance students' understanding of the field of health promotion and behavioral sciences via exploration of a range of research topics and methods. Faculty will present planned, ongoing, and completed research that covers a range of health promotion and behavioral science topics, and students will have the opportunity to critically discuss and reflect on current topics, methods, and theories based on these projects as well as supplemental readings. Pass/Fail, F not in GPA

PHD 1435 Health Promotion and Behavioral Sciences Doctoral/Post-Doctoral Research Seminar (2 Credits)
This seminar course affords the opportunity for doctoral students and post-doctoral fellows to improve their research skills and increase their scientific productivity in the formulation of research proposals and journal publications and presentations at scientific meetings. Participants present their work-in-progress and act as reviewers for others' work. Students also learn other career skills and the principles of the responsible conduct of research, e.g., making poster presentations, presenting job talks, writing cover letters and teaching philosophy statements, and observing fair practices for authorship and acknowledgement. This course provides opportunities to involve mentors (e.g., advisers, dissertation supervisors, committee members) and to practice mentoring and teaching with other participants. Prerequisites: Doctoral student or post-doctoral fellow or consent of instructor Pass/Fail, F not in GPA

PHD 1440 Proposal Writing for Health Promotion and Behavioral Sciences (3 Credits)
The purpose of this course is for HPBS doctoral students to accelerate the completion of a well-developed draft of their dissertation proposal. Students will read and engage in class discussions to develop their writing and study approach with attention to the organization of their background research (evidence tables), research plan, content, and clarity of writing. In addition to drafting their own proposal, students will provide peer reviews of other students' work. Prerequisites: Doctoral students in HPBS (DrPH or PhD) who have successfully completed preliminary exams and have identified a dissertation chair. Prior to the beginning of the course, the instructors expect the student to submit a draft of at least two specific aims and data source(s) with their dissertation chair's e-mail approval. The instructors also expect the student to set up regular meetings with their dissertation chair for feedback and guidance on sections of the proposal. Pass/Fail, F not in GPA

PH 1447 Technology, Entrepreneurship, and Applied Innovation in Public Health (1 Credit)
This seminar class provides the opportunity to extend professional networks while considering career paths "less travelled." In a series of engaging personal life stories, successful practitioners working at the intersection of public health, technology, and entrepreneurship share "how-tos" and insights for success in their for-profit start-ups, non-profit 503c, foundations, fortune 500 corporations, venture capital firms, and academic institutions. A common theme is the translation of academic IP to the marketplace to maximize reach, impact, and sustainability. Pass/Fail, F not in GPA

PHD 1450 Dissemination & Implementation Research and Practice (1 Credit)
This course introduces students to dissemination and implementation (D&I) theories and methods. In-class lectures and discussions focus on the foundations of D&I science including terminology, conceptual models and frameworks, measures, and implementation strategies. Student evaluations include participation in class and a D&I plan that addresses a public health problem. Students do not need prior knowledge or experience with D&I research in order to participate in the class. Pass/Fail, F not in GPA

PHD 1451 Dissemination & Implementation Research and Practice Part II (2 Credits)
This course focuses on dissemination and implementation (D&I) topics that inform research and practice. There will be in-depth coverage of how to apply D&I theories and frameworks, how to select, develop, and tailor implementation strategies, and how to develop an evaluation plan, that includes the examination of implementation outcomes. The course will also cover processes for program adaptation and de-implementation. Prerequisites: PHD 1450 Pass/Fail, F not in GPA

PHM 1496 Capstone for HPBS Students (3 Credits)
This integrative learning experience is designed to demonstrate synthesis of major themes from the MPH core and major-specific courses. Students will develop, write, and present a proposal for a health promotion intervention. The proposal will be a grant and will focus on the development and evaluation of a proposed theory-based intervention. Prerequisites for HPBS majors: Completed MPH Core & PHM 1111L & PH 1112L* & PHM 1113L* & PHM 1120L* & completed at least 30 semester credit hours the semester before enrolling in capstone *One of these courses can be taken concurrently with PHM 1496. It is strongly recommended that students take PHM 1120 prior to enrolling in the course, but can be taken concurrently if needed Prerequisites for Dietetic Internship students: Must be a dietetic intern & completed the MPH Core & completed at least 30 semester credit hours the semester before enrolling in capstone Pass/Fail, F not in GPA

PH 1498 Special Topics in Health Promotion and Behavioral Sciences (1-4 Credits)
Credit hours vary among Special Topics courses. Topics vary each semester and provide in-depth study of HPBS faculty research. Pass/Fail, F not in GPA

PH 1498L Special Topics in Health Promotion and Behavioral Sciences (1-4 Credits)
Credit hours vary among Special Topics courses. Topics vary each semester and provide in-depth study of HPBS faculty research. Letter Graded

PH 1499 IS: Health Promotion and Behav Science (1-9 Credits)
A plan of study is determined for each participating student and supervised by a member of the HPBS faculty. This course may be repeated for credit. All independent study courses are required to have learning objectives and an outline of learning activities. Pass/Fail, F not in GPA

Biostatistics and Data Science Course Descriptions

PH 1624L Introduction to SAS Data Management (3 Credits)
This course covers reading ASCII files using various formats qualifiers, using DROP and KEEP statements, merging files, writing subsets of files, sorting, labeling variables, calculating date intervals, and using the LAG function. Minimal statistical processing, such as t tests and chi-squares, will also be introduced. Students are given several small coding assignments that are due approximately one (1) week later. To complete the assignments, students must have access to a computer on which SAS is installed. Letter Graded

PH 1630L Introduction to R Programming for Biostatistics and Data Science (2 Credits)
This course is an introduction to programming for statistics and data science using R programming language. The first half of the course covers basic programming concepts including variables, data types, data structures (lists, arrays, data frames, etc.), selection and repetition structures, to functions and packages. The second half includes data manipulation, exploration and visualization using tidyverse. Implementation of basic Statistical techniques are included in the course. Letter Graded

PH 1631L Introduction to Python Programming for Biostatistics and Data Science (2 Credits)
This course is an introduction to programming for statistics and data science using the Python programming language. Starting with basic programming concepts including variables, data types, data structures (lists, arrays, dictionaries, data frames, etc.), selection and repetition structures, to functions and packages, and finally data manipulation, exploration and visualization using the Python programming language. Letter Graded

PHM 1690L Introduction to Biostatistics in Public Health (4 Credits)
This course is designed as the first biostatistics course for students who have not previously taken a course in biostatistics; it is a designated core course for MPH students. Students will learn how to analyze quantitative data using appropriate biostatistical methods and software and interpret analysis results for a given public health context. Letter Graded

PH 1700L Intermediate Biostatistics (3 Credits)
This course is required for students minoring in Biostatistics and for students in Biostatistics who have not previously taken biostatistics courses. This course extends the topics covered in Foundations of Biostatistics to provide a deeper foundation for data analysis, and includes some coverage of the mathematical underpinnings of biostatistics. However, the main focus of the course is the application of biostatistics to research problems of public health and the biological sciences. Computer applications are included. Prerequisites: PHM 1690L or equivalent knowledge/training Letter Graded

PH 1745L Sampling Techniques (3 Credits)
This course introduces the principles and current practices of survey sampling with health-related applications. Topics include basic concepts and practical issues in statistical sampling; design and analysis for common sample designs: including simple random sampling, stratified random sampling, systematic sampling, cluster sampling, and multistage sampling; variance estimation techniques, and how to estimate the sampling weights. Statistical methods using national, and local complex surveys from descriptive statistics to linear and logistic regression with sampling weights are presented, such as the National Health and Nutrition Examination Survey (NHANES) or the Population Assessment of Tobacco and Health (PATH) Study, among others. Prerequisites: PH 1700L or consent of instructor Letter Graded

PH 1820L Applied Linear Regression (3 Credits)
The course emphasizes the design, implementation, analysis, and reporting of research investigations. Topics include two-sample inference using t-distributions, robustness and resistance, alternatives to the t-test based analyses, comparisons among several samples, linear combinations and multiple comparisons, simple and multiple linear regression methods, regression diagnostics, variable selection, and related methods. The course requires intensive computer analyses of case studies, emphasizing graphics and proper use and interpretation of statistical software packages using Stata as a model statistical software package. Prerequisites: PH 1700L or consent of instructor Letter Graded

PH 1821L Applied Multivariate Analysis for Biostatistics (3 Credits)
This course is a continuation of PH 1820L. Topics include the analysis of variance for two-way classifications, factorial arrangements and blocking designs, analysis of repeated measures and other multivariate responses, exploratory tools for summarizing multivariate responses, logistic methods for binary response variables and binomial counts, and log-linear regression for Poisson counts. Prerequisites: [PH 1820L or consent of instructor] & linear algebra Letter Graded

PH 1830L Categorical Data Analysis (3 Credits)
This course presents the theory and applications of categorical data analysis. Topics include contingency tables, applied generalized linear models, logistic regression model, sampling methods, model building strategies, assessing model fit, conditional logistic regression for matched analyses, polychotomous logistic regression, and Poisson regression. Prerequisites: [PH 1700L & calculus] or consent of instructor Letter Graded

PH 1831L Survival Analysis (3 Credits)
This course presents the theory and applications of survival analysis. Topics include censoring, parametric and nonparametric models, hypothesis testing, proportional hazards model with fixed and time-varying covariates, model building strategies, and assessing model fit. Prerequisites: (Calculus & [PH 1830L (preferred) or PH 1820L]) or consent of instructor Letter Graded

PH 1835L Statistical Methodology in Clinical Trials (3 Credits)
This course covers the use of current statistical methodology in the design, execution, and analysis of clinical trials. Some of the topics include basic study design, randomization, sample size issues, data analysis issues, and interim monitoring. Prerequisites: [PH 1700L & calculus & PH 1831L] or consent of instructor Letter Graded

PHD 1838 Communication, Collaboration and Leadership for Biostatisticians and Data Scientists (3 Credits)
The objectives of this course are to enable the students to: 1). Understand the role of statisticians and data scientists in a large multidisciplinary team; 2). Effectively analyze and assess different communication modes for efficient communications; 3). Apply effective presentation and communication skills to communicate statistical concepts and ideas with different types of audiences; 4). Apply scientific writing skills in preparing and writing data analysis plan, data analysis report, grant proposals and manuscripts for publications; 5). Understand the differences and prepare to play a leadership role under different job environments in academia, research institutions, industries and governments. Pass/Fail, F not in GPA

PH 1840L Statistical Methods for Handling Missing Data (3 Credits)
This course covers the use of current statistical methodology for handling missing data in health research studies. Primary emphasis will be given to population-based studies using surveys and secondary emphasis will be given to clinical-based studies, e.g. clinical trials, where dropout is commonly present. Some of the topics include missing data patterns, single imputation methods, estimation of imputation uncertainty, likelihood-based methods, multiple imputation, selection models, pattern-mixture models, shared-parameter models, and sensitivity analysis. Prerequisites: PH 1700L or consent of instructor Letter Graded

PHD 1855L Distribution Free Methods (3 Credits)
This doctoral-level course introduces the theory and applications of distribution-free (non-parametric) statistical methods. Topics include properties of distribution functions, K-S tests, runs tests, rank sum tests, non-parametric analysis of variance, rank correlation, contingency table analysis, and distribution-free confidence intervals. Prerequisites: PH 1700L Letter Graded

PHD 1861 Introduction to Meta-Analysis (1 Credit)
The goal of this course is to introduct students to best practices, resources, and methods for conducting a meta-analysis. The process of meta-analysis will be illustrated through the use of published case studies. The format includes face-to-face classes, online exercises, readings, recorded lectures, and a STATA-based experience for meta-analysis. R software for meta-analysis will also be introduced side-by-side with STATA, but students may choose to use either language. Pass/Fail, F not in GPA

PH 1910L Probability and Distribution Theory (3 Credits)
This course covers probability theory, distributions of discrete and continuous random variables, mathematical expectation, moments and moment generating functions, distribution of transformed variables, limiting distributions, and estimation. Theoretical results are applied to selected research problems in public health and the biomedical sciences. Prerequisites: Working knowledge of differential and integral calculus Letter Graded

PH 1911L Statistical Inference (3 Credits)
This course is a continuation of PH 1910L. Topics include statistical hypothesis tests, LR tests, Bayes tests, noncentral distribution and power, selected non-parametric tests, sufficiency, completeness, exponential family, and the multivariate normal distribution. Theoretical results are applied to research problems in public health and biomedical sciences. Prerequisites: PH 1910L or consent of instructor Letter Graded

PHD 1912L Large Sample Theory (3 Credits)
Large sample theory constitutes a coherent body of concepts and results that are central to both theoretical and applied statistics, and underlies much of the work on fundamental biostatistical topics such as likelihood ratio tests and bootstrapping. The course will start from the introduction to real analysis including limits and order, and basic probabilistic tools. The fundamental large-sample theory most relevant to biostatistical applications will then be taught, including convergence and large sample tests. Prerequisites: Calculus & Linear Algebra & PH 1910L & PH 1911L Letter Graded

PHD 1915L Linear Models I (3 Credits)
This doctoral-level course introduces the fundamentals of linear statistical models for students with preparation in statistical theory and methods. Using matrix algebra, distributions of quadratic forms are presented and used to develop the general linear model for multi-factor data. Topics include estimation and hypothesis testing in the full rank model, estimability, and statistical inference in the less than full rank model. Theory and computation are emphasized. Prerequisites: PH 1911L or consent of instructor Letter Graded

PH 1916L Generalized Linear Models (3 Credits)
This course focuses on methods for generalized linear models (GLMs), not on the use of software for data analysis with GLMs. Emphasis will be placed on statistical modeling, building from standard normal linear models, extending to and going beyond GLMs, and going beyond GLMs. The main subject areas are logic models for nominal and ordinal data, log-linear models, models for repeated categorical data, generalized linear mixed models and other mixture models for categorical data. Methods of maximum likelihood, weighted least squares, and generalized estimating equations will be used for estimation and inference. The course focus will be on theory, but examples of application will also be presented. Prerequisites: PH 1910L & PH 1911L Letter Graded

PHD 1918L Statis Meth in Correlated Outcome Data (3 Credits)
This doctoral-level course presents extensions of general and generalized linear models to correlated outcome data. Such models arise from hierarchical designs such as longitudinal studies or sample surveys. Major topics include mixed linear models for continuous, binomial, and count data; maximum likelihood estimation; generalized estimating equations; REML, EM algorithm; current general and specialized software applicable to these methods; and readings from current statistical literature. This course is intended for students with a background in linear models. Prerequisites: PH 1916L or consent of instructor Letter Graded

PHD 1930L Statistical Computing (3 Credits)
This doctoral-level course consists of two parts. Part 1 covers programming and other computer skills required for the research and application of statistical methods. The focus will be on programming in the R language. Other computing topics covered are Unix/Linux, Emacs, LaTeX, R graphics, culling C code from R, writing R package, running simulation in statistical research, using high-performance computing cluster, and best coding practices. Part 2 covers the theory and application of common algorithms used in statistical computing. Topics include root finding algorithms, optimization algorithms, numerical integration methods, EM algorithm, importance sampling, rejection sampling, Gibbs sampling, Markov chain Monte Carlo (MCMC), bootstrapping, jackknife, and permutation test. Letter Graded

PHD 1950L Stochastic Processes in Biostatistics I (3 Credits)
This doctoral-level course covers the application of stochastic processes to problems in the biological and health sciences. Topics include discrete-time Markov chains; discrete-time branching processes; random walks; estimation of parameters in discrete-time Markov chains with complete or partially observed data; test of the Markov property and test of stationarity; time-reversible Markov chains; basic theory of Markov chains; Monte Carlo methods and its applications; and Poisson processes. Recent developments in related areas and their applications will be explored. Basic statistical theory, especially the estimation methods and EM algorithm, will be reviewed. Prerequisites: PH 1911L and a thorough knowledge of calculus Letter Graded

PHD 1951L Stochastic Processes in Biostatistics II (3 Credits)
This course is a continuation of PHD 1950L. This course briefly reviews differential equations and partial differential equations, but it mainly covers several models of continuous-time Markov processes that include the Poisson process, the Yule process, the birth-and-death process, the epidemic process, the queuing process, the illness-death process, and other stochastic models in public health. Statistical inference for some of these models will also be explored. The appropriate data using these models will be analyzed. Applications of counting processes and the concept of Martingale theory to other statistical methods including survival analysis will be introduced. Brownian motion will be briefly discussed. Prerequisites: PHD 1950L or consent of instructor Letter Graded

PH 1961 Spatial-Temporal Analysis for Population Health Data (3 Credits)
This course is designed for students who are interested in analyzing spatial-temporal data, including disease surveillance and environmental health data. Main topics include research ethics, study design, databases for spatial-temporal population health data, data retrieving and processing with R programming (e.g., retrieving US Census data and geocoding in R), exploratory data analysis, data visualization with R and modeling for spatial-temporal data. The course will also introduce a variety of statistical methods (e.g. spatial-temporal disease mapping models) for point-level and area-level population data, and focus on application and interpretation. Prerequisites: [Applied linear regression at the level of PH 1820 or equivalent] & working knowledge of R programming Pass/Fail, F not in GPA

PHD 1965L Bayesian Data Analysis (3 Credits)
This doctoral-level course examines basic aspects of the Bayesian paradigm including Bayes theorem; decision theory; general principles (likelihood, exchangeability, de Finetti's theorem); prior distributions (conjugate, non-conjugate, reference); single-parameter models (binomial, Poisson, normal); multi-parameter models (normal, multinomial, linear regression, general linear model, hierarchical regression); inference (exact, normal approximations, non-normal iterative approximations); computation (Monte Carlo, convergence diagnostics); and model diagnostics (Bayes factors, posterior predictive checks). Letter Graded

PH 1975L Introduction to Data Science (3 Credits)
This course covers the basics of algorithms, programming in Python, relational and modern NoSQL database systems, data management, analytical databases and data warehouses, big data systems and computing, data collection and statistical processing methods, statistical learning and inference, statistical data exploration and analysis, machine learning, data visualization, communication in data science. Prerequisites: PHM 1690L & basic knowledge of computer programming. Letter Graded

PH 1976L Fundamentals of Data Analytics and Predictions (3 Credits)
This course introduces modern statistical methods and computational algorithms and tools for big data analysis including descriptive statistics, sampling technique, regression learning, clustering, and classification (e.g., support vector machine, tree-based methods). Students will be introduced to the basic concepts behind data science. Hands-on sessions will familiarize students with the details and use of the most commonly used online tools and resources. Prerequisites: [PH 1700L or the equivalent] & [PH 2783 or PH 1998L ST: Introduction to Statistical and Data Science Programing] & [calculus, linear algebra, basic statistical theory and convex optimization methods at the introductory level] Letter Graded

PH 1977L Data Science Computing (3 Credits)
This course is about principles, programming, infrastructures, and tools for computing and data management in data science to facilitate statistical analysis and make it efficient for population health. Its topics include efficient algorithm design and analysis, parallel and distributed programming in Python, relational databases and data warehouses, NoSQL databases, Apache Spark infrastructure and data science tools for management of and statistical inference on structured and unstructured data. Prerequisites: PH 1975L or equivalent knowledge or training Letter Graded

PH 1978L Machine Learning in Practice (3 Credits)
This course is covers advanced data analysis and prediction techniques and tools with applications. Prerequisites: PH 1976L & Python programming skills Letter Graded

PHD 1979L Advanced Data Analytic Methods: AI and Deep Learning (3 Credits)
Learn the advanced technologies in Artificial Intelligence (AI), including Convolutional Neural Network (CNN), Variational Auto Encoder (VAE), Generative Adversarial Network (GAN), multimodal and multitask found models, Generative Pretrained Transformer (GPT)-4, GPT-4V, and Generalized Multimodal Intelligence Network Interface (GEMINI); their applications, and their ability to be trained to carry out interdisciplinary study. Prerequisites:Calculus & algebra & PH 1976 Fundamentals of Data Analytics and Predictions & PH 1978 Machine Learning in Practice Letter Graded

PH 1982L Evolution of DNA and Protein Sequences (3 Credits)
This course provides basic principles for understanding factors that govern the evolution of DNA and protein sequences. Students will be provided with the opportunity to learn about the formation and evolution of multigene families and other evolutionary phenomena. They will also be introduced to statistical methods and computer programs for analyzing DNA and protein sequence data. There will be computer demonstrations of some topics. The application of these principles and methods to genome-wide epidemiology will be discussed. [Cross-listed with GSBS GS110103] Prerequisites: Calculus & statistics & consent of instructor Letter Graded

PH 1984L Population Genetics (3 Credits)
This is an intermediate level course in the area of statistical genetics/computational biology. It is designed to help students to understand the fundamentals of theoretical population genetics and to be able to apply such knowledge in analyzing samples of DNA sequences from a population. Students will learn to understand allele/genotypic frequencies and how they are affected by various evolutionary forces, including mating pattern, mutation, random genetic drift, linkage, natural selection and population subdivision/migration. Special emphasis is on the coalescent theory and statistical properties of some fundamental summary statistics, as well as their application. [Cross-listed with GS11 1123] Prerequisites: Some background in genetics and statistics & consent of instructor Letter Graded

PH 1986L Introduction to Statistical Genetics (3 Credits)
This course is designed to enable the student to understand the interplay between statistics and genetics. Specifically, by the end of the course, students should be able to: (1) describe the fundamental principles and theory in some areas of genetics in which statistics plays an important role; (2) apply some widely used statistical methods and approaches to solve specific genetic questions; and (3) be prepared for advanced courses in the area of statistical genetics. This course has been revamped in 2021 to merge the course "Introduction to Statistics Genetics" and "Introduction to Genomics and Bioinformatics". [Cross-listed with GSBS GS11 1113] Letter Graded

PH 1988 Biostatistics Seminar (1 Credit)
The seminar in biostatistics consists of presentations from guest speakers and some students who are working on doctoral dissertation research. It will provide an overview of various topics of current importance in the field of biostatistics and public health while emphasizing the mathematical and statistical tools needed to address these issues. Pass/Fail, F not in GPA

PH 1992 Big Data in Practice - EHR Data Processing and Analytics (3 Credits)
In this Big Data era, it is necessary to train our students to have creative thinking and problem-solving skills in dealing with complex real-world Big Data, in addition to solid statistical foundations. In this course, will provide a new perspective for Big Data issues and potential solutions to Big Data problems. In addition to Big Data analytic methods, we also introduce soft skills such as communication and collaboration skills in a multidisciplinary Big Data team environment. Electronic Health Record (EHR) Big Data projects will be used as examples for hands-on practice. Prerequisite: PH 1975L & PH 1976L Pass/Fail, F not in GPA

PHD 1995 Research Practice Experience for Biostatistics Students (3 Credits)
A research practice experience is a unique learning experience that a student pursuing a PhD in Biostatistics must acquire outside the classroom. This opportunity allows students to apply classroom education towards a real-world public health work setting. Prerequisite: Must be a PhD Biostatistics student, successful completion of the Biostatistics and Data Science Preliminary Exam. Pass/Fail, F not in GPA

PHM 1996 Capstone for BIOS Students (3 Credits)
This integrative learning experience is designed to demonstrate synthesis of major themes from the MPH core and major-specific courses. Students produce at least one high-quality written product. Prerequisites: Students must be a MPH in Biostatistics major & completed the MPH core courses & completed at least 30 semester credit hours the semester before enrolling. Pass/Fail, F not in GPA

PHD 1997 Teaching and Learning Experiences for Doctoral Students in Biostatistics (1 Credit)
This doctoral-level course provides doctoral students in Biostatistics with an overview of the application of teaching methods in biostatistics. The objectives for this class are: (1) Apply teaching methods learned in the course, for example, through presentations on modern statistical topics, and/or via their role as teaching assistants (TAs) in Biostatistics courses; (2) Develop group leadership and teaching skills; and (3) Monitor and improve presentation skills. The student will receive instruction and feedback on their group leadership and teaching skills from faculty. Students will discuss the problem-based learning case studies based on examples provided and on their own teaching experiences. Pass/Fail, F not in GPA

PH 1998 Special Topics in Biostatistics (1-4 Credits)
Credit hours vary among Special Topics courses. Topics courses vary each semester and provide coverage of biostatistical theory and applications. Pass/Fail, F not in GPA

PH 1998L Special Topics in Biostatistics (1-4 Credits)
Credit hours vary among Special Topics courses. Topics courses vary each semester and provide coverage of biostatistical theory and applications. Letter Graded

PH 1999 Individual Study in Biostatistics (1-9 Credits)
A plan of study is determined for each participating student, and supervised by a member of the Biostatistics faculty. In general, courses of independent study are not recommended unless a student has completed the appropriate introductory courses in biostatistics or presents evidence of experience in the field of biostatistics. This course may be repeated for credit. All independent study courses are required to have learning objectives and an outline of learning activities. Pass/Fail, F not in GPA

Environmental and Occupational Health Science Course Descriptions

PHD 2105L Environmental and Occupational Health Sciences Doctoral Seminar (1 Credit)
This seminar course is designed for doctoral students and post-doctoral fellows in EOHS. Doctoral students in other departments and programs may enroll with the consent of the instructors. The course combines research seminar presentations with specific assignments to provide students an opportunity to improve their knowledge of the latest EOHS topics, their presentation skills, and their scientific productivity in the formulation of research proposals and journal publications and presentations at scientific meetings. The seminar provides opportunities to involve mentors (advisors, dissertation supervisors, committee members) and to practice mentoring and teaching with other class members. Letter Graded

PHD 2106L Introduction to Doctoral Research Methods in Environmental and Occupational Health Sciences (2 Credits)
This course provides doctoral students with a background in the perspectives, key concepts, and methods involved in conducting research and evaluating scientific claims in the EOHS context, part of the necessary training to undertake a future research project. The course considers basic aspects and challenges of the philosophy of science and the inference of causality; ethical issues on conducting research; study design and sampling methods; the role of statistics; and the appropriateness of the measures of association, including hypothesis formulation and testing; and presentation of findings. Students are also introduced to the scientific production process. Letter Graded

PHM 2110L Public Health Ecology & the Human Environment (3 Credits)
This course provides an introductory overview of the basic principles underpinning public health ecology and environmental health. It satisfies the core environmental health MPH requirement for majors and non-majors. Students are provided with foundational knowledge in public health ecology, principles or environmental health and an introduction to environmental policies & controls. Applications of this knowledge will be applied to an environmental case study, wherein students will use a systems thinking approach to identify the key elements of the problem, develop solutions and articulate a dissemination plan. In addition, inter-professional engagement simulations will be used to provide students with skills for engaging stakeholders, including community members, policy makers/enforcers, and other healthcare professionals. Letter Graded

PH 2120 Climate Change & Health - Human Impact on the Environment (3 Credits)
This course provides a general awareness of how the man-made and natural ecosystem interact to affect health and the quality of life, reviews relevant principles from the natural sciences, and discusses issues influencing the solutions to environmental health problems. The course content will focus on the impact of climate change on human health. The intersection between environmental degradation and climate change and adverse human health outcomes will be examined. The course objectives will be accomplished through lectures, videos, class discussions, group activities, written assignments, and examinations. Pass/Fail, F not in GPA

PH 2132L Infection Control and Biosafety (3 Credits)
The field of infectious disease and control is mainly composed of four professions: infection preventionists, biosafety professionals, environmental health specialists, and public health professionals. Although the targeted populations for each of these professions differ, a common set of core competencies exists that are essential in order to successfully prevent or control infection. This course focuses on the core competencies that are common amongst all of these professions and will also discuss differences between these trades. Prerequisites: Undergraduate biology required. A course in microbiology preferred. Letter Graded

PHM 2135L Risk Analysis: Principles and Practice (3 Credits)
The purpose of this course is to provide students with the principles of risk assessment for environmental and occupational health hazards. This course introduces important components in risk assessment including hazard identification, exposure assessment, dose-response assessment, and risk characterization. Materials of risk management and risk communication are also covered. Case studies are used to demonstrate important principles and practices of risk analysis. Letter Graded

PHD 2135L Risk Analysis: Principles and Practice (3 Credits)
The purpose of this course is to provide students with the principles of risk assessment for environmental and occupational health hazards. This course introduces important components in risk assessment including hazard identification, exposure assessment, dose-response assessment, and risk characterization. Materials of risk management and risk communication are also covered. Case studies are used to demonstrate important principles and practices of risk analysis. Letter Graded

PH 2150 Air Environment (3 Credits)
This course provides a comprehensive introduction of air pollution with a focus on its effects on human health. It covers a variety of topics related to air quality, including fundamental principles, measurements and control, exposure and risk assessment, epidemiology, energy and air quality, environmental justice, and regulations. Both outdoor ambient air and (non-occupational) indoor air quality are considered. Special emphasis is placed on human health effects and the determinants of human exposure. Pass/Fail, F not in GPA

PHM 2155 Environmental Sampling Analysis (4 Credits)
This course covers the theoretical bases and practical applications of sampling techniques and analytical methods used in the identification of hazards in the environment. Students will plan environmental sampling design, develop sampling strategies, interpret and communicate generated results, and critique data related to environmental studies. Prerequisites: [Undergraduate chemistry & undergraduate mathematics] or consent of instructor Pass/Fail, F not in GPA Lab fee: $10.00

PHD 2155 Environmental Sampling Analysis (4 Credits)
Credit hours vary among Special Topics courses. Topics vary each semester and provide in-depth study of HPBS faculty research. Pass/Fail, F not in GPA

PH 2175L Toxicology I: Principles of Toxicology (3 Credits)
This course presents basic principles of toxicology and their applications to the understanding of xenobiotic-induced target organ toxicity. Topics covered include toxicant disposition, mechanisms of toxicity, and target organ responses to toxic agents. A broad overview of various classes of toxic agents will be presented in the context of their exposure routes, disposition, toxicologic sequelae, and mechanisms of toxicity. This course is designed to provide a foundation for understanding the complex interactions between toxicants and biologic systems. Prerequisites: Prior biological science coursework required (i.e., biology, chemistry, or physiology) and consent of instructor Letter Graded

PH 2177 Toxicology II: Toxic Agents and the Environment (3 Credits)
This course provides in-class discussions, based on guided readings, on current topics in toxicology. The discussions include the historical context for our understanding of toxicant-induced adverse health effects. Class activities will be based on discussions of books designed for the lay public and the scientific literature on which these books are based. Principle mechanisms of toxicity as they relate to the understanding of environmentally induced disease form the framework for the course. In-depth reviews of various classes of environmental contaminants and their adverse health effects will be presented. Prerequisites: PH 2175L (preferred) or consent of instructor Pass/Fail, F not in GPA

PH 2205L Health & Safety Program Management (3 Credits)
This course introduces students to real world challenges related to the management of occupational health and safety programs. Students will be equipped with the knowledge and skills needed to effectively manage a successful health and safety program. This course is a practical introduction to occupational health and safety program management for field practitioners with interest in related disciplines (e.g., industrial hygiene, ergonomics, occupational epidemiology, safety engineering). It draws on concepts from strategic, quality, and accounting management; sociology; political science; and behavioral sciences. Using real-world health-and safety-based examples, students will be challenged to apply the concepts presented in class to real-world scenarios. Letter Graded

PHM 2230L Water Environment (3 Credits)
This course provides students with an overview of the ecological, cultural, and human health significance of water. Students will learn through a combination of lectures, class discussions, and case studies. Issues of water quantity and quality, sustainability, chemical and biological contaminants, water treatment, and conservation practices will be covered. Current water regulations, underlying risk assessments, and related health issues for selected contaminants will be presented. Doctoral students will select a water-related health issue and complete a project describing its importance to public health, identify any gaps in current knowledge and policy, and predict future impacts on environmental science and/or public health. Letter Graded

PHD 2230L Water Environment (4 Credits)
This course provides students with an overview of the ecological, cultural, and human health significance of water. Students will learn through a combination of lectures, class discussions, and case studies. Issues of water quantity and quality, sustainability, chemical and biological contaminants, water treatment, and conservation practices will be covered. Current water regulations, underlying risk assessments, and related health issues for selected contaminants will be presented. Doctoral students will select a water-related health issue and complete a project describing its importance to public health, identify any gaps in current knowledge and policy, and predict future impacts on environmental science and/or public health. Letter Graded

PH 2241L Fundamentals of Occupational Safety (3 Credits)
This course is designed as a practical introduction to occupational safety for practitioners with interest in related disciplines (e.g. industrial hygiene, ergonomics, occupational epidemiology, safety engineering). The course will focus on hazard recognition, assessment of accident potential, and hazard control. Students will be introduced to the evolution of the safety profession and will be presented with a variety of laws, regulations, codes and standards, and other occupational safety and accident prevention information. Letter Graded

PH 2245 Fundamentals of Industrial Hygiene (4 Credits)
This course introduces students to concepts of industrial hygiene and occupational health hazards. Typical industrial conditions that may produce work-related disorders and diseases are studied. Major chemical, physical, and biological stresses in the industrial environment are presented, and important sources, effects, and evaluation and control measures are discussed. Where appropriate, typical calculation methods are included. Prerequisites: Undergraduate biology & undergraduate chemistry (organic chemistry preferred) & undergraduate mathematics Pass/Fail, F not in GPA

PH 2246L Principles of Occupational Ergonomics (3 Credits)
This course is designed to introduce students to the principles of ergonomics with a focus on the physiological and anatomical capabilities of the worker and interaction with their environment. The course will review anthropometry, physiological basis of work, occupational musculoskeletal disorders and risk factors, workplace and equipment design, environment, job analysis, and elements of the ergonomics process to improve job design. Letter Graded

PH 2250 Occupational Health Controls (4 Credits)
This course presents the principles and practice of controlling workplace and associated hazards, and details CPC, respiratory protection, dilution, and local exhaust ventilation engineering controls: basic design and evaluation of industrial ventilation systems, and noise control. Prerequisites: [PHM 2110L & PH 2245] or consent of instructor Pass/Fail, F not in GPA

PH 2255 Clinical Occupational Medicine (4 Credits)
This course offers students the opportunity to familiarize themselves with the clinical practice of and current issues in occupational medicine, supplements their basic knowledge in the clinical presentations of occupational illness and injury by organ systems, and introduces them to systematic approaches to the evaluation and management of work-related injury and illness. The course is designed for students interested in occupational medicine practice and who have taken at least one college-level biology course. Pass/Fail, F not in GPA

PH 2256 Occupational Health Psychology (2 Credits)
This course provides an introductory overview of the basic theories, principles and topics encompassed in the field of occupational health psychology, at both the individual worker and worker population levels. Pass/Fail, F not in GPA

PH 2260 Occupational Health Field Trips (3 Credits)
This course takes students into approximately six industrial and occupational settings, with analysis of processes and potential worker health hazards involved. This course aims to introduce students to basic industrial processes and delivery of occupational health services through plant visits; to enable students to perform simple walk-through evaluations of plant facilities and to provide written reports on these evaluations in order to identify potential workplace hazards and evaluate their level of control; and to help students appreciate the importance of using an integrated interdisciplinary approach in the anticipation, evaluation, and control of workplace hazards. Prerequisites: PH 2245 or consent of instructor Pass/Fail, F not in GPA

PH 2265 Occupational Medicine Practice (2 Credits)
This seminar-style course presents topics of current interest in the practice of occupational medicine. In this course, both faculty and students prepare and discuss topics. Topics vary from year-to-year and semester-to-semester, and include didactic presentations by students, faculty, or invited speakers; field visits to selected worksites; board certification review sessions; and an annual in-service practice examination to assist in preparation for the American Board of Preventive Medicine certification examination. Pass/Fail, F not in GPA

PH 2270L Total Worker Health and Worker Well-being (2 Credits)
Total Worker Health® (TWH) involved the policies, programs and practices integrating protection from work-related safety and health hazards with promotion of injury and illness prevention to enhance worker well-being. The terminology, concepts and conceptual frameworks surrounding the field of THW and worker well-being are introduced along with resources for planning, implementing and evaluating interventions. Students evaluate the effectiveness of TWH interventions in all size businesses and explore potential modifiers of occupational factors influencing worker well-being. Letter Graded

PHD 2271 Total Worker Health Field Experience (3 Credits)
Total Worker Health (TWH) PhD degree track students work with an industry/occupational preceptor on a worker well-being project for one semester. Students work on the project at the facility. Projects require application of the theories and principles of total worker health to a real-world situation. The course is offered to students in campuses where the PhD in Environmental Sciences, TWH track is offered. Prerequisites: PH 2205L & PH 2270L & PH 2241L & PH 2245 & PH 2256 & PHD 1113L & PHD 1120L & (PHD 1118L or PHD 1123L) Pass/Fail, F not in GPA

PH 2280L Environmental Microbiology (3 Credits)
This course introduces to environmental microbiology, with particular emphases on how microorganisms are transmitted to humans as well as ways to identify and prevent this transmission. Topics include microbial sources of contamination; environmental sampling and laboratory techniques; preventive strategies for air-, water-, and food-borne disease; global issues impacting microbial disease; and the roles of epidemiology and risk assessment in addressing human exposure to environmental microbes. Letter Graded

PHM 2360L Occupational Epidemiology (3 Credits)
This course describes the types and magnitude of workplace injuries and illnesses, which exact a large human and economic toll on adult and child workers in the United States and worldwide (many, if not most, of these adverse health outcomes are preventable); examines the epidemiologic methods used to identify risk factors for these events; and examines the role of academia, industry and public health practice in understanding and controlling these conditions from an epidemiologic perspective. The course is especially targeted as a Special Topics course for epidemiology majors and to provide an epidemiologic and public health perspective to occupational health for occupational health, environmental science and other interested students. Doctoral students will have additional projects. Prerequisites: [PH 1700L or PHM 1690L] and [PHM 2612L or PHM 2610] Letter Graded

PHD 2360L Occupational Epidemiology (3 Credits)
This course describes the types and magnitude of workplace injuries and illnesses, which exact a large human and economic toll on adult and child workers in the United States and worldwide (many, if not most, of these adverse health outcomes are preventable); examines the epidemiologic methods used to identify risk factors for these events; and examines the role of academia, industry and public health practice in understanding and controlling these conditions from an epidemiologic perspective. The course is especially targeted as a Special Topics course for epidemiology majors and to provide an epidemiologic and public health perspective to occupational health for occupational health, environmental science and other interested students. Doctoral students will have additional projects. Prerequisites: [PH 1700L or PHM 1690L] and [PHM 2612L or PHM 2610] Letter Graded

PHM 2362L Environmental Epidemiology (3 Credits)
This course is designed to introduce students to specific research areas within the field of environmental epidemiology as well as to epidemiologic and exposure assessment methodologies commonly used in the field. The course provides an introduction to selected topics and concepts in environmental epidemiology and will prepare students to critically appraise the environmental epidemiologic literature. Topical areas may include (but are not limited to) air pollutants, persistent organic pollutants, pesticides, metals, environmental disasters, and environmental justice. Prerequisites: [PH 2610 or PHM 2612L] & PHM 1690L Letter Graded

PHD 2362L Environmental Epidemiology (3 Credits)
This course is designed to introduce students to specific research areas within the field of environmental epidemiology as well as to epidemiologic and exposure assessment methodologies commonly used in the field. The course provides an introduction to selected topics and concepts in environmental epidemiology and will prepare students to critically appraise the environmental epidemiologic literature. Topical areas may include (but are not limited to) air pollutants, persistent organic pollutants, pesticides, metals, environmental disasters, and environmental justice. Prerequisites: [PH 2610 or PHM 2612L] & PHM 1690L Letter Graded

PH 2491 Public Health Preparedness & Disaster Response (3 Credits)
This course provides an overview of the emergency response system and the public health system responsibilities in management of disasters with a special emphasis on planning and response. The course format is an interactive graduate level electronic seminar. Website resources are identified for students to obtain basic background information regarding disaster preparedness, emergency response systems, and emergency plans. Combined with PH 2991. Prerequisites: PHM 1110L & PHM 1690L & PHM 2110L & PHM 3715L & PHM 5015L Pass/Fail, F not in GPA

PHM 2496 Capstone for EOHS Students (3 Credits)
This integrative learning experience is designed to demonstrate synthesis of major themes from the MPH core and major-specific courses. Students produce at least one high-quality written product. Prerequisites: Completed MPH core courses & [concurrent enrollment in or completed: PH 2175L & PHM 2135L] & completed at least 30 semester credit hours the semester before enrolling in capstone. Pass/Fail, F not in GPA

PH 2498 Special Topics in Environmental and Occupational Health Sciences (1-4 Credits)
Credit hours vary among Special Topics courses. Topics vary each semester to provide intensive study of selected environmental factors, or specific methods of analysis, evaluation, or control. Pass/Fail, F not in GPA

PH 2498L Special Topics in Environmental and Occupational Health Sciences (4 Credits)
Credit hours vary among Special Topics courses. Topics vary each semester to provide intensive study of selected environmental factors, or specific methods of analysis, evaluation, or control. Letter Graded

PH 2499 Indiv Stdy/Environmentl and Occ Health (1-9 Credits)
A plan of study is determined for each participating student, and supervised by a member of the EOHS faculty. All independent study courses are required to have learning objectives and an outline of learning activities. This course may be repeated for credit. Pass/Fail, F not in GPA

Epidemiology Course Descriptions

PHM 2612L Epidemiology I (3 Credits)
This course provides a strong foundation in concepts, principles, and methods specific to epidemiology. By the end of this course, students should be able to apply these skills to (a) assess the health of a population; (b) describe the natural history, distribution, and determinants of health-related states and events; and (c) evaluate programs designed to improve public health. To accomplish this, the course considers epidemiology in the context of core public health functions and services. Letter Graded

PH 2615L Epidemiology II (3 Credits)
This course focuses on the principles and activities necessary to carry out information collection that is implemented and managed in an ethical manner consistent with the principles of the scientific method. This course addresses practical aspects of epidemiologic research. Systems theory, epidemiologic methods, principles of survey research, operations research methods, and computer uses in research are covered. The final product from the class is the development of an epidemiologic field ""Manual of Procedures"" for a study. PH 2615L Epidemiology II and PH 2710L Epidemiology III can be taken interchangeably. Prerequisites: [PHM 2612L or PHM 2610 or equivalent] & [PH 1700L or PHM 1690L] Letter Graded

PH 2710L Epidemiology III (3 Credits)
This course covers advanced concepts in epidemiologic methods with an emphasis on observational studies. Topics include causal inference, measures of disease frequency, measures of association, study design, precision and validity in epidemiologic studies, introduction to stratified and logistic regression analysis, concepts assessing effect modification and confounding, interpretation of epidemiologic study results, and manuscript development. PH 2615L Epidemiology II and PH 2710L Epidemiology III can be taken interchangeably. Prerequisites: [PHM 2612L or PHM 2610] & [PHM 1690L & (PH 1700L or equivalent) Letter Graded

PHD 2711L Epidemiology IV (3 Credits)
This course prepares students to use and make reasonable inferences regarding causality from epidemiologic data analyses. Students address research questions using data from a variety of study designs. Students acquire hands-on experience with stratified analysis, logistic regression, and survival analysis. Other learning activities cover meta-analysis, advanced issues in assessment of confounding and effect measure modification, strategies for building multivariable models, and sensitivity analysis. Prerequisites: [PH 2615L & PH 2710L & PH 1700L & enrolled in SPH doctoral program] or consent of Instructor Letter Graded

PHD 2712L Experimental Methods in Epidemiology (3 Credits)
This course equips students to evaluate and interpret evidence concerning preventive or therapeutic measures, especially those recommended for public health application. It concerns principles and methods of experimental studies in epidemiology and public health, from simple clinical trials to prevention trials in multiple communities. Applications span diverse areas, including cardiovascular diseases, cancer, and infectious diseases. Students participate actively in a seminar format, critique published reports, and undertake a collaborative project to develop a research protocol for an experimental study. Prerequisites: PH 2710L or consent of instructor Letter Graded

PHD 2720L Epidemiologic Proposal Development (3 Credits)
This course covers the structure and content of a student thesis research proposal, scientific writing conventions, critical evaluation and synthesis of epidemiological literature, development of specific aims and research methods, and procedure for writing and editing research proposals. Doctoral students will also cover NIH grant applications and the NIH grant review process. Prerequisites: PHD 2711L & PHD 2712L Letter Graded

PH 2725L Neuroepidemiology (2 Credits)
This course provides an overview of the risk factors for a variety of neurologic and neuropsychiatric diseases, including stroke, Alzheimer's disease and other dementias, Parkinson's disease, brain tumors, autism, and mood disorders. Areas covered include a description of the prevalence, incidence, mortality, risk factors, and etiologic mechanisms of these diseases and conditions. Students will gain an understanding of the impact of these diseases on public health; of the unique methodological issues associated with epidemiologic and genetic studies of these diseases; and of the basic pathobiology and clinical aspects of these disorders. The course aims to aid students' comprehension of published literature in neuroepidemiology and neurogenetics. Letter Graded

PH 2730L Epidemiology and Control of Infectious Diseases (3 Credits)
This course introduces epidemiologic aspects of infectious diseases and provides information regarding prevention and control of these diseases. At the end of the course, students have an understanding of the epidemiologic aspects of infectious diseases including incidence, distribution, and pattern of disease occurrence as well as different modes of transmission and associated risk factors. They should understand the importance of surveillance systems in detecting epidemics, the application of epidemiological methods to determine the risk and associated factors, and the significance of prevention and control programs for infectious diseases. Students gain knowledge and skills in carrying out epidemic investigations through a series of case study assignments. Prerequisites: [PHM 2612L or PHM 2610] or consent of instructor Letter Graded

PH 2735L Physical Activity and Health: Epidemiology and Mechanisms (3 Credits)
This course presents evidence that exercise training and physical activity can prevent disease and increase the quality of life. The course covers heart disease, hypertension, diabetes, obesity, osteoporosis, eating disorders, cancers, immune system, and aging, as well as inter-relationships among and between these conditions. Each section starts with the physiology basis for the disease, and the epidemiologic evidence that exercise training and physical activity will reduce the risk of developing the disease. Then, cross-sectional and longitudinal studies are presented supporting the epidemiological data. Finally, studies are presented that focus on the mechanisms by which exercise and physical activity prevents the development of the disease, and, in some cases, how it can improve the disease state. Letter Graded

PH 2740L Cardiovascular Disease Epidemiology and Prevention (3 Credits)
This course provides an overview of the field of cardiovascular disease (CVD) epidemiology. Topics include the pathophysiology of CVD, CVD survey methods, trends in CVD mortality and morbidity, CVD risk factors, major strategies for CVD prevention, and a summary of major CVD clinical trials. Students will gain an understanding of the impact of CVD on public health. Prerequisites: [PHM 2612L or PHM 2610] or consent of instructor Letter Graded

PH 2742L Epidemiology of Mental Health (3 Credits)
This course reviews descriptive and analytic epidemiology for major mental health symptoms and conditions worldwide. Course topics include understanding: functional and societal burden of mental health conditions, psychiatric epidemiology research designs, causality in mental health, cross-societal comparisons, risk factors and protective factors, plus an overview of treatment, health systems, and prevention. Prerequisites: [PHM 2610 or PHM 2612L or PHD 1420L or PHD 1421L or PH 3660] or consent of instructor. Letter Graded

PH 2745 Cancer Epidemiology (3 Credits)
This primarily introductory-level course reviews the causes of cancer and the epidemiology of cancer by anatomical site. The course will introduce seminal studies and current issues in cancer epidemiology, and will cover basic concepts pertinent to cancer epidemiology research including biology, pathology, statistics, classic and novel risk factors, prevention, and genetics. Selected publications from epidemiologic literature provide opportunity for student-faculty discussion. Pass/Fail, F not in GPA

PH 2750 Disease: Natural History, Prev, Control (3 Credits)
This course is intended for students who have not had significant training in biology. It will cover common diseases, medical terminology, and the associated scientific and medical literature. The course will consist predominantly of online lectures, readings, and discussion board participation. Objectives include attaining a basic understanding of the biological basis of health and of disease processes; developing a vocabulary of medical terminology that will enhance the student's ability to read and comprehend public health literature; and developing an understanding of common human diseases and their importance in a public health context. The grade is based on participation, assignments, a mid-term examination, and research project. Pass/Fail, F not in GPA

PH 2765L Pediatric Epidemiology (3 Credits)
This course describes the public health impact of pediatric conditions and introduces special considerations in the design and conduct of epidemiological studies of pediatric conditions. Resources for pediatric epidemiology and the epidemiology of common chronic pediatric conditions are also covered. Prerequisites: PHM 2612L Letter Graded

PH 2766L Pediatric Population Health (3 Credits)
This course will provide a local, national and global perspective on critial pediatric population health issues and health outcomes and will be taught within a life course framework. We will identify the determinants of these health outcomes and the current public policy surrounding these issues, including a special focus on women of reproductive age, infants, children, and adolescents. We will cover the epidemiological methods, design and statistical approaches that are typically applied to pediatric population health data. Letter Graded

PH 2767 Pediatric Behavioral Epidemiology (3 Credits)
Course covers 2 public health areas: (A) Epidemiology of 6 leading causes of acute and chronic diseases, including: 1) Tobacco; 2) Alcohol/other drugs; 3 Nutrition; 4) Physical activity; 5) Intentional and unintentional injuries; and 6) HIV, STD, pregnancy. (B) Health promotion strategies to prevent acute and chronic disease. These include methods to increase health-enhancing and decrease health compromising behaviors. Other topics include: 1) Physical, social, cognitive development; 2) Health disparities; 3) Sleep, social media and video games; 4) Effects of climate change on health; and 5) Mental health. Prerequisites (or co-requisites): PHM 2612L & PHM 1110L Pass/Fail, F not in GPA

PH 2775L Epidemiologic Methods in Racial and Ethnic Disparities (3 Credits)
This course provides an overview of health issues related to race and health in modern U.S. society. Special emphasis is given to epidemiologic methods and perspectives in research studies using race/ethnicity; demographic trends; mortality and life expectancy; and social, etiology, biological, and genetic factors associated with health disparities by racial and ethnic group in the United States. This course builds on the previous knowledge on the methodology of analytical and descriptive study designs to understand the advantages and shortcomings of race/ethnicity in epidemiological studies. Prerequisites: PHM 2612L Letter Graded

PH 2780L Genetic Epidemiology (3 Credits)
This course introduces statistical methods and software for analyzing measured genetic variation in human studies. The primary focus will be on analytic methods with hands-on use of sample datasets and available software. Students will be refreshed on the genetic and statistical theory underlying current methodologies. Students are recommended to have previous exposure to the principles of genetics and biostatistics. Letter Graded

PH 2781L Practical Python Programming & Algorithms for Data Analysis (3 Credits)
This course is intended for students who are focused on big data analysis in the Python programming language from large scale epidemiologic datasets, electronic medical records, or next generation sequence data. It will cover basic programming including strings, array, dictionaries, conditional statements, data visualization, external data sources, and algorithms with a focus on using programming to solve challenges within the students' own research projects. Letter Graded

PH 2782L Practical Computational Genetics and Bioinformatics (3 Credits)
This course is designed as a training of necessary computational and bioinformatics skills used in everyday analysis of biological data, especially DNA sequence and polymorphism data. Topics include basic Unix/Linux command line, programming (Python), human sequence/polymorphism databases, and DNA analysis. Prerequisites: Basic knowledge of genetics and DNA sequence Letter Graded

PH 2783 Introduction to R Programming and Data Management (3 Credits)
This course aims to provide students with hands-on experience in R programming and data management. The students should be familiar with basic concepts in epidemiology and biostatistics. Previous experience in using SAS, STATA or SPSS is helpful, but not required. Topics include downloading and installing R, basic programming concepts, basic programming best practices, R packages and environments, R data structures, data transfer, creating and manipulating data, visualizing data, conditional operations, working with multiple data frames, restructuring data frames, repeated/iterative operations, writing functions, basic analyses used in epidemiology, and techniques for presenting results to various audiences. Special emphasis will be given to using the Tidyverse family of R packages. Pass/Fail, F not in GPA

PH 2784L Introduction to R Analysis for Epidemiologic Research (3 Credits)
This course aims to provide students with hands-on experience in R analysis for epidemiologic research. The students should be familiar with basic concepts in epidemiology and biostatistics. Previous experience in using SAS, STATA or SPSS is helpful, but not required. Topics include R data structure, data management and visualization, loops and conditions, classical statistical tests, functions, packages and environments, sample size and power calculation. Prerequisites: PHM 1690L & PHM 2612L Letter Graded

PH 2785L Laboratory Methods: Applications and Implications to Public Health (3 Credits)
This introductory course provides an overview of various methods and techniques utilized in laboratory settings and epidemiologic investigations. Emphasis is placed on laboratory methods that are relevant to the study of public health, such as the techniques utilized in investigating disease outbreaks. This course addresses a unique need and the necessity for public health students to know the basic laboratory methods used in epidemiologic studies. An understanding of the basic concepts of immunology, molecular biology, and/or genetics would be helpful, but is not a prerequisite. Letter Graded

PH 2793 Current Topics in Infectious Disease Epidemiology (2 Credits)
This course is designed as an introduction to the epidemiology of emerging pathogens, their mechanisms of transmission and virulence, and new technologies for surveillance, prevention, and treatment. At the end of the course students will have an understanding of the broad categories of infectious microbes (viruses, bacteria, fungi, and parasites) and the different ways these pathogens transmit and cause disease. Additionally, students will learn the fundamentals of different technologies, including cutting edge `omics techniques (such as genomics and transcriptomic), used to identify and track these pathogens. Prerequisite: a previous introductory course in biology, either in high school or undergraduate study Pass/Fail, F not in GPA

PH 2795 Disease Detectives: International Epidemic Investigations (3 Credits)
This applied epidemiology seminar brings in speakers from different areas of public health practice to discuss current public health practices. Prerequisite: PHM 2612L or equivalent Pass/Fail, F not in GPA

PH 2797 Shoeleather Epidemiology: Essential Skills of Applied Epidemiology (2 Credits)
The course is designed as an introductory course in parasitology; a basic background in biology should be sufficient preparation. An understanding of the basic concepts of immunology would be helpful, but is not a prerequisite. The course will consist of a combination of lectures, group discussion, and homework assignments. For a number of topics, guest lecturers who have a unique perspective on the subject will be enlisted. Particular viral and parasitic pathogens of humans have been selected for study based on their public health importance. Pathogens that are especially problematic in international settings and/or emerging or re-emerging diseases are given special attention. Key factors in the selection of topics include prevalence, morbidity and mortality, and societal impact of the microbe. Pass/Fail, F not in GPA

PHM 2800L Tropical Infectious Diseases (3 Credits)
The course is designed as an introductory course in parasitology; a basic background in biology should be sufficient preparation. An understanding of the basic concepts of immunology would be helpful, but is not a prerequisite. The course will consist of a combination of lectures, group discussion, and homework assignments. For a number of topics, guest lecturers who have a unique perspective on the subject will be enlisted. Particular viral and parasitic pathogens of humans have been selected for study based on their public health importance. Pathogens that are especially problematic in international settings and/or emerging or re-emerging diseases are given special attention. Key factors in the selection of topics include prevalence, morbidity and mortality, and societal impact of the microbe. Letter Graded

PH 2803L Vaccines: Cornerstone of Public Health (3 Credits)
This course allows students to fully understand the origin of vaccines, the immune response to vaccines, how vaccines are manufactured, how they are assessed for efficacy, the role of surveillance, the importance of vaccine safety and the key issues of vaccine regulation and economics. Students will learn about specific vaccines from the time they were conceived, and how they are used, how they provide immunity, and the economics of their use, especially in lower- and middle-income countries. Students will understand the natural history of the diseases prevented by the vaccines. Prerequisites (recommended): a basic course in epidemiology, statistics and biology. Letter Graded

PH 2805L Medical Microbiology (3 Credits)
The course is designed as an introductory course in medical microbiology; a basic background in biology should be sufficient preparation. An understanding of the basic concepts of immunology would be helpful, but is not a prerequisite. The course will consist of a combination of lectures on selected topics. For a number of topics, guest lecturers who have a unique perspective of the subject will be enlisted. Particular bacterial pathogens of humans have been selected for study based on their public health importance. Key factors in the selection of topics include prevalence, morbidity and mortality, and societal impact of the microbe. Letter Graded

PH 2808L Overview of Tropical Medicine (2 Credits)
This course focuses on health issues and public health problems common in tropical and subtropical regions of the world, with an emphasis on research in South America. The course gives an overview of the main tropical diseases such as malaria, tuberculosis, HIV, neglected tropical diseases and maternal and child health issues. The course will cover global epidemiological data of these diseases with an emphasis on developing countries; some basic information on the clinical presentation and diagnosis; the current main challenges for prevention and control; and potential areas for research. Letter Graded

PH 2809L Immunology (3 Credits)
This course covers the essential concepts of the human immune response and their relevance to disease control and prevention. There will be presentations from guest lecturers who have expertise in specific areas where the principles of immunology find their application to human health. Throughout the course, extra emphasis is placed on aspects of immunology with particular relevance to public health, such as immunodeficiency, blood transfusion, nutrition and immunology, tumor immunology, and vaccines. Each student will prepare a report on an area of immunology that is of particular interest to them. Prerequisites: Basic background in biology Letter Graded

PH 2810 Pathology and Public Health (3 Credits)
This course provides an overview of the pathophysiology of disease. The first third of the semester is devoted to studying pathophysiologic processes. Thereafter, for each body system, two to three diseases are examined and studied in detail, including clinical, histologic, and anatomic changes that occur, as well as public health implications of each. Each student presents a final research project on a disease process or type, including the pathology and public health aspects. The final grade is based on attendance, participation, examinations, and class projects. Prerequisites: PHW 2750 or [one semester of college biology or zoology] Pass/Fail, F not in GPA

PH 2815L Genetics and Human Disease (3 Credits)
This course introduces principles and methods of human genetic analysis with special reference to the contribution of genes to the burden of human disease. Although molecular, biochemical, and morphogenic processes controlled by genes will be briefly surveyed, the aim of the course is to describe the analytical processes whereby genetic mechanisms are inferred based on pedigrees and population-based designs using tools ranging from segregation and linkage analysis to genome-wide association studies and multi-omic integration. Prerequisites: Consent of instructor & general genetics and statistics Cross-listed with GSBS GS110013 Letter Graded

PH 2817L Big Data Foundations for Genes, Environment and Interactions (3 Credits)
This course introduces the principles and methods for making inferences regarding genes, environments and their interactions in the context of Big Data resources including, electronic medical records, genomics, transcriptomics, epigenetics, microbiomics, metabolomics and environmental assessment. An overview of the data constructs, utility, limitations and integration of these area will be given along with brief introductions to Python and R in order to evaluate how genes and the environment interact to maintain or compromise health. Letter Graded

PH 2830L Clinical Genetics in Epidemiology (3 Credits)
This course teaches the role clinical genetics plays in the practice of epidemiology, and the relationship between epidemiology and medical genetics. Emphasis will be on the practice of medical genetics as it may be encountered by professionals in public health. The subject material covers basic biology of clinical genetics, genetic diseases and birth defects as seen in a medical genetics clinic, the provision of genetic services in Texas, and public policy issues relating to the practice of medical genetics. Prerequisites: Recent course in college biology or equivalent Letter Graded

PHM 2835 Injury Epidemiology (3 Credits)
This course provides overview of the leading types of injury in the United States, as well as the epidemiologic methods employed in conducting injury research. Students will learn about injury surveillance methodology employed to foster the reporting and capturing of injury events. Students will learn to systematically critique the injury literature by applying epidemiologic methodology. Students will have the opportunity to engage in online discussion about motor vehicle accidents, violence, drowning, nail gun injury, needle stick injury, musculoskeletal, and farm-related injuries, to name a few topics. Pass/Fail, F not in GPA

PHD 2835 Injury Epidemiology (3 Credits)
This course provides overview of the leading types of injury in the United States, as well as the epidemiologic methods employed in conducting injury research. Students will learn about injury surveillance methodology employed to foster the reporting and capturing of injury events. Students will learn to systematically critique the injury literature by applying epidemiologic methodology. Students will have the opportunity to engage in online discussion about motor vehicle accidents, violence, drowning, nail gun injury, needle stick injury, musculoskeletal, and farm-related injuries, to name a few topics. Pass/Fail, F not in GPA

PHM 2845L Nutritional Epidemiology (3 Credits)
This course teaches how to describe the methods and evaluate the issues associated with nutritional assessment of populations using dietary, biochemical, and anthropometric data. A combination of lecture, seminar, and hands-on activities are incorporated to examine the strengths and weaknesses of nutritional assessment methodologies used with epidemiologic study designs. Students are provided data and guided to explore methodologies of statistical analysis and interpretation of nutritional data. Prerequisites: [PHM 2612L or PHM 2610] & [PHM 1690L or PH 1700L or equivalent] or consent of instructor Letter Graded

PHD 2845L Nutritional Epidemiology (3 Credits)
This course teaches how to describe the methods and evaluate the issues associated with nutritional assessment of populations using dietary, biochemical, and anthropometric data. A combination of lecture, seminar, and hands-on activities are incorporated to examine the strengths and weaknesses of nutritional assessment methodologies used with epidemiologic study designs. Students are provided data and guided to explore methodologies of statistical analysis and interpretation of nutritional data. Prerequisites: [PHM 2612L or PHM 2610] & [PHM 1690L or PH 1700L or equivalent] or consent of instructor Letter Graded

PH 2858L Quantitative Analysis for Public Health Research and Practice (3 Credits)
This course bridges epidemiological and biostatistical skillsets. The overall objective is to provide students with the tools and hands-on experience of analyzing datasets guided by research questions. Students will learn how to conduct a research project from conceptualization to dissemination, including: development of research questions and analytic plans; cleaning and coding data; assessing the degree of missingness; evaluating and interpreting univariate, bivariate, and multivariate analyses and building models; analyzing and conceptualizing interaction; analyzing complex survey data; and appropriate research dissemination techniques. Prerequisites: [PHM 2612L or PHM 2610] & [PHM 1690L or PH 1700L] Letter Graded

PH 2860 Adv Design Analysis Meth in Epidemiology (3 Credits)
This course primarily covers topics related to study design and appropriate data analysis using advanced techniques. At the core, the faculty will discuss basic and generalized regression models for binary (logistic), continuous (linear), and count (Poisson) outcomes; multivariate data reduction techniques, such as factors analysis and Principal Component Analysis; longitudinal models; analysis of clustered data; and select data mining methods. Whenever possible, the faculty will illustrate how to carry out data analyses in SAS or STATA or other suitable statistical packages. Prerequisites: PH 2710L & PH 1830L Pass/Fail, F not in GPA

PH 2890L Using Mobile Health (mHealth) Technologies in Public Health (3 Credits)
This seminar is an avenue for students to familiarize themselves with electronic health (eHealth) technologies and mobile health (mHealth) tools and to discuss their applicability for public health efforts in a supportive environment of peers and faculty. Letter Graded

PHD 2908L Applied Epidemiological Analysis (3 Credits)
3 credits The course gives doctoral students experience in developing skills and designing strategies to plan the analysis of and critically evaluate epidemiological data from occupational and environmental settings. The goal of the course is to prepare students to integrate their knowledge of epidemiology and biostatistics through applied data analysis in the context of occupational and environmental problems. Letter Graded

PH 2926 Fundamentals and Applications of GIS (3 Credits)
This course teaches basic concepts of GIS and common methods of spatial analysis that are critical for understanding where health events happen (e.g., Snow's cholera map) and important across all components of public health, including environmental sciences, epidemiology, health planning and policy, health promotion, and international health. The course objectives will be accomplished through a combination of lectures, hands-on labs, and student projects. Pass/Fail, F not in GPA

PHM 2950L Genetic Epidemiology of Chronic Disease (2 Credits)
This course exposes students to the evidence and logic involved in inferring the contribution of genetic mechanisms to those diseases of public health importance. Emphasis will be on developing a framework for assessing the impact of genes on common disease, in a non-technical manner. The course does not include detailed methodological developments or statistical techniques. The format will be a weekly two-hour session during which a single disease will be examined. In this way, students will be introduced to a broad spectrum of diseases and learn to recognize the similarities and the uniqueness inherent to each and the prospects of utilizing genetic and genomic data for improving health outcomes for individuals, families and public health, in general. [Cross-listed with GSBS GS110092] Letter Graded

PH 2960 Seminar in Genetics and Population Biology (1 Credit)
Students analyze and present individual topics or research. [Cross-listed with GSBS GS110711] Prerequisites: Consent of instructor Pass/Fail, F not in GPA

PH 2970L Foundations of Public Health Genetics (3 Credits)
This course is designed mainly (but not exclusively) for students with a limited background in genetics who want to gain an appreciation of the importance and current limitations of the application of human genetics to public health approaches to identifying and ameliorating disease. The course aims to provide enough background in genetics, human biology, and genomics to allow students to understand and appreciate the role of human genetics in public health. Doctoral students will complete additional work to demonstrate the ability to synthesize information from published papers and online resources and use it to analyze features of genetic diseases that are unique, unusual, or not yet well understood. Letter Graded

PH 2975 Community Oriented Quality Improvement (3 Credits)
This course introduces students to concepts of Community Oriented Quality Improvement (COQI): 1) Meeting with field representatives; 2) Conducting a needs assessment and/or systematic review; 3) Determining areas of organizational quality improvement; 4) Design QI project based on their and empirical evidence; 5) Develop an evaluation plan. Pass/Fail, F not in GPA

PHD 2990 Epidemiology Seminar (1 Credit)
The Epidemiology Seminar and Journal Club is open to all students, but is mandatory for epidemiology doctoral students who have not yet taken their preliminary examination. The seminar is intended to hone research and presentation skills, and to provide students an opportunity to present data, a research proposal, or an epidemiology-related topic to an audience of their peers and mentors. The seminar will provide students an opportunity to receive critical feedback on their research and develop professional interactions between faculty and other students. Pass/Fail, F not in GPA

PH 2991 Public Health Preparedness & Disaster Response (3 Credits)
This course provides an overview of the emergency response system and the public health system responsibilities in management of disasters with a special emphasis on planning and response. The course format is an interactive graduate level electronic seminar. Website resources are identified for students to obtain basic background information regarding disaster preparedness, emergency response systems, and emergency plans. Combined with PH 2491. Prerequisites: PHM 1110L & PHM 1690L & PHM 2110L & PHM 3715L & PHM 5015L Pass/Fail, F not in GPA

PHM 2996 Capstone for EPID Students (3 Credits)
This integrative learning experience is designed to demonstrate synthesis of major themes from the MPH core and major-specific courses. Students produce at least one high-quality written product. Prerequisites (for students admitted prior to fall 2023): Completed MPH core courses & completed PH 2615L Epidemiology II & completed at least 30 semester credit hours the semester before enrolling in capstone. Prerequisites (for students admitted in fall 2023 or later): Completed MPH core courses & completed PH 2615L Epidemiology II & PH 2710L Epidemiology III & completed at least 30 semester credit hours the semester before enrolling in capstone. Pass/Fail, F not in GPA

PH 2998 Special Topics in Epidemiology (1-4 Credits)
Credit hours vary among Special Topics courses. Topics in Epidemiology vary each semester. Pass/Fail, F not in GPA

PH 2998L Special Topics in Epidemiology (1-4 Credits)
Credit hours vary among Special Topics courses. Topics in Epidemiology vary each semester. Letter Graded

PH 2999 Individual Study in Epidemiology (1-9 Credits)
A plan of study is determined for each participating student, and supervised by a member of the Epidemiology faculty. In general, courses of independent study are not recommended unless a student has completed the introductory course or presents evidence of experience in the field of epidemiology. All independent study courses are required to have learning objectives and an outline of learning activities. Pass/Fail, F not in GPA

Management, Policy and Community Health Course Descriptions

PH 3616 Thinking for the Future (3 Credits)
This course addresses both the drivers of change in the 21st century that impact public health and the cognitive skills that will allow individuals to participate in effecting positive change. Students will be exposed to problem approaches that are appropriate for complex situations that arise in public health. Pass/Fail, F not in GPA

PH 3617 Thinking for Public Health (3 Credits)
This course is self-paced and online. It is designed to aid the student in identifying systematic thought processes that impact the quality of the analysis of public health issues and the design of potential solutions. The student will be exposed to theories that cross disciplinary boundaries of psychology, behavioral economics, and decision science with an application to public health. It is this applicable to the cognitive bases of several public health competencies. Pass/Fail, F not in GPA

PHM 3620L Principles and Practice of Public Health (4 Credits)
This course illustrates how the health of populations is promoted and protected by organized public health practice. Students are acquainted with current evolving concepts and performance of public health practice, and are introduced to essential public health services performed by public health agencies. Students will learn expectations of the effective and efficient performance of agencies and the competencies required of individual public/community health workers. Representatives from community/public health programs will participate in class presentations along with faculty. Letter Graded

PHD 3620L Principles and Practice of Public Health (4 Credits)
This course illustrates how the health of populations is promoted and protected by organized public health practice. Students are acquainted with current evolving concepts and performance of public health practice, and are introduced to essential public health services performed by public health agencies. Students will learn expectations of the effective and efficient performance of agencies and the competencies required of individual public/community health workers. Representatives from community/public health programs will participate in class presentations along with faculty. Letter Graded

PHD 3625L Practice-based Methods and Design (3 Credits)
This doctoral level course focuses on the design and selection of methods applicable to public health and community practitioners working in real-world settings to answer real-world questions. In this course, students will partner with a community organization of their choice to design a study protocol for a community or population health issue. Letter Graded

PHM 3630 Health Program Planning, Implementation, and Evaluation (3 Credits)
This course introduces students to the fundamental concepts and techniques of planning, implementing, and evaluating public health programs. The course will cover concepts that are relevant to evaluation of health interventions, as well as social and behavioral interventions, in the community settings. These will include program/intervention; implementation and impact evaluation concepts; models/designs; methods; indicators; and data collection, analysis, and interpretation strategies. Design and application of evaluations will include both quantitative and qualitative research methods. Pass/Fail, F not in GPA

PHD 3631L Community Engagement/ Community-Based Participatory Research (3 Credits)
This course is designed to provide students with essential concepts of both Community Based Participatory Research (CBPR) principles as well as overall guidance in Community Engagement (CE) practices with public health research. CBPR and CE is a partnership approach to research that equitably involves community members and researches in all aspects of the research process. This engagement allows all partners to contribute their own expertise and share in the decision-making process and overall ownership of the research. This course is intended for doctoral students interested in using CBPR approaches. Letter Graded

PHM 3715L Management & Policy Concepts in Public Health (3 Credits)
This course provides an overview of theory and practice in the management and policy sciences applied to the field of public health. Topics include public health in the U.S. health system/legal bases of public health, public policy institutions, planning and management to promote health, emergency preparedness, public sector institutions, management, and decision-making. Students will gain skills in oral and written communication with individual and group projects. Letter Graded

PHM 3718L Accounting for Healthcare Management (2 Credits)
This course covers relevant topics in financial accounting and management. Students will improve their understanding of financial accounting principles and will learn different analytical approaches for evaluating financial performance in the healthcare sector. In addition, it will enable students to demonstrate a mastery of key theories and principles of healthcare accounting and to apply ethical decision making in financial management. Letter Graded

PHM 3720L Healthcare Finance (2 Credits)
This course offers students the opportunity to improve their understanding and use of financial concepts and principles in the health care industry. Financial management under prospective payment and capitation systems, as well as product costing and pricing, are included. The lecture format will be augmented by student readings, homework assignments, and class discussion. Students are expected to attend class, participate in discussions, and complete homework assignments. Letter Graded

PHD 3731L Research Design and Inquiry (3 Credits)
This course prepares students to conduct research with academic rigor. Students are exposed to different research methods prevalent in healthcare management and policy disciplines through assigned readings (research articles and unpublished dissertations). In addition, the course emphasis is on manuscript writing, designing a feasible study grounded in theory or conceptual framework and based on publicly available data sources, comprehensive literature review, selection of appropriate research methods, and identification of potential analytical issues and methodological solutions. Prerequisites: PH 1700L & PHM 3744L & PHD 3930 Letter Graded

PH 3732L Research Methods in Public Health Law (3 Credits)
In this class, students will learn about the variety of mechanisms, theories and models central to conducting public health law research, a growing field dedicated to empirically measuring and analyzing law as a central means for advancing population health. Students will learn to integrate theories from social and behavioral sciences in examining public health law and policy. Students will learn to research statutes, regulations, and case law and how those can be used to alter the informational, socioeconomic, and built environments for population health. Students will compare optimal research designs for randomized trials and natural experiments for public health law evaluation, as well as methods for qualitative and cost-benefit studies of public health law. They will also discuss the challenge of effectively translating the results of scientific evaluations into public health laws. Letter Graded

PH 3733L Law and Policy (3 Credits)
In this class, students will review important aspects of the US government and its functions and then learn how public agencies combine the three functions of government that are normally separated - executive, legislative, and judicial - into single institutions with jurisdiction over many policies that act as social determinants of health. Federal, state, and local agencies have broad powers to create and enforce those regulations. As the scope and power of administrative law is extensive, students will also learn about the limitations on agency action, from constitutional constraints to judicial review. Letter Graded

PH 3734L Public Health Policy Surveillance and Legal Epidemiology (3 Credits)
Students will learn to conceptualize a public health policy research topic, collect and codify the relevant laws and apply statistical techniques to analyzing public health law datasets. Students will learn the techniques for tracking policy changes over time (policy surveillance), legal mapping (comparing policies across jurisdictions), and legal epidemiology (analyzing causal relationships between policy changes and population health outcomes). The course will prepare students to complete a research project in the subsequent semester as an independent study. Prerequisites: Previous courses in biostatistics and epidemiology or equivalent experience Letter Graded

PH 3735L Healthcare Strategic Management (3 Credits)
This course focuses on the development and implementation of strategy by health care organizations in the changing healthcare marketplace. The course stresses practical approaches to articulate an organization's mission and vision and to formulate strategies that fit the external and internal situation. In addition, basic principles of community-based health planning are examined, and the potential linkages between organizational strategic planning and population health are explored. This is a required course for the healthcare management MPH program. Letter Graded

PH 3736L Healthcare Payment Systems and Policy (3 Credits)
This course reviews current U.S. healthcare policy in terms of the national healthcare system and the various payments systems. This course builds on system theory and examines the unique approach in the US and how it is changing. In the United States, payment systems are provided in the form of private or public insurance plans, or other forms of group coverage that are offered to eligible populations. Each healthcare payment system will be examined in depth to reveal the policies that serve as the foundation of the program; the authority, the economics, the targeted population, and the current challenges. Students will apply systems theory and policy concepts to theoretically redesign the U.S. healthcare system. Letter Graded

PH 3738L Legal Issues in Healthcare (3 Credits)
This course provides an overview of legal and ethical issues facing the health care industry and examines legal and ethical issues in the administration of health care programs. Students will gain a working knowledge of how to apply federal and Texas health laws and regulations to real-world problems. Components studied include: key legal process and resources, ethical issues of concern to health providers, medical staff issues and peer review, quality and malpractice concerns, legal and ethical issues related to access to healthcare, end of life issues, reproductive health, role and structure of hospital ethics committees, tort law and professional liability, fraud and abuse, governmental regulation, informed consent, confidentiality and medical records, and ethical decision-making. Letter Graded

PHD 3743L Organizational and Management Theory (3 Credits)
This course helps doctoral students to develop frameworks for thinking about the world of health care organizations and its complexity. The specific emphasis will be health services organizations and management research, with an emphasis on organization theory. Organization theory is a set of approaches to the understanding of how organizations form, survive and grow, interact with each other, recruit and process members, gain and manage resources, and deal with internal and external problems. The primary goals of this course are to apply relevant theories to a range of organizational problems and to attain skills needed to be an effective researcher in health services organization and management research. Letter Graded

PHM 3744L Organizational Behavior and Human Resource Management in Health Services Organizations (3 Credits)
This course provides students with an application of organizational behavior theory; models to analyze; and evaluation factors that affect behavior, performance, and job satisfaction of people working in organizations. This course exposes students to a body of knowledge and equips them with skills needed to successfully manage and lead health services organizations. It focuses on applying different approaches for managing individuals, teams, and organizations to achieve organizational excellence. Letter Graded

PHM 3746L Evaluation & Improvement of Healthcare Quality (3 Credits)
This course provides students with requisite knowledge and skills for understanding, evaluating, and improving clinical and operational processes, as well as healthcare outcomes both within an organization and across a population. Qualitative and quantitative approaches to quality management and improvement are examined through historical perspectives, real-world cases, and didactic exercises. Letter Graded

PH 3747L Healthcare Operations Management (2 Credits)
This course introduces students to key management functions, processes, issues, and challenges currently face by health care agencies and organizations. This course uses more advanced methods to improve healthcare processes and outcomes. Specific focus will vary but may include: understanding how organizational context influences processes and patient care; problem-solving and using key tools such as SWOT or gap analysis; understanding how policies and regulations affect operations; making process improvements (e.g. reducing hospital readmissions); understanding performance measure and how these are used for mandatory reporting and tacking program or patient outcomes; and learning about tools, concepts of techniques used to improve management performance. Letter Graded

PHM 3800L Working with Diverse Communities (3 Credits)
This introductory course will focus on providing students with the knowledge and tools necessary to increase cultural awareness and sensitivity. The class begins with an intensive workshop, introducing students to key concepts and community members engaged in social justice work. Following the introductory workshop, readings from each week will focus on the unique needs and challenges of a different community. Letter Graded

PHD 3800L Working with Diverse Communities (3 Credits)
This introductory course will focus on providing students with the knowledge and tools necessary to increase cultural awareness and sensitivity. The class begins with an intensive workshop, introducing students to key concepts and community members engaged in social justice work. Following the introductory workshop, readings from each week will focus on the unique needs and challenges of a different community. Letter Graded

PHD 3801L Community Grant Writing (1 Credit)
The goal of this introductory-level doctoral course is to provide students with the knowledge and tolls necessary to write a community-based grant proposal. This course covers the complete process of grant proposal development: legal and policy background of funding organizations; theory and culture of philanthropy; funder relations; research and identification of an achievable and fundable project; logistical concerns when preparing a proposal; proposal writing; budget development; preparation of a full proposal package for submission; and post award or rejection follow-up with funders. Students gain an understanding of community based organizations and become familiar with tools and resources available to assist them as they seek funds for their projects, institutions, or causes. Letter Graded

PHM 3810 Health Policy in The United States (3 Credits)
This course provides an overview of health policy in the United States. The principal institutions, processes, and ideas shaping health policy at the federal level will be described and explained. Health policy questions will be illustrated using substantive topics of importance to public health. Principal policy-making institutions, processes, and ideas that shape health policy at the federal level will be assessed and criticized. Pass/Fail, F not in GPA

PHD 3810 Health Policy in The United States (3 Credits)
This course provides an overview of health policy in the United States. The principal institutions, processes, and ideas shaping health policy at the federal level will be described and explained. Health policy questions will be illustrated using substantive topics of importance to public health. Principal policy-making institutions, processes, and ideas that shape health policy at the federal level will be assessed and criticized. Doctoral students will appraise health policy in the United States and evaluate its strengths and weaknesses. Pass/Fail, F not in GPA

PHD 3812 Comparative Health Systems (3 Credits)
This doctoral seminar course examines national health systems. The World Health Organization building blocks framework is introduced to appraise different components of national health systems with the intent of strengthening them. The second half of the course is devoted to systematically comparing national health systems, as well as the industries within the health system and sectors that are associated with the health sector. The course draws on organizational theory and other theories in the social sciences. It has a balances focus on low-, middle-, and high-income countries. Pass/Fail, F not in GPA

PH 3815 Health Policy Analysis (3 Credits)
This course examines the process of policy development and the role of research and analysis in the process. A framework is introduced for selecting the type of research and analysis needed to address different policy questions. Key concepts and methods of policy research and analysis are introduced and applied to real-world policy problems in public health. Upon completion of the course, students should have an understanding of the role of policy analysis in the policy development process, be able to frame policy issues for research and analysis, and be able to identify and appropriately apply research methods and analysis to policy questions. Pass/Fail, F not in GPA

PH 3818 Texas Health Policy: Emerging Issues and New Approaches (3 Credits)
This course examines major issues, new programs, and legislative initiatives in Texas health policy. Background information on the state legislative process, budget, and historical role in health policy is presented. Policy analysis concepts and methods are introduced as a guide for class discussion and student assignments. When the legislature is in session, topics are selected that reflect proposed legislation. In semesters between legislative sessions, topics are selected based on interim study assignments and other sources. Topics typically include: Medicaid/CHIP changes/reform, healthcare regulation, behavioral health, long-term care, medical education, rural and border health, disease prevention and control, and health promotion. Pass/Fail, F not in GPA

PH 3825 Public Health Law (3 Credits)
This course introduces students to public health law, which defines the extent to which the state can interfere with private interests when protecting the health of the population. Students will study, through constitutional and statutory analysis, how the balance between these interests is determined. Because administrative agencies are used extensively to regulate matters that affect the public health, students will examine the legal characteristics of these governmental entities. The use of the common law to establish public health policy and remedies for public health problems will be considered. Pass/Fail, F not in GPA

PHD 3830 Ethics and Policy (3 Credits)
This course focuses on the application of ethics, values, and moral reasoning to problems and issues in public health. It offers a careful overview of approaches to moral theory and modes of assessment to develop students' skills in reasoning and evaluation. Special attention will be given to justice and equity as key moral claims in public health. Practical examples will be used to illustrate moral arguments, criteria, and modes of reasoning connected with health promotion, disease prevention, and healthcare delivery. Pass/Fail, F not in GPA

PH 3835 Public Health Advocacy (1 Credit)
This course provides the basic underlying skills, tools, and knowledge necessary to participate in public health policy advocacy initiatives at the local, state, or federal level. The policy making process and organizational advocacy strategies will be explained, and students will apply their learning and develop their oral and written advocacy skills through assignments. Pass/Fail, F not in GPA

PHD 3846L Quality Management Improvement in Healthcare Doctoral (3 Credits)
This course provides students with requisite knowledge and skills for evaluating and conducting research in the areas of quality, performance improvement, high reliability, and patient safety at the unity, organization and population levels. Frameworks for defining, analyzing and comparing quality outcomes are presented, inclusive of confounding factors. Operational approaches to population health and organization quality improvement are examined through expert speakers and real-world cases. Students are also introduced to management science techniques commonly used to assess and improve systems and workflows. Letter Graded

PHM 3910 Health Economics (3 Credits)
This course covers the theory of microeconomic analysis and its application to health and health services. It emphasizes the use of theory to understand problems of organization, delivery, and financing of health services; discrepancies in health levels among members of society; and the choices available to society regarding these issues. Pass/Fail, F not in GPA

PHD 3910 Health Economics (3 Credits)
This course covers the theory of microeconomic analysis and its application to health and health services. It emphasizes the use of theory to understand problems of organization, delivery, and financing of health services; discrepancies in health levels among members of society; and the choices available to society regarding these issues. Doctoral students will also be required to write a paper that identifies and discusses the major policy and research issues in one of the areas that is introduced in the course, critically reviews relevantly published research in this area, synthesizes their view of the state of this research and suggests what types of research might be most fruitful, e.g., as if pursued in a dissertation. Pass/Fail, F not in GPA

PH 3915 Methods for the Economic Evaluation of Health Programs (3 Credits)
This course covers the concepts and methods for the economic analysis of healthcare decision alternatives. Topics will include cost-benefit, cost-effectiveness and cost-utility analysis, and other methods of decision analysis. It emphasizes the application of these methods to the evaluation of alternative health programs. Prerequisite: Consent of instructor Pass/Fail, F not in GPA

PHD 3916 Decision Analysis in Public Health and Medicine (3 Credits)
Decision analysis is defined as a systematic approach to inform optimal decisions evaluating long-term mortality and quality of life outcomes of alternative strategies considering any uncertainty. In the field of public health and medicine, decision analysis is being increasingly used as a framework for the economic evaluation of health care interventions. This course is designed to introduce key concepts and methods of decision analysis as applied to public health and medicine. Topics to be covered include (but are not limited to) decision structuring, decision modeling, parameter estimation, Monte Carlo simulation, and uncertainty analysis. Real-world application examples and recent trends in the field will be introduced as well. Pass/Fail, F not in GPA

PHM 3918L Geographic Information Systems Science (3 Credits)
This introductory level elective course in Geographic Information Systems Science (GIS) introduces the science and skills required for the geographic exploration of public health data. Topics will include cartography, sources of GIS data, working with Census and other secondary data sources, geoprocessing, geocoding and basic spatial analysis, among others. Students will acquire skills through a combination of lecture, labs and hands-on assignments using ArcGIS and other software packages. Letter Graded

PHD 3918L Geographic Information Systems Science (3 Credits)
This introductory level elective course in Geographic Information Systems Science (GIS) introduces the science and skills required for the geographic exploration of public health data. Topics will include cartography, sources of GIS data, working with Census and other secondary data sources, geoprocessing, geocoding and basic spatial analysis, among others. Students will acquire skills through a combination of lecture, labs and hands-on assignments using ArcGIS and other software packages. Letter Graded

PH 3920 Health Service Delivery and Performance (3 Credits)
This course explores the effectiveness, efficiency, and equity of the U.S. healthcare system. Students are introduced to definitions, concepts, and methods used in health services research and policy analysis, and given an opportunity to use them to evaluate important problems and efforts to reform the healthcare system. Each section of the course is taught by a different faculty member with expertise related to one area of health services research and/or policy analysis. Each year, there is a thematic focus for the course that is addressed from the various perspectives and is the subject of a policy analysis exercise at the end of the semester. Pass/Fail, F not in GPA

PHM 3922 Economic and Social Determinants of Health (3 Credits)
This course introduces the concept of population health and analyzes the reason for health disparities between countries as well as socioeconomic and racial/ethnic groups within countries. It takes an approach to health that identifies the social factors, such as inequalities in income and opportunities, and racial/ethnic disparities that influence the health of populations. The course examines population health by exploring economic, social, and cultural factors; identifying systematic variation in these factors leading to health disparities; exploring how economic, social, and cultural conditions affect individual risk factors, human behavior, and biology; and assessing economic and social policies. A social determinants of health-related term paper is required. Pass/Fail, F not in GPA

PHD 3922 Economic and Social Determinants of Health (3 Credits)
This course introduces the concept of population health and analyzes the reason for health disparities between countries as well as socioeconomic and racial/ethnic groups within countries. It takes an approach to health that identifies the social factors, such as inequalities in income and opportunities, and racial/ethnic disparities that influence the health of populations. The course examines population health by exploring economic, social, and cultural factors; identifying systematic variation in these factors leading to health disparities; exploring how economic, social, and cultural conditions affect individual risk factors, human behavior, and biology; and assessing economic and social policies. A social determinants of health-related term paper is required. For doctoral students: A longer and more in depth paper is required. Pass/Fail, F not in GPA

PHD 3926L Health Survey Research Design (3 Credits)
This course presents the methods for designing and conducting health surveys. Emphasis will be placed on problem conceptualization, measurements, and questionnaire design in the context of a total survey design framework. Examples of face-to-face, telephone, mail, and Internet surveys will be presented. Prerequisites: PHM 1690L & [PHM 2610 or PHM 2612L] or equivalents Letter Graded

PHD 3930 Econometrics in Public Health (3 Credits)
This course has two learning objectives: developing skills in quantitative methods for the analysis of complex data, and understanding and critically evaluating public health research using econometric methods. This course consists of 11 units, including linear regression, non-linear regression, analyzing cost as dependent variable, panel data methods, random and fixed effect models, specification tests, endogeneity, instrumental variables, and selection models. Prerequisite: Consent of instructor Pass/Fail, F not in GPA

PHD 3931 Advanced Econometrics (3 Credits)
This course introduces advanced techniques in statistics and econometrics for conducting successful health outcomes and policy research. Students are expected to have an understanding of basic statistical concepts, such as discrete and continuous random variables, probability distributions, joint distributions, conditional distributions, independence, statistical inferences and estimations, properties of estimators, hypothesis testing, ordinary least square regression, logistic regression, one-way ANOVA, contingency tables, and chi-square analyses. Topics covered will include Causal Inference, Causal Graphs, Treatment Effect Identification, Models of Causal Exposure, Linear regression, Panel Data methods including Fixed and Random Effects estimation, Limited Dependent Variable Models like - Logistic regression, Probit, Tobit, Heckman, 2-Part and 2-Step models, Interpreting Marginal Effects and Interactions for Limited Dependent Variable models, Modeling cost data especially using log transforms, Simultaneous Equations and Instrumental Variable Analysis, and Use of Specification Tests like Hausman, Breusch-Pagan, White, Park, Glejser and Box-Cox. The course will emphasize practical applications of statistical methods to real world problems of public health and health outcomes research. Prerequisite: PHD 3930 or equivalent. Pass/Fail, F not in GPA

PHD 3935 Advanced Health Economics (3 Credits)
This doctoral seminar-style course focuses on the application of microeconomic analysis to questions dealing with the production of health, the demand for health services, the production and supply of health services, market equilibrium, social health insurance, and government regulation of health sector activities. Prerequisites: [PHD 3910 or equivalent] & consent of instructor Pass/Fail, F not in GPA

PH 3940 Health Care Outcomes and Quality Research (3 Credits)
This course introduces students to measurement and evaluation issues associated with patient-centered outcomes and quality of care studies, an increasingly important component of present-day health services research. The focus will be on the application, rather than development, of measurements. Topics that will be covered include development of the outcomes framework, outcomes measures, risk adjustment of health outcomes, technical and practical issues with measurement and estimation, and empirical examples of healthcare outcomes research. Outcome and quality measures that will be covered include generic and condition-specific health status measures, satisfaction, patient trust, and patient adherence. Pass/Fail, F not in GPA

PH 3941 Claims Data in Healthcare Research (3 Credits)
This course provides an overview of the elements of administrative claims data. This information will be crucial to any student interested in utilizing claims data for research purposes. The course will focus on the various data fields in enrollment, and medical claims, and pharmacy claims. Strategies for effectively querying claims datasets will be provided. Multiple data sets include commercial claims, Medicare claims, and Medicaid claims. Prerequisites: Familiarity with SAS or Stata Pass/Fail, F not in GPA

PHD 3945 Adv Hlth Services Research Methods (3 Credits)
This course introduces students to the application of quantitative methods in health services research. The major elements of designing and conducting an empirical study will be covered, with emphasis on specification of research questions and design, measures, use of primary and secondary data sources, and issues in bivariate and multivariate analysis. Examples of the use of different methods in the literature will be reviewed. Pass/Fail, F not in GPA

PHD 3946L Strategy, Governance and Leadership (3 Credits)
This course provides students with an overview of the basic concepts and principles of strategic planning within the broader context of governance, management, and leadership. The emphasis on this broader context is important because it is in the arena of strategy development that governance and management overlap and the need for clear leadership arises. While the institutional focus is primarily on healthcare organizations, the organizational dynamics and strategic management principles apply across industries. Letter Graded

PHD 3950 Applied Leadership Studies in Public Health (3 Credits)
This course is designed for doctoral students in all disciplines who have had previous leadership courses or leadership training. It focuses on synthesizing, applying, and evaluating leadership theories, concepts, and emerging perspectives; analyzing personal, professional, organizational, and system leadership dynamics in a rapidly changing and complex world; and discerning the implications of leadership research on the practice of leadership in public health research and practice settings. Three themes of reflection, critical thinking, and communication support the examination of leadership dilemmas, patterns, behaviors, and outcomes. Other topics to be addressed include leadership studies research; complex adaptive systems and sustainability; culture and change; ethics; power influence and politics; and creating and sharing a vision. Pass/Fail, F not in GPA

PHD 3970 Doctoral Dissertation Proposal Development in Management, Policy and Community Health (3 Credits)
This course focuses on the development and critique of a dissertation research proposal for students pursuing a DrPH or PhD in MPACH. Prerequisites: Enrolled in a doctoral program (DrPH or PhD) in MPACH & completed an acceptable dissertation topic synopsis & identified dissertation chair" Pass/Fail, F not in GPA

PHM 3996L Capstone for MPACH Students (3 Credits)
This integrative learning experience is designed to demonstrate synthesis of major themes from the MPH core and major-specific courses. Students produce at least one high-quality written product. Prerequisites: Students must be an MPH MPCH major or a MPH Customized major with advanced public health coursework meeting major-specific competency requirements & completed the MPH Core courses & completed at least 30 semester credit hours the semester before enrolling in capstone. Letter Graded

PH 3998 Special Topics in Management, Policy and Community Health (1-4 Credits)
Credit hours vary among Special Topics courses. Topics vary each semester and provide in-depth study of various public health issues. Pass/Fail, F not in GPA

PH 3998L Special Topics in Management, Policy and Community Health (1-4 Credits)
Credit hours vary among Special Topics courses. Topics vary each semester and provide in-depth study of various public health issues. Letter Graded

PH 3999 IS: Management, Policy and Community Health (1-9 Credits)
A plan of study is determined for each participating student and supervised by a member of the MPACH faculty. This course may be repeated for credit. All independent study courses are required to have learning objectives and an outline of learning activities. Pass/Fail, F not in GPA

Interdepartmental Course Descriptions

PHM 5015L Introduction to Qualitative Research in Public Health (2 Credits)
This course will provide an overview of qualitative research in public health. Students will be introduced to qualitative research methods and analysis. This introductory course will help students understand the core ideas, processes, and activities underpinning qualitative research. Students will be able to develop interview guides, focus group guides, and codebooks and have the opportunity to practice qualitative methodological and analytical techniques. This knowledge will allow the student to use qualitative research in public health practice and provides preparation for further study of qualitative research methods and analysis. Letter Graded

PH 5030 Diabetes Seminar (1 Credit)
This seminar will offer comprehensive course content during an intensive timeframe format. Topic areas include standards and practice recommendations; pregnancy and diabetes; acute and chronic complications of diabetes; diabetes education; and medications. Treatment algorithms, protocols, and guidelines for weight loss, exercise, nutrition, glycemic control and insulin administration will be discussed. A diabetes cooking classes will be presented during the week. This course is also open to medical students, nursing students, etc. and to RDs/interns in the community for CEU credits. Pass/Fail, F not in GPA

PH 5031 Garden for Health (2 Credits)
In the Holistic Garden of the School of Public Health, students will gain knowledge of how to use the garden as a tool to improve health and quality of life. Common fruits, vegetables and herbs that are produced during the warmer and cooler months of the year along with information that pertains to their successful cultivation and their unique roles in our diet and health will be discussed. Course Fee: $75.00 Pass/Fail, F not in GPA Course fee: $75.00

PH 5032 Culinary Medicine (2 Credits)
Through innovative nutrition curriculum and hands-on training in the culinary arts, the Culinary Medicine course will teach medical, nursing, and dietetic intern students about food: how to cook, what to eat, and how to help their patients improve their diet - and thereby, their health. Course Fee: $75.00 Pass/Fail, F not in GPA Course fee: $75.00

PH 5040L Nutrition Research Methods (1 Credit)
This course teaches basic epidemiologic research skills applied to nutrition. Students complete training for UTHealth School of Public Health online library databases and the Academy of Nutrition and Dietetics (AND) Evidence Analyses Process (EAP). Students learn to create and score evidence tables using the EAP. Students develop a brief nutrition research proposal with an objective, literature review, methods section, and dummy tables and graphs. Students learn techniques for effective PowerPoint presentations and deliver an oral presentation of their individual project. Pass/Fail, F not in GPA

PH 5098 Special Topics in Interdivisional Courses (1-4 Credits)
Credit hours vary among Special Topics courses. Topics vary each semester and provide intensive coverage of interdepartmental theory and applications. Pass/Fail, F not in GPA

PH 5098L Special Topics in Interdivisional Courses (1-4 Credits)
Credit hours vary among Special Topics courses. Topics vary each semester and provide intensive coverage of interdepartmental theory and applications. Letter Graded

PHM 5096 Capstone for Customized Students (3 Credits)
This integrative learning experience is designed to demonstrate synthesis of major themes from the MPH core and major-specific courses. Students produce at least one high-quality written product. Prerequisites: Completed the MPH Core courses; and completed at least 30 semester credit hours the semester before enrolling in capstone. Other prerequisites vary by campus and course offering. Pass/Fail, F not in GPA

PH 5102 Health Disparities Core Seminar (1 Credit)
This seminar is a venue for students to familiarize themselves with health disparities literature and to discuss current health disparities issues in a supportive environment of peers and faculty. Pass/Fail, F not in GPA

PH 5200 Foundations of Leadership in Public Health (3 Credits)
This is an introductory course in public health leadership for students in all academic programs. This course introduces students to the theories and principles of effective leadership, presents leadership challenges, and discovers personal attributes of leadership in public health practice and research. Students will begin to develop life-long learning skills through self-development, experiential learning, and discussion of leadership approaches. Content areas will include complexity theory, change management, ethics, collaboration, effective communication, team-building, dialogue, decision-making, conflict management, leadership evaluation, advocacy, and strategic planning. Pass/Fail, F not in GPA

PHM 5210 Selected Readings in Leadership Studies (1 Credit)
These seminars are designed to assess how public health professionals become leaders. Students are introduced to concepts of adaptive leadership, evaluation and analysis of leadership readings, application of concepts to public health and management challenges, and discussion and examination of leadership issues, using experience and examples from the field. Pass/Fail, F not in GPA

PHD 5210 Selected Readings in Leadership Studies (2 Credits)
These seminars are designed to assess how public health professionals become leaders. Students are introduced to concepts of adaptive leadership, evaluation and analysis of leadership readings, application of concepts to public health and management challenges, and discussion and examination of leadership issues, using experience and examples from the field. Pass/Fail, F not in GPA

PH 5220 Gender and Leadership (3 Credits)
This course focuses on the topic of women and leadership. Using a seminar approach anchored in selected readings, students will consider prevailing theories of leadership and discuss the variable of gender. Readings will focus on a variety of specific issues such as the "glass ceiling," derailing behaviors, and conflict style differences in women and men. Pass/Fail

PH 5301 Maternal and Child Health Core Training Seminar I (3 Credits)
The Maternal and Child Health Core Training Seminar sessions will provide an opportunity for instruction and discussion of topics specific to Maternal and Child Health. The scope of the MCH Core Training Seminar curriculum is centered on life span development, from perinatal/infant health to child/adolescent and women's health. Students will receive instruction on utilizing data sources specific to maternal and child health, such as vital records and other routine data sources as well as hands-on experience in extracting data, analyzing data, and interpreting results. Students will also have the opportunity to meet and learn from community organizations in the MCH field. Students will learn MCH content as well as HRSA-defined leadership competencies. Pass/Fail, F not in GPA

PH 5311 Maternal and Child Health Core Training Seminar II (3 Credits)
The Maternal and Child Health Core Training Seminar sessions will provide an opportunity for instruction and discussion of topics specific to Maternal and Child Health. The scope of the MCH Core Training Seminar curriculum is centered on life span development, from perinatal/infant health to child/adolescent and women's health. Students will receive instruction on utilizing data sources specific to maternal and child health, such as vital records and other routine data sources as well as hands-on experience in extracting data, analyzing data, and interpreting results. Students will also have the opportunity to meet and learn from community organizations in the MCH field. Students will learn MCH content as well as HRSA-defined leadership competencies. Pass/Fail, F not in GPA

PH 5400 Physical Activity Assessment & Surveillance (3 Credits)
This course provides students with an in-depth understanding of the various methods used to measure physical activity and related constructs (e.g., energy expenditure and physical fitness) in individuals and populations. This understanding will be achieved through a review of the current research literature related to measurement methods and hands-on practice experiences with various physical activity measurement methods (i.e., data collection to interpretation). Behavioral, environmental, and policy-related correlates and determinants of physical activity will also be discussed. Pass/Fail, F not in GPA

PH 5401L Physical Activity & Public Health Practice (3 Credits)
This course focuses on physical activity promotion in practice. The course covers key topic areas such as the physical activity guideline recommendations, health behavior theories and physical activity interventions, the National Physical Activity Plan, and the Guide to Community Preventive Services Recommendations for physical Activity. The course will also build important skills for reviewing the physical activity promotion literature, identifying priority areas for physical activity promotion, using a systems approach for physical activity promotion, and synthesizing physical activity research to inform practice. Letter Graded

PHD 5500 Principles of Adult and Community Education for Public Health (2 Credits)
This is a required course for students seeking a DrPH and an elective for students seeking a PhD. The course provides an overview of principals of adult and community education, how to design and facilitate a course, and how to evaluate students' learning. Prerequisites: To be successful in this course, students should understand research design, methods of data analyses, their discipline, the learning needs of their community, and their health topic. Pass/Fail, F not in GPA

PHD 5502 Preparing to Teach: Mentoring Future Community Health Educators and Public Health Faculty (1 Credit)
This is an elective course for doctoral students seeking a mentored, collaborative teaching experience with an accom-plished community or university-based instructor. Prerequisites: PHD 5500 Pass/Fail, F not in GPA

PH 5610 Global Health Overview (3 Credits)
This course presents an overview of the issues affecting the living conditions and the health status of low-income country residents, and the local and global responses to these problems. Throughout the semester, students will develop an understanding of global and international health through the discussion of sub-themes, including the different meanings of globalization; population and demographics; assessment, health indicators, and epidemiology; immunizations; communicable and emerging diseases; war, conflict, refugees, migration, and displacement; health systems; cultural differentiation; maternal and child health; food security and nutrition; trade agreements, agriculture, and pharmaceuticals; environmental health and pollution; urban health and the development of mega-cities; and economic development. Pass/Fail, F not in GPA

PH 5612 Global Health Seminar (1 Credit)
This weekly seminar is presented by faculty, students, and visiting professors, and varies in subject matter, depending on current events as well as the special expertise and experience of presenters. Pass/Fail, F not in GPA

PH 5613 Critical Cinema for Public Health (2 Credits)
This course presents a series of documentaries and Big Screen movies revolving around public health topics. The range of topics will include health disparities; health systems; culture, behavior, and health; environmental health themes; globalization; addictions; mental health; food production; research ethics and methods; violence; and surveillance and control of epidemics. All movie presentations will be followed by a class discussion. Pass/Fail, F not in GPA

PH 9997 Practicum (1 Credit)
A practicum is a unique learning experience that is planned, supervised, evaluated and graded. Practicum experiences allow students the opportunity to apply classroom education towards a real-world public health problem in a work setting. Students should consult their degree requirements for maximum credits that can be applied to their degree. More information about practicum can be found online on the UTHealth School of Public Health website. Pass/Fail, F not in GPA

PH 9997 Practicum (2 Credits)
A practicum is a unique learning experience that is planned, supervised, evaluated and graded. Practicum experiences allow students the opportunity to apply classroom education towards a real-world public health problem in a work setting. Students should consult their degree requirements for maximum credits that can be applied to their degree. More information about practicum can be found online on the UTHealth School of Public Health website. Pass/Fail, F not in GPA

PH 9997 Practicum (3 Credits)
A practicum is a unique learning experience that is planned, supervised, evaluated and graded. Practicum experiences allow students the opportunity to apply classroom education towards a real-world public health problem in a work setting. Students should consult their degree requirements for maximum credits that can be applied to their degree. More information about practicum can be found online on the UTHealth School of Public Health website. Pass/Fail, F not in GPA

PH 9997 Practicum (1-9 Credits)
A practicum is a unique learning experience that is planned, supervised, evaluated and graded. Practicum experiences allow students the opportunity to apply classroom education towards a real-world public health problem in a work setting. Students should consult their degree requirements for maximum credits that can be applied to their degree. More information about practicum can be found online on the UTHealth School of Public Health website. Pass/Fail, F not in GPA

PH 9997M Practicm Occupational Medicine Residents (1-9 Credits)
A practicum is a unique learning experience that is planned, supervised, evaluated and graded. Practicum experiences allow students the opportunity to apply classroom education towards a real-world public health problem in a work setting. Students should consult their degree requirements for maximum credits that can be applied to their degree. More information about practicum can be found online on the UTHealth School of Public Health website. Pass/Fail, F not in GPA

PHM 9998 Integrative Learning Experience/Thesis Research (1-9 Credits)
A culminating experience is designed to ensure that all MPH graduates can integrate and apply the knowledge and skills that they have gained during their graduate training. Students should consult their degree requirements for maximum credits that can be applied to their degree. More information about culminating experience can be found online on the UTHealth School of Public Health website. Pass/Fail, F not in GPA

PHD 9999 Dissertation Research (1-9 Credits)
Dissertation research is for students pursuing a doctoral degree that are required to complete a written research dissertation that makes a substantial contribution to knowledge in the public health sciences. Students should consult their degree requirements for maximum credits that can be applied to their degree. More information about dissertation research can be found online on the UTHealth School of Public Health website. Pass/Fail, F not in GPA

INDEX