PUBLIC HEALTH, MASTER OF (M.P.H.) WITH A CONCENTRATION IN EPIDEMIOLOGY

Program accreditation
Council on Education for Public Health

Program goal
The mission of the VCU M.P.H. program is to provide exceptional public health training; conduct cutting-edge, translational research; promote health equity and community wellness; and foster life-long inquiry and discovery that improve human health.

The overall goal of the M.P.H. program is to educate students to become well-grounded in the essential knowledge, skills and attitudes of public health and demonstrate their ability to apply these essentials through course work, internships and the M.P.H. capstone project. The epidemiology concentration is designed to provide students with the skills required to advance to a broad spectrum of positions as public health researchers, epidemiologists, or data analysts who can perform the following:

1. Collect, analyze and evaluate public health data
2. Select and apply epidemiologic methods appropriate for the disease topic
3. Plan, implement and evaluate public health interventions
4. Apply results of research and data analyses to policy development as necessary
5. Effectively communicate results of research to a wide variety of audiences

The structure of the program provides a framework for the progressive development of a mastery of the current state of the subject matter of public health and an ability to synthesize and apply this information to the identification of key areas of practice and research in public health. Students will develop educational competencies outlined by the M.P.H. program. These competencies cover the foundational knowledge necessary for a public health practitioner to both communicate the core of public health knowledge and express the design, results and interpretation of various public health interventions, evaluations, and data collection and analysis efforts to a variety of potential audiences.

Student learning outcomes
Student learning outcomes are monitored by the program faculty and center primarily around competencies for all students. Overall learning outcomes are as follows:

1. Integrated knowledge of public health: Students will demonstrate knowledge of the current elements of public health, at a level assessed by program faculty as competent or higher, according to the program rubric.
2. Demonstration of focused knowledge and skills: Students will demonstrate more detailed knowledge and applied skills in the individual area of scholarship, including familiarity with the research literature and the ability to evaluate and critique publications, at a level assessed by program faculty as competent or higher, according to the program rubric.
3. Development of competencies: Through program course work and applied experiences, students will develop competence in the discipline of public health as demonstrated through annual self-assessment of performance on the M.P.H. program competencies and faculty assessment of (1) student competence in semi-annual student reviews and (2) student performance in the program’s integrated learning experience, the capstone project.
4. Training in appropriate public health skills/knowledge: Through didactic study and two separate applied experiences in professional public health settings, students will gain knowledge and skills required to perform as public health practitioners and/or researchers.

The M.P.H. program trains students to develop educational competencies established by the program’s accrediting body, the Council on Education for Public Health. These competencies may be viewed on the Department of Family Medicine and Population Health website (https://familymedicine.vcu.edu/epidemiology/epidemiology-graduate-programs/mph-program/competencies/).

VCU Graduate Bulletin, VCU Graduate School and general academic policies and regulations for all graduate students in all graduate programs
The VCU Graduate Bulletin website documents the official admission and academic rules and regulations that govern graduate education for all graduate programs at the university. These policies are established by the graduate faculty of the university through their elected representatives to the University Graduate Council.

It is the responsibility of all graduate students, both on- and off-campus, to be familiar with the VCU Graduate Bulletin as well as the Graduate School website and academic regulations in individual school and department publications and on program websites. However, in all cases, the official policies and procedures of the University Graduate Council, as published on the VCU Graduate Bulletin and Graduate School websites, take precedence over individual program policies and guidelines.

Visit the academic regulations section for additional information on academic regulations for graduate students.

Degree candidacy requirements
A graduate student admitted to a program or concentration requiring a final research project, work of art, thesis or dissertation, must qualify for continuing master’s or doctoral status according to the degree candidacy requirements of the student’s graduate program. Admission to degree candidacy, if applicable, is a formal statement by the graduate student’s faculty regarding the student’s academic achievements and the student’s readiness to proceed to the final research phase of the degree program.

Graduate students and program directors should refer to the following degree candidacy policy as published in the VCU Graduate Bulletin for complete information and instructions.

Visit the academic regulations section for additional information on degree candidacy requirements.

Graduation requirements
As graduate students approach the end of their academic programs and the final semester of matriculation, they must make formal application to
Applications:
Applicants must meet the following requirements:

Visit the academic regulations section for additional information on graduation requirements.

Other information
School of Medicine graduate program policies

The School of Medicine provides policies applicable to all programs administratively housed in the school. Information on master’s programs is available elsewhere in this chapter of the Graduate Bulletin.

The M.P.H. program student handbook is available upon request.

Apply online at sophas.org (http://www.sophas.org/) and submit a VCU supplemental application following instructions available at sophas.org.

Admission requirements

<table>
<thead>
<tr>
<th>Degree</th>
<th>Semester(s) of entry</th>
<th>Deadline dates</th>
<th>Test requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.P.H.</td>
<td>Fall</td>
<td>Mar 1</td>
<td>GRE, TOEFL or IELTS for international students</td>
</tr>
</tbody>
</table>

In addition to the general admission requirements of the VCU Graduate School (http://bulletin.vcu.edu/graduate/study/admission-graduate-study/admission-requirements/), to be considered for admission, applicants must meet the following requirements:

1. Prior degree: Students must hold a bachelor’s degree from an accredited institution, with a minimum GPA of 3.0 on a 4.0 scale in all undergraduate and any other graduate study. Official copies of transcripts for all prior degrees earned must be submitted to the VCU Office of Graduate Admissions.

2. GRE: Applicants must provide current GRE test results (taken within the past five years).

3. TOEFL: International students must submit TOEFL or IELTS scores. Minimum TOEFL score is 600 (paper-based), 250 (computer-based) or 100 (Internet-based); IELTS minimum score is 7.0. The PTE is also accepted with a minimum score of 65. Test score requirements may be waived for international students who have received a medical degree (M.D.) in the U.S. Contact the program coordinator for more information.

Students must also submit the following materials with their applications:

1. Letters of recommendation from three individuals who can assess applicant qualifications for graduate school; at least one academic reference is required, but two are preferred. Most appropriate are letters from past professors or work supervisors.

2. Current version of curriculum vitae or resume. Include experience and/or education relevant to study in public health.

3. Personal statement covering the following issues in two to five pages:
   a. Description of the applicant’s career goals
   b. Why the applicant wishes to pursue an M.P.H. degree
   c. How an M.P.H. degree will help the applicant achieve her/his career goals
   d. Description of applicant’s particular areas of interest in public health (e.g., maternal and child health, epidemiology, community engagement)
   e. Why VCU’s M.P.H. program best fits the student’s public health interests
   f. What applicant plans to do in the first few years after graduation

Degree requirements

The mission of the Master of Public Health program is to provide exceptional public health training; conduct cutting-edge, translational research; promote health equity and community wellness; and foster lifelong inquiry and discovery that improve human health. The program prepares students committed to public health careers in the public, private or nonprofit sectors through a rigorous curriculum that helps students develop analytic and critical-reasoning skills to improve population health. The M.P.H. program boasts experiential learning, a highly interactive environment, accessible and approachable faculty and student involvement in significant projects.

In addition to general VCU Graduate School graduation requirements (http://bulletin.vcu.edu/academic-regs/grad/graduation-info/), a minimum of 45 credit hours of formal course work is required, including:

1. 25 credits minimum of core didactic course work
2. 14 credits minimum of concentration course work, including elective course selections
3. An internship, typically conducted in the first and second year
4. A capstone project planned and implemented in the second year of the program

Note that some elective courses may not be available in certain years or may require instructor permission for registration.

Curriculum requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 543</td>
<td>Graduate Research Methods I</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 544</td>
<td>Graduate Research Methods II</td>
<td>3</td>
</tr>
<tr>
<td>EPID 547</td>
<td>Applied Data Analysis Lab I</td>
<td>1.5</td>
</tr>
<tr>
<td>EPID 548</td>
<td>Applied Data Analysis Lab II</td>
<td>1.5</td>
</tr>
<tr>
<td>EPID 571</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>EPID 580</td>
<td>Public Health Ethics</td>
<td>1</td>
</tr>
<tr>
<td>EPID 593</td>
<td>Foundations of the Public Health Profession</td>
<td>2</td>
</tr>
<tr>
<td>EPID 604</td>
<td>Principles of Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>HOCR 601</td>
<td>Introduction to Health Policy</td>
<td>3</td>
</tr>
<tr>
<td>IPEC 501</td>
<td>Foundations of Interprofessional Practice</td>
<td>1</td>
</tr>
<tr>
<td>SBHD 605</td>
<td>Introduction to Social and Behavioral Health</td>
<td>3</td>
</tr>
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Required additional courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPID 606</td>
<td>Epidemiologic Methods</td>
<td>3</td>
</tr>
</tbody>
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may include the following courses:

Select a minimum of five credit hours of course work chosen according to the area(s) of interest in public health. These may include the following courses:

- **BIOS 535** Behavioral Measurement
- **BIOS 549** Spatial Data Analysis
- **BIOS 571** Clinical Trials
- **CCRT 630** Design Implications in Clinical Trials
- **CCRT 631** Adaptive Clinical Trials
- **EPID 594** MPH Practicum
- **EPID 600** Introduction to Public Health
- **EPID 601** Contemporary Issues and Controversies in Public Health
- **EPID 603** Public Health Policy and Politics
- **EPID 622** Maternal and Child Health
- **EPID 623** Injury and Violence Epidemiology
- **EPID 691** Special Topics
- **EPID 692** Independent Study
- **GRAD 614** Introduction to Grant Writing
- **GRTY 501** Physiological Aging
- **GRTY 510** Aging
- **GRTY 603** Social Gerontology
- **GRTY 604** Problems, Issues and Trends in Gerontology
- **HEMS 505** Contemporary Issues in Health
- **HEMS 550** Exercise, Nutrition and Weight Management
- **HEMS 604** Nutrition for Health and Physical Activity
- **HEMS 605** Psychology of Physical Activity
- **HEMS 606** Psychosocial Aspects of Sport and Physical Activity
- **HGEN 611** Data Science I
- **HGEN 620** Principles of Human Behavioral Genetics
- **HSEP 601** Emergency Management: Response Planning and Incident Command
- **HSEP 603** Risk Assessment
- **HSEP 650** Public Health Preparedness
- **PSYC 660** Health Psychology
- **SBHD 630** Theoretical Foundations of Social and Behavioral Health
- **SBHD 632** Health Disparities and Social Justice
- **SBHD 636** Community-based Participatory Research
- **SBHD 638** Applications in Qualitative Research Methods
- **SOCY 524** Aging and the Minority Community
- **SOCY 603** Seminar in Population Studies
- **SOCY 607** Seminar in Racial and Ethnic Relations in America
- **SOCY 611** Studies in the Community
- **SOCY 620** Seminar in Criminology
- **SOCY 624** Community and Community Services for the Elderly
- **SOCY 632** Intimate Partner and Sexual Violence: Medical Practice and Policy
- **SOCY 633** Application of the Policy Process to Issues of Violence
- **SOCY 634** Social Contexts of Childhood and Violence
- **SOCY 635** Theorizing Gender Violence
- **SOCY 645** The Sociology of Health and Illness
- **URSP 521** Introduction to Geographic Information Systems
- **URSP 621** Introduction to Geographic Information Systems
- **URSP 622** Community Socioeconomic Analysis Using GIS
- **URSP 625** Spatial Database Management and GIS Modeling

Applied practice and integrative learning courses

- **EPID 693** Public Health Internship
- **EPID 694** MPH Capstone Project

Total Hours 45

The minimum total of graduate credit hours required for this degree is 45.

Public health internship: The public health internship is a supervised experience designed to expose M.P.H. students to a real-world public health practice setting, such as a governmental public health agency or nonprofit organization, requiring them to integrate classroom knowledge and skills in practical applications in a professional environment. Each student intern works with a practice site supervisor who assigns tasks, instructs the student in new skills and evaluates the student’s progress. Students work a minimum of 180 hours in a professional public health organization.

Capstone project: The culminating work in the M.P.H. program is the capstone project. The project is a practical experience that allows the student to apply what has been learned in the didactic components of the curriculum to a focused project. The goal is to enhance the student's academic experience through the application of public health concepts and skills in a supervised experience. Students are required to synthesize the literature; analyze, assess or evaluate quantitative or qualitative data; and in general apply theory and integrate knowledge gained and principles in situations that approximate some aspects of professional practice. With this mentored experience, students are able to both broaden their skills and hone their proficiency in a specific area of public health. The major product of this culminating experience is expected to vary depending on the educational goals of the student, but could include one of the following:

1. Manuscript suitable for publication in a peer-reviewed journal
2. Comprehensive disease-related report and analysis
3. Policy analysis report
4. Needs assessment for a specific population
5. Development, implementation and analysis of target population surveys
6. Program evaluation

At a minimum, the capstone experience will require the integration of multiple major competencies used by a public health professional. In fulfilling the capstone requirement, each candidate must: (a) submit a formal written paper of sufficient depth and rigor and (b) satisfactorily complete a poster presentation of the project chosen as the basis for the written paper at an appropriate venue (e.g., research forum, refereed conference, etc.) approved by the M.P.H. program director.

Students are expected to maintain satisfactory academic progress on the capstone project; such progress entails completing the capstone project according to the timeline included in the student's proposal for the capstone project (typically in no more than one-to-two semesters). Exceptions beyond this time limit must be approved by the student's adviser and the graduate program director, based on the student's submission to the adviser of a written explanation for the delay in progress. This written explanation must include a plan for completing the project, developed by the student with adviser input and approval.

Satisfactory academic progress

Satisfactory academic progress in the M.P.H. program may be assessed on multiple factors. These factors include professional conduct including communication with the adviser about capstone project progress or other relevant work; honor policy adherence and academic conduct; and continuous enrollment compliance. Students are notified of faculty assessment of their progress and performance in the program via semi-annual advising letters provided after the fall and spring semesters. In addition, special advising letters may be issued outside of this cycle if additional guidance or notification of unsatisfactory academic progress is necessary.

Non-curricular program requirements

In addition to course work, students are required to complete the following noncurricular requirements for the M.P.H. degree:

1. Documented attendance at 12 public health seminars
2. Twenty hours of community-based service-learning

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Program website: epidemiology.vcu.edu/education/mph (http://www.epidemiology.vcu.edu/education/mph/)