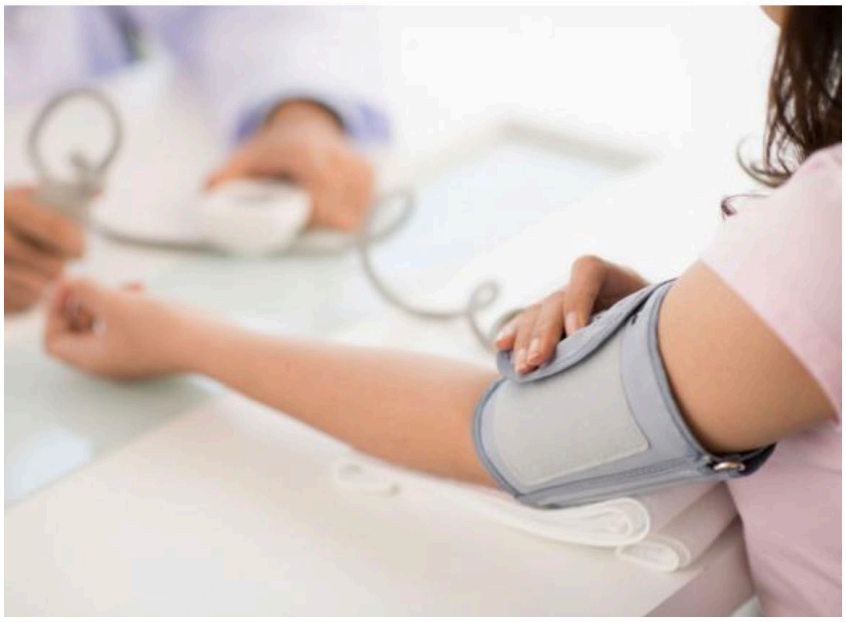
Combined PharmD/MPH Program Catalog
Texas Tech University Health Sciences Center

PharmD/Masters of Public Health

The PharmD/MPH program is a reflection of the combined missions of the TTUHSC Jerry H. Hodge School of Pharmacy (https://www.ttuhsc.edu/pharmacy/admissions.aspx) and the Julia Jones Matthews School of Population and Public Health (https://www.ttuhsc.edu/population-public-health/programs/dual-degrees.aspx). The program prepares pharmacy students to meet the increasing challenges in their communities' continuously evolving health care industry and to educate those students to become future health care leaders in public health policy development.



Uniqueness Of The Program:

- Out of the 34 accredited schools offering a PharmD/MPH program in the nation, TTUHSC offers one of the few online public health curricular tracks, which allows completion of both degrees within the timeframe of the PharmD curricular track.

- The MPH program consists of a minimum of 45 credit hours, including eight core courses, an applied practice experience (APE) and an integrated learning experience (ILE).
- Students are able to utilize 9 credit hours from School of Pharmacy coursework towards the Masters in Public Health program, offering a distinct advantage to those working on both degrees concurrently in the ability to complete the MPH coursework in less time.
- Applicants for the combined PharmD/MPH Degree program must have a prior baccalaureate or higher degree to be admitted into the program.
- Because the current Master of Public Health program is a clinical program, its versatility is a strong fit for the necessary areas of focus to develop not only strong leaders in health care organizations, governmental agencies, and practice settings, but professionals who would be focused on service to the community.

2021

Program started in Summer 2021

24

Complete MPH requirements in as little as 24 months

Pharmacists in Public Health Practice

- CDC and American Public Health Association (APHA) recognized value of pharmacists in public health sector:
- Bone mineral density testing
- Smoking cessation
- Emergency contraception access
- Sexually transmitted disease education
- Hypertension / diabetes screening
- Colorectal cancer screening
- Advising patients on OTC meds

American Public Health Association encouraged Congress to charge CMS with recognizing pharmacists as healthcare providers

- Expanding role of pharmacists in population-based healthcare
- Community and clinical pharmacotherapy expertise
- Access to care
- Preventative services offered
- Drug information services

Pharm.D./MPH Opportunities

Pharmacy career paths with the MPH include:

- Health policy development and quality managers within local, county, state or federal government agencies
- Community health and immunology
- Emergency and humanitarian response
- Genetics research
- Insurance, managed care organizations, health systems
- Family and juvenile health
- Faculty members for schools of public health, health professions and advanced pharmacy practice
- Global health

PROGRAM HISTORY | HOW TO APPLY | TUITION/FINANCIAL AID | CONTACT US

Program History:

While the Masters in Public Health degree has been available through TTUHSC since 2014, the combined Pharm.D./MPH degree program was launched in 2021.

How To Apply:

Once accepted into the Jerry H Hodge TTUHSC School of Pharmacy Pharm.D. program, interested students can apply to the **School of Population and Public Health** through their centralized application system, SOPHAS Express. Applications are due by March 1st of each year. If the MPH program acceptance is not granted for the summer prior to the Pharm.D. curriculum begins (P0), a student can reapply for the summer after the P1 year in pharmacy school and still be able to complete the MPH program at the same time as the Pharm.D. degree is awarded. The Julia Jones Matthews School of Population and Public Health and the Jerry H. Hodge School of Pharmacy may limit the number of pharmacy students that are allowed to enroll in the MPH.

School of Pharmacy P0 and P1 students desiring to enroll in the Pharm.D.-MPH program must sign an acknowledgement or disclosure form, which signifies an understanding of special curricular requirements for enrolling in the program.

Applications must be completed and submitted by March 1 for Summer applicants. Applications must be completed in the MPH program's centralized application system (SOPHAS Express) by March 1 for Summer applicants. Once the SOPHAS application has reached a "Verified" status, applicants will receive an email on how to submit the program's supplemental application.

Enrollment Timeline:

March 1, 2025: Deadline for completion of applications in SOPHAS Express

April 1, 2025: Deadline to submit MPH supplemental application, supplemental application fee, oath of residency, and technical standards form

April 1, 2025: Completion of review of applicants and selection of interviewees

April 30, 2025: Completion of interviews

May 3, 2025: MPH Admissions Committee finalizes selection of candidates

May 10, 2025: SPPH and SOP Pharm.D.-MPH Review Committees reviews candidates for potential approval

**May 19, 2025: Beginning of classes (online)

Admissions Requirements for the SPPH:

1. Electronic application at https://sophasexpress.liaisoncas.com/ and $55 SOPHAS Express application fee
2. TTUHSC Supplemental Application (instructions will be sent after the SOPHAS Express application is verified)
3. TTUHSC Supplemental Application fee of $50
5. Oath of Residency form
6. Technical Standards form
7. A personal interview may be requested
8. Once admitted to the MPH program, a $50 placement fee is also required.

Please note, the MPH program will use your transcripts and letters of recommendation from your PharmCAS application.

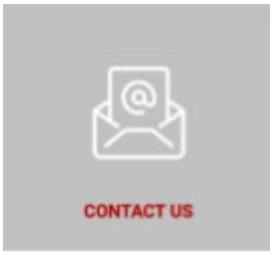
Prerequisites for Admission:

See https://www.ttuhsc.edu/population-public-health/admissions.aspx for a complete list of admission requirements for the MPH degree.

Please note: Pharmacy students interested in the combined Pharm.D./MPH degree program must submit an application to both programs. The PharmCAS application will not be accepted by the SPPH. Note that the deadline for applications is different for each program. Please be aware of this and meet all deadlines for each program. Only candidates accepted into the Jerry H Hodge School of Pharmacy before March 1st are eligible to apply for the combined MPH program for a P0 year start. All applicants must possess a bachelor's degree or the equivalent from an accredited college or university prior to applying for the MPH program.

Tuition and Financial Aid:

https://www.ttuhsc.edu/financial-aid/default.aspx



Contact Us:

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MPH Course Descriptions

*MPH courses only. Please see the TTUHSC Jerry H. Hodge School of Pharmacy catalogue for the PharmD requirements and course descriptions

5090. Integrated Learning Experience-Extended (V1-6).

The Integrated Learning Experience requires the student to synthesize and integrate knowledge acquired in coursework and other learning experiences and to apply theory and principles in a situation that approximates some aspect of professional practice. The course will be taken by students who have not completed their project or thesis ILE. (F)
Prerequisites: SPPH 5304, SPPH 5307, SPPH 5309, SPPH 5310, SPPH 5311, SPPH 5313, and SPPH 5334.

5099. Independent Study (V1-6). (F, O, H, IVC)

5110. Leadership Seminar (1:1:0:0).

The course will provide the student with the opportunity to
learn leadership lessons from the careers of a diverse group of leaders who are successful executives and entrepreneurs from multiple sectors, including public health, hospitals, government, nonprofit. It will present the chance to discuss and reflect on leadership styles, provide exposure to leadership theory, and assist in the development of effective networking skills. It will prepare students for effectively engaging with their peers, personal network, and potential employers. (F, O, H, IVC).

5304. Introduction to Social and Behavioral Sciences (3:3:0:0).

This three-credit hour course focuses on the behavioral sciences and their influence on public health. As a core course, this is an overview and introduction to social and behavioral health theories and issues- briefly covering several aspects of the behavioral sciences, such as: individual, community, organizational, and social impacts on health and population health status; cultural competence; effective communication strategies; and engagement of rural and urban communities using theory-informed models. (F, O, H, IVC)

5307. Introduction to Epidemiology (3:3:0:0).

This course will introduce students to the fundamental principles of epidemiology. Students will be introduced to quantitative data collection methods as well as being taught how to interpret results of data analysis for public health research, policy, or practice. Ultimately, this course will equip students with the necessary information to apply epidemiological methods to the breadth of settings and situations in public health practice. (F, O, H, IVC)

5308. Advanced Epidemiology Methods (3:3:0:0).

This three-semester hour course will review selected articles from the epidemiologic and biostatistical literature that are of historical importance.
Prerequisites: GSPH 5307. (F, O, H, IVC).

5309. Basic Environmental Health Sciences (3:3:0:0).

This course is an overview of the major areas of environmental health and provides students with an understanding of hazards in the environment, the effects of environmental contaminants on health, and various approaches to address major environmental health problems. Areas of emphasis are environmental epidemiology, toxicology, agents of environmental disease and policy and regulation. (FO, H, IVC).

5310. Public Health Policy (3:3:0:0).

This course presents competencies surrounding public health policy formulation. The main focus will be on the policy issues in the U.S. health care system, but some global health will be explored. The course will include application of principles of policy formulation, development budgeting, implementation, evaluation and analysis. An historical overview of seminal health policy events in U.S. history is also explored through competing stakeholder dynamics. (F, O, H, IVC)

5311. Introduction to Biostatistics (3:3:0:0).

This course will introduce students to basic biostatistics as used in public health practice. Through the utilization of SPSS software, students will learn to interpret their statistical analysis results in order to describe, measure, and analyze quantitative data. Additionally, students will learn to interpret their statistical analysis results in order to describe, measure, and analyze public health problems. Applications of these interpretations will be useful in several avenues of public health including research and policy making. (F, H, O, IVC).

5312. Intermediate Biostatistics (3:3:0:0).

The objective of this course is to expand upon the basic concepts of statistical reasoning developed in SPPH 5311 (Introduction to Biostatistics) to selected applications of biostatistical analysis: simple and multiple linear regression, contingency table analysis, logistic regression, and analysis of variance. The course also includes introductions to survival analysis, repeated measures data, and nonparametric methods.
Prerequisite: SPPH 5311 or equivalent. (F, O, H, IVC).

5313. Introduction to Public Health (3:3:0:0).

This introductory course will explore the history of public health, the successes and challenges faced by public health practitioners over the years, and the current trends in public health in the United States. Students will learn the core functions of public health and the essential services of public health, and how public health is practiced in the United States. This course covers the Foundational Knowledge in Public Health as required by our accrediting body. (F, O, H, IVC)

5314. Planning and Development Health Promotion Interventions (3:3:0:0).

This course will take the student through the process of intervention development, beginning with the assessment needed to understand determinants of health and behavior through the mapping of determinants, development of strategies and methods, and preparing for evaluation. Students will work in small groups on a complex public health problem and will develop an intervention to address that problem.
Prerequisite: SPPH 5304. (F, O, H, IVC)

5315. Organizational Leadership and Management (3:3:0:0).

This three-credit course provides an overview of theory and practice of leadership and management as applied to public health. Public health managerial concerns such as leadership, strategic planning, decision making, negotiations, and budget and resource management, will be introduced in this course. This course is intended primarily for MPH students with little or no previous graduate-level academic preparation in leadership and management. (F, O, H, IVC).

5316. Responsible Conduct of Research and Communication in Public Health (3:3:0:0).

This three-credit hour course applies an active, participatory approach to help public health and health care professionals learn about the regulatory environment as well as the normative ethics of conducting public health research as well as how to better communicate more effectively in written and spoken communications. (F, O, H, IVC).

5319. Applied Practice Experience (3:0:0:3).

The Applied Practice Experience is an integral component of professional training in public health, enabling students to observe from professionals in the field. The Applied Practice Experience also allows students to apply theoretical learning toward achievement of practical goals and skills while under the supervision of a preceptor and an Applied Practice Experience advisor.

Prerequisites: SPPH 5304, SPPH 5307, SPPH 5309, SPPH 5310, SPPH 5311, SPPH 5313, and SPPH 5334. (F, O, H, IVC).

5321. Program Evaluation (3:3:0:0).

Students will learn the basics of public health program evaluation. Combining the CDC Framework for Program Evaluation with theory-based evaluation principles, students will learn how to engage stakeholders, describe public health programs, design evaluations, gather credible evidence, and justify conclusions to ensure maximum use of evaluation findings for program stakeholders and evidence-based public health programming.
Prerequisites: SPPH 5304, SPPH 5311. (F, O, IVC)

5322. Epidemiology Research Methods (3:3:0:0).

This three-semester hour course will focus on the key principles and methods of epidemiologic research at an intermediate level. Practical issues, such as applied logistic regression, will be discussed.
Prerequisite: SPPH 5307. (F, O, H, IVC).

5325. Health Care Payment Systems and Policy (3:3:0:0).

In this course we will evaluate multiple dimensions of health care cost and payment, focusing on how payment systems influence provider organization, behavior and performance and how policy is developed. (F, O, H, IVC).

5326. Emerging Theories for Public Health (3:3:0:0).

We will discuss the scientific principles of theory surrounding the changing population health environment. In this class, students learn to view theoretical models as tools that can be applied to explain retrospective population health behavior, as well as, forecast future behavior change in human populations. Theoretical constructs, variables, and operationalized measures of theory are applied in the scientific analysis of both open and closed systems that allow for a contrast of for-profit, non-profit, and government systems of healthcare. The class is conducted in a seminar format. No textbook is required. Journal articles are provided by the professor. (F, O, H, IVC).

5327. Social Epidemiology (3:3:0:0).

This class focuses on social, behavioral, and environmental contributors to population health and well-being. This course will include analysis and discussion of the data, methods, and research ethics relevant to social epidemiology, and students will be

expected to develop and refine population-based solutions to complex social and structural factors that impact population health. The course examines how structural biases and social inequality impact health at the local, national, and global level, and considers how issues of cultural competence are relevant to addressing health disparities. (F, O, H, IVC).

5328.Chronic Disease Epidemiology (3:3:0:0).

This course addresses the etiology, prevention, distribution, natural history, and treatment outcomes of chronic health conditions, and their impact on public health. (F, O, H, IVC).

5329. Issues in Rural Health (3:3:0:0).

This three-credit hour course focuses on rural health issues and their influence on public health. This course will delve deeper into these challenges, addressing the specific physical and cultural characteristics of rural areas that make them so different from their urban counterparts. Additionally, this course will address epidemiological methods to assess rural health issues such as ethical principles and environmental hazards. Students will be challenged to interpret results of data, assess population needs specific to rural communities, propose strategies to build coalitions using partnerships. During the course of study students will apply systems thinking tools to research public health issues, solving skills to identify interventions and present findings both in writing and using oral presentations. They will also look at public health program planning from a community-focused lens and focus on overcoming specific barriers that are driving disparities in rural areas.

Prerequisites: SPPH 5304, SPPH 5307, SPPH 5311. (F, O, H, IVC).

5330. Toxicology and Public Health (3:3:0:0).

This course is designed to cover the basic concepts of toxicology, including an examination of major classes of pollutants, mechanisms of toxicity and the relationship between human disease and exposure to environmental chemicals. This course also applies these concepts to effects on general and susceptible populations, risk communication and public health practice. (F, O, H, IVC).

5331. Global Health Issues (3:3:0:0).

This course will explore issues of global health and public health responses to those needs. (F, O, H, IVC).

5332. Quality Improvement in Healthcare (3:3:0:0).

The purpose of this course is to explore the concept of Quality and the process of Quality Improvement across the Health Care continuum. We will discuss the history and evolution of quality, its terms, principles, theories, and practices. Students will review methods of improving quality, including but not limited to continuous Quality Improvement and Total Quality Management, and to the guidelines for implementing quality management and continuous quality improvement processes. Students will also be asked to think creatively to design novel ways of improving quality. (F, O, H, IVC).

5333. Qualitative Research Methods (3:3:0:0).

This course will include sessions on: introduction to qualitative research, research design, ethnography, conducting a literature search, qualitative interviewing, recruitment and sampling, mixed methods, focus groups, thematic qualitative data analysis, ethics, and the quality of qualitative research. (F, O, H, IVC).

5334. Community-Based Methods and Practice (3:3:0:0).

This class deals with public health practice at the community, organizational, and political levels and Community Based Participatory Research methods. We want you to feel comfortable with all of these levels, and would like you to be able to work on health issues at all levels. In this class you will learn how to select qualitative methods and how to do them (focus groups, photo voice, key informant interviews, nominal group process). In this class you will develop a community-based project, intervention, or program. (F, O, H, IVC).

5335. Reproductive Epidemiology (3:3:0:0).

An introduction to maternal and child health (MCH) epidemiology. Readings from the textbook will be supplemented with several journal articles. Guest speakers from the discipline of MCH, obstetrics, and neonatology will deliver selected lectures. **Prerequisite: SPPH 5307. (F, O, H, IVC).**

5336. Digital Media in Public Health (3:3:0:0).

This class will explore the use of social and digital media as it is currently being used in the field of public health. Class will include discussions of innovative public health programming ideas, and evidence-based practices using social and digital media. (F, O, H, IVC).

5337.The U.S. Healthcare System (3:3:0:0).

This course provides an overview of healthcare in the United States. The historical context as well as trends that could impact the healthcare system is presented. Several aspects of health care systems and services are explored. (F, O, H, IVC).

5340. Data Management and Analysis for the Health Sciences (3:3:0:0).

This is a three credit hour course for master's degree students in public health. This course covers practical issues related to public health design, data management, and data analysis using SPSS and SAS software packages. (F, O, H, IVC).

5341. Applied Statistics for Epidemiology and Health Sciences (3:3:0:0).

This course is designed for students who seek to develop statistical reasoning in epidemiology, as well as skills in data analysis, interpretation, and presentation. This course places special emphasis on applied statistics and modeling techniques. Common statistical models for continuous, categorical and count data from both cross-sectional and longitudinal studies will be implemented. During this course, students will discuss advanced epidemiologic methods issues that one may encounter during data analysis with guidance from the course director. Theoretical principles will be demonstrated with real world examples from biomedical studies. This course requires substantial statistical computing in software packages SPSS and/or SAS.R: some familiarity with one of these packages is recommended but not required. (F, O, H, IVC).

5342. Visualization of Public Health Data (3:3:0:0).

Data mining is a process of discovering patterns in large data sets involving methods at the intersection of machine learning, statistics, and database systems. Data analytics is the discipline that encompasses the complete management of data from collection, organization, storage to all the tools and techniques used in its analysis. After processing the data results needs to be reported, visualization is key to communicate out results effectively. The exponentially increasing rate at which data is generated creates a corresponding need for professionals who can effectively handle its storage, analysis, and translation and create visualizations. (F, O, H, IVC).

5343. GIS Data Visualization for Public Health (3:3:0:0).

Geographic Information Systems (GIS) are tools for managing, describing, analyzing, and presenting information about the relationships between where features are (location,

size and shape) and what they are like (descriptive information known as attribute data). GIS has become an important tool across a variety of fields, including public health, environmental science, epidemiology, planning, architecture, engineering, and business. Further, GIS has become an important political instrument allowing communities and regions to tell their stories geographically representing data social and environmental data in maps. Python, a beginner-user-friendly and simple programming language, is extremely useful in terms of GIS since many (or most) of the different GIS Software packages (such as ArcGIS, QGIS, PostGIS etc.) provide an interface to do analysis using Python scripting.

5350. Public Health Ethics and Law (3:3:0:0).

This course is intended to introduce students to key concepts of law and ethics as applied to public health. It seeks to demonstrate, with both current and historical examples, constrains in public health decision-making and actions. This course will help students identify and appropriately assess legal and ethical issues that underlie the field of public health. The course will combine lecture (minimally), "Socratic" in-class dialogue, and student lead discussions/presentations in approaching its topics. The course may include some guest presentations by visiting experts from the Texas Tech University Health Sciences Center, other universities, and state and local governments. (F, O, H, IVC).

5360. Comparative Effectiveness & Quality Improvement of Public Healthcare (3:3:0:0).

The course will provide the student with an in-depth understanding of public health delivery systems across the globe. Topics will include: historic development, organization and characteristics of the U.S. public health delivery system as compared to other countries' public health delivery systems. Comparative effectiveness research and quality improvement techniques will be used to draw comparisons about current payment and reimbursement systems; healthcare accrediting agencies; functions and organizations of providers; organization of health facilities; and health information management to optimize patient care in many different countries.
Prerequisites: SPPH 5311 and SPPH 5310. (F, O, H, IVC).

5388. Special Topics (3:3:0:0).

This three-credit hour course will cover topics of temporal or special interest which are not being offered as part of the Master of Public Health degree curriculum. Experimental courses may also be offered as special topic courses and subsequently proposed as a regular course. (F, O, H, IVC).

5399. Integrated Learning Experience (3:0:0:3).

The Integrated Learning Experience requires the student to synthesize and integrate knowledge acquired in coursework and other learning experiences and to apply theory and principles in a situation that approximates some aspect of professional practice. The student will choose between either a capstone course or a public health project.
Prerequisites: SPPH 5304, SPPH 5307, SPPH 5309, SPPH 5310, SPPH 5311, SPPH 5313, and SPPH 5334. (F, O, H, IVC).