

MPH in Epidemiology

Academic Year 2012-2013

The Masters of Public Health degree program prepares students to address the following core competencies while advancing their knowledge of public health:

1. **Public Health Knowledge and Skills**-The MPH student will apply basic knowledge and skills of the core public health sciences that include: biostatistics, epidemiology, health management and policy, behavioral and community health, and environmental and occupational health, to the prevention of illness and injury and the promotion of population health.
2. **Integration of Theory and Practice**-The MPH student will demonstrate the effective integration of theory and practice related to public health issues that affect diverse populations, through a thesis or comprehensive examination and a practice experience.
3. **Communication and Informatics**-The MPH student will gather, organize, and manage data and information effectively to address public health issues through oral and written communications to diverse professionals and lay audiences.
4. **Diversity and Culture**-The MPH student will demonstrate the ability to interact with both diverse individuals and communities to produce or impact an intended public health outcome.
5. **Professionalism**-The MPH student will apply ethical principles to the practice of public health in a variety of settings, demonstrating personal integrity while embracing diverse communities.

The epidemiology concentration is designed for students seeking to acquire skills in the fundamental methods of epidemiologic investigation and prevention in populations. Concentration courses emphasize basic and advanced epidemiologic principles and their application to current problems in public health and related disciplines. Students in the epidemiology concentration are expected to use appropriate methods to plan, implement, and conduct epidemiologic research. Students are also expected to critically evaluate research methodology to assess validity and potential sources of bias. Skills in computer use and statistics acquired in the public health program are used to analyze, interpret, and disseminate the results of epidemiologic investigations. For the culminating experience, students may choose between a thesis option or a comprehensive examination option. Students selecting the comprehensive examination option will complete 48 semester credit hours and students selecting the thesis option will complete 51 semester credit hours to earn the MPH degree. By the conclusion of the MPH program, a student in the epidemiology concentration will be able to:

1. Describe a public health problem in terms of magnitude, person, time and place
2. Identify key sources of data for epidemiologic purposes
3. Use data collection methods appropriate for epidemiologic research
4. Design appropriate epidemiologic studies
5. Apply analytic methods to answer epidemiologic questions
6. Design and use survey tools
7. Identify the principles and limitations of public health screening programs
8. Critically evaluate epidemiologic evidence
9. Communicate epidemiologic information to lay and professional audiences
10. Comprehend basic ethical principles pertaining to the collection, maintenance, use and dissemination of epidemiologic data
11. Demonstrate proficiency in using statistical software to manage and analyze health related data

Epidemiology Curriculum (48 or 51 Semester Credit Hours)

CORE COURSES:			15 SCH
BACH	5300	Theoretical Foundations of Individual & Community Health	3 SCH
BIOS	5300	Biostatistics for Public Health 1	3 SCH
EOHS	5300	Environmental Health	3 SCH
EPID	5300	Principles of Epidemiology	3 SCH
HMAP	5300	Introduction to Health Management and Policy	3 SCH

REQUIRED COURSES:			15 SCH
BIOS	5310	Biostatistics for Public Health 2	3 SCH
EPID	5310	Intermediate Epidemiology	3 SCH
EPID	5312	Survey Methodology	3 SCH
EPID	5313	Database Management and SAS Programming	3 SCH
EPID	5314	Applied Data Analysis in Epidemiology	3 SCH

PRACTICE EXPERIENCE:			3 SCH
EPID	5397	Public Health Practice Experience	3 SCH

CONCENTRATION SELECTIVE COURSES: 12 SCH for Thesis Option or 15 SCH for Comprehensive Exam Option

Choose **one** from the following courses (applied to both thesis and comprehensive exam option)

EPID	5318	Chronic Disease Epidemiology	3 SCH
EPID	5320	Infectious Disease Epidemiology	3 SCH

Choose **three** from the following courses if completing the thesis option or **four** from the following courses if completing the comprehensive examination option

BIOS	5324	Data Management	3 SCH
EPID	5391	Special Topics in Epidemiology	1-3 SCH
EPID	5399	Independent Study in Epidemiology	1-3 SCH
EPID	6310	Advanced Methods in Epidemiology 1	3 SCH
EPID	6312	Advanced Methods in Epidemiology 2	3 SCH
EPID	6314	Experimental Methods in Epidemiology	3 SCH
EPID	6316	Molecular Epidemiology	3 SCH
EPID	6318	Epidemiologic Surveillance	3 SCH
EPID	6320	Social Epidemiology	3 SCH
EPID	6322	Nutritional Epidemiology	3 SCH
EPID	6324	Cancer Epidemiology	3 SCH
EPID	6326	Occupational Epidemiology	3 SCH

- Students may substitute an elective course not on this list only with prior approval of their advisor.

CULMINATING EXPERIENCE:			0-6 SCH
PHED	5000	Certified in Public Health Examination	0 SCH
EPID	5001	MPH Comprehensive Examination	0 SCH
OR			
EPID	5395	Thesis	6 SCH

MPH students enrolled in the thesis as part of their degree plan are required to demonstrate that they are actively working toward its completion. This requires confirmed submission of written materials and on-going consultation with committee members within the first and subsequent semesters of registering for thesis credit. It is the responsibility of the student to maintain contact with their thesis advisor and committee members to assure satisfactory progress. MPH students choosing the thesis option but not making satisfactory progress as determined by their advisor may be required to take the comprehensive exam instead of the thesis or may be required to take additional courses to assure sufficient knowledge and skills needed to continue the research project. Any action taken as a result of not meeting the above expectations is subject to the discretion of the department chair.

The UNTHSC School of Public Health reserves the right to make changes at any time to reflect current program and curriculum updates and does not constitute a contract between the Health Science Center and a student or applicant for admission.