

MASTER OF PUBLIC HEALTH: PUBLIC HEALTH EPIDEMIOLOGY

The department of population health offers a variety of degree options and graduate courses. In health, a master of public health is offered with five majors.

MPH Program

Public health is a multidisciplinary field whose goal is to promote the health of the population through organized community efforts. According to the American Public Health Association (APHA), public health is prevention; public health is policy development and population health surveillance; and public health save money, improves quality of life, helps children thrive, and reduces human suffering.

The MPH degree program is fully accredited by the Council on Education for Public Health (CEPH) and can be completed in a minimum of four semesters for full-time students and eight semesters for part-time students.

The Public Health Epidemiology major prepares students for careers involving the study of the distribution of disease in large groups or from a population-based perspective. The study of epidemiology includes factors affecting disease and disability in population and is a fundamental science of public health and preventive medicine. Epidemiology research traditionally has focused on causes of disease through population study for both infectious and chronic diseases. Epidemiologists attempt to quantify the distribution and establish the determinants of health problems by describing and analyzing the biological, environmental, social, and behavioral factors affecting health, illness, and premature death.

The MPH Program accepts students for Fall and Spring semesters. Applicants must apply through SOPHAS as well as complete a UToledo Student Conduct Form and pay a UToledo Graduate Application Fee to the University of Toledo. All required documentation must be submitted to SOPHAS electronically.

REQUIREMENTS

- Degree
 - An earned bachelor's degree from an accredited college or university
- Grade Point Average (GPA)
 - Regular admission: $GPA \geq 3.0$ (on a 4.0 scale) required
 - Provisional admission may be offered for applicants with $2.7 \leq GPA < 3.0$
- Foundation Courses (required undergraduate courses)
 - All students must have completed courses in college-level mathematics and social sciences
- Official Transcripts
 - Official transcripts from all institutions where any undergraduate or other courses, including any graduate degrees, must be sent directly to SOPHAS

- Transcripts from international institutions MUST be translated into English and evaluated onto a 4.0 scale using WES (World Education Services)
- English Language Proficiency
 - An English proficiency score from either TOEFL (80 or higher) or IELTS (6.5 or higher) must be submitted
 - No other English proficiency scores are accepted by the program
- Resume
 - A current resume must be uploaded
- Statement of Purpose
 - A Statement of Purpose indicating why the applicant wants to pursue the MPH program must be uploaded
 - Applicants may also use this statement to explain any discrepancies in their academic record
- Letters of Recommendation
 - A minimum of three letters are required, which can be requested within the SOPHAS application
 - Two of these letters MUST be from someone having a graduate degree
 - The credential of the writer must be included in the recommendation letter

All MPH students are required to take the following 9 (24 credit hours) core courses.

| Code | Title | Hours |
|---|---|-----------|
| PUBH 6000 | Quantitative and Qualitative Data Analysis in Public Health | 3 |
| PUBH 6010 | Public Health Epidemiology | 3 |
| PUBH 6020 | Management and Leadership in Public Health | 3 |
| PUBH 6050 | Concepts and Issues in Environmental Health (Concepts and Issues in Environmental Health) | 3 |
| PUBH 6080 | Social Determinants of Health | 3 |
| PUBH 6090 | Issues in Public Health | 3 |
| PUBH 6900 | Interprofessional Education for Public Health | 1 |
| PUBH 6950 | Integrative Learning Experience | 2 |
| One of the Following Must Be Completed: | | 3 |
| PUBH 6960 | Internship in Public Health | |
| PUBH 6970 | Project in Public Health | |
| Total Hours | | 24 |

All PHEP majors are required to take the following 5 (15 credit hours) major specific courses. In addition, all PHEP majors are required to take 2 (total of 6 credit hours) advised electives.

| Code | Title | Hours |
|--------------|----------------------------------|-------|
| PUBH 6030 | Advanced Epidemiology | 3 |
| PUBH 6060 | Advanced Biostatistics | 3 |
| PUBH 6120 | Epidemiology Infectious Diseases | 3 |
| PUBH 6550 | Chronic Disease Epidemiology | 3 |
| PUBH 6070 | Genetic Epidemiology | 3 |
| or PUBH 6130 | Molecular Epidemiology | |

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| Two graduate course electives (6cr) from any program (with advisor approval) | 6 |
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| Total Hours | 21 |
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- PLO 1. FOUNDATIONAL COMPETENCIES: Apply epidemiological methods to the breadth of settings and situations in public health practice;
- PLO 2. FOUNDATIONAL COMPETENCIES: Select quantitative and qualitative data collection methods appropriate for a given public health context;
- PLO 3. FOUNDATIONAL COMPETENCIES: Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate;
- PLO 4. FOUNDATIONAL COMPETENCIES: Interpret results of data analysis for public health research, policy or practice;
- PLO 5. FOUNDATIONAL COMPETENCIES: Compare the organization, structure, and function of health care, public health, and regulatory systems across national and international settings;
- PLO 6. FOUNDATIONAL COMPETENCIES: Discuss the means by which structural bias, social inequities, and racism undermine health and create challenges to achieving health equity at organizational, community, and societal levels;
- PLO 7. FOUNDATIONAL COMPETENCIES: Assess population needs, assets, and capacities that affect communities' health;
- PLO 8. FOUNDATIONAL COMPETENCIES: Apply awareness of cultural values and practices to the design or implementation of public health policies or programs;
- PLO 9. FOUNDATIONAL COMPETENCIES: Design a population-based policy, program, project, or intervention;
- PLO 10. FOUNDATIONAL COMPETENCIES: Explain basic principles and tools of budget and resource management;
- PLO 11. FOUNDATIONAL COMPETENCIES: Select methods to evaluate public health programs;
- PLO 12. FOUNDATIONAL COMPETENCIES: Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence;
- PLO 13. FOUNDATIONAL COMPETENCIES: Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes;
- PLO 14. FOUNDATIONAL COMPETENCIES: Advocate for political, social, or economic policies and programs that will improve health in diverse populations;
- PLO 15. FOUNDATIONAL COMPETENCIES: Evaluate policies for their impact on public health and health equity;
- PLO 16. FOUNDATIONAL COMPETENCIES: Apply principles of leadership, governance, and management, which includes creating a vision, empowering others, fostering collaboration, and guiding decision making;
- PLO 17. FOUNDATIONAL COMPETENCIES: Apply negotiation and mediation skills to address organizational or community challenges;
- PLO 18. FOUNDATIONAL COMPETENCIES: Select communication strategies for different audiences and sectors;
- PLO 19. FOUNDATIONAL COMPETENCIES: Communicate audience-appropriate public health content, both in writing and through oral presentation;
- PLO 20. FOUNDATIONAL COMPETENCIES: Describe the importance of cultural competence in communicating public health content;
- PLO 21. FOUNDATIONAL COMPETENCIES: Perform effectively on interprofessional teams;
- PLO 22. FOUNDATIONAL COMPETENCIES: Apply systems thinking to a public health issue.
- PLO 1. PUBLIC HEALTH EPIDEMIOLOGY COMPETENCIES: Differentiate the major epidemiologic research study designs based on their strengths and limitations;
- PLO 2. PUBLIC HEALTH EPIDEMIOLOGY COMPETENCIES: Distinguish between the major sources of bias in epidemiologic research (confounding, selection bias, and measurement error) and select the appropriate method to evaluate and reduce bias;
- PLO 3. PUBLIC HEALTH EPIDEMIOLOGY COMPETENCIES: Apply criteria to support whether or not an association is causal;
- PLO 4. PUBLIC HEALTH EPIDEMIOLOGY COMPETENCIES: Formulate appropriate public health recommendations using evidence-based practice based on a synthesis of findings across studies found in the scientific literature;
- PLO 5. PUBLIC HEALTH EPIDEMIOLOGY COMPETENCIES: Design an epidemiologic study to address a question of interest;
- PLO 6. PUBLIC HEALTH EPIDEMIOLOGY COMPETENCIES: Identify and apply molecular/genetic principles and technologies in public health practice;
- PLO 7. PUBLIC HEALTH EPIDEMIOLOGY COMPETENCIES: Write a clear description of the rationale, methods, results, and interpretation of an epidemiologic investigation;
- PLO 8. PUBLIC HEALTH EPIDEMIOLOGY COMPETENCIES: Identify, analyze, and interpret data arising from local, national, and international research and surveillance databases.