PHARMACY, DOCTOR OF (PHARM.D.)/PUBLIC HEALTH, MASTER OF (M.P.H.) [DUAL DEGREE]

Advanced study in pharmacy and public health is available through a dual degree program co-sponsored by the Department of Pharmacotherapy and Outcomes Science in the School of Pharmacy and the Division of Epidemiology, Department of Family Medicine and Population Health, in the School of Medicine.

The dual degree Pharm.D. and M.P.H. program allows students to earn two degrees with a minimum of 191 credits rather than the 200 credits necessary if the two degrees were pursued separately. This efficiency lowers the overall cost of tuition while also reducing time to earning both degrees.

Program goals
The objectives of this dual degree program are to train students to be well-grounded in the essential knowledge, skills and attitudes of public and population health, while they achieve a Doctor of Pharmacy. Students completing the program will be able to:

- Collect, analyze, and evaluate public health data
- Plan, implement and evaluate public health interventions
- Apply results of evaluations and data analyses to policy development
- Promote community health through educational campaigns
- Synthesize and apply evidence-based information to the identification of key areas of practice and research

Among the many benefits offered by participation in the dual degree program are the following:

- Understanding of health issues on a population level
- Mastery of health behavior theory necessary for effective for health promotion activities such as community vaccination campaigns and wellness programs
- Ability to plan and evaluate health programs
- Training in epidemiological methodology and data analysis techniques
- Competitiveness in applying for pharmacy residencies

The diplomas for this dual degree program may be awarded simultaneously. Students receive both degrees after five years of study to complete the requirements of both degree programs.

Student learning outcomes
The student learning outcomes described on the individual M.P.H. concentration pages also apply to Pharm.D.-M.P.H. students.

- M.P.H. with a concentration in applied public health (http://bulletin.vcu.edu/graduate/school-medicine/public-health-mphtconcentration-applied/)
- M.P.H. with a concentration in epidemiology (http://bulletin.vcu.edu/graduate/school-medicine/public-health-mphtconcentration-epidemiology/)

- M.P.H. with a concentration in cancer health equity science (http://bulletin.vcu.edu/graduate/school-medicine/public-health-mphtconcentration-cancer-health-equity/)

The educational outcomes of the Pharm.D. program (https://pharmacy.vcu.edu/about-us/educational-outcomes/) can be viewed on the School of Pharmacy website.

Other information
Advising
The student is assigned an adviser from each program to develop a plan of study. The M.P.H. program administrator provides guidance on course registration issues to ensure successful completion of the student's year in the M.P.H. curriculum. An M.P.H. faculty member provides guidance on the student capstone project; a Pharm.D. faculty member may collaborate in this mentoring process.

Admission requirements and application procedure
Pharm.D. students apply to the M.P.H. program in their P3 year. Applications are made through sophas.org (https://sophas.org/), which lists the current admission year's application deadline. A supplemental application to VCU, with an additional fee, is also required. GRE or other academic test scores are not required for the M.P.H. program application; students may choose to include PCAT scores with their application.

Students should refer to the admission requirements information for the specific concentration within the M.P.H. degree in the VCU Graduate Bulletin for additional details on admission requirements, including transcript, personal statement and recommendation letter guidelines.

Degree requirements
Students in the dual degree program are required to take a minimum of 36 credits in the M.P.H. curriculum, including 18 credit hours of core courses, a minimum of nine credit hours of concentration courses, a minimum of six credits of elective course work and a minimum of three credit hours of a capstone project that examines a relevant public health topic.

These courses within the Pharm.D. curriculum satisfy requirements in the M.P.H. degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPEC 501</td>
<td>Foundations of Interprofessional Practice (satisfies an M.P.H. core requirement)</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 509</td>
<td>Evidence-Based Pharmacy I: Introduction to Pharmacy Information Skills (satisfies M.P.H. elective)</td>
<td>1.5</td>
</tr>
<tr>
<td>PHAR 533</td>
<td>Introductory Pharmacy Practice Experience: Patient Care (satisfies M.P.H. elective)</td>
<td>.5</td>
</tr>
<tr>
<td>PHAR 545</td>
<td>The U.S. Health Care System (satisfies M.P.H. elective)</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 546</td>
<td>Pharmacy-based Immunization Delivery (satisfies M.P.H. elective)</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Students may choose to include PCAT scores with their application.
Curriculum requirements for the dual degree

<table>
<thead>
<tr>
<th>Course</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>PHARM 565</td>
<td>Evidence-based Pharmacy II: Research Methods and Statistics (satisfies M.P.H. elective)</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**Total Hours**: 9

Students receive both degrees after five years of study to complete the requirements of both degree programs.
Electives

M.P.H. requirements

• M.P.H. core requirements

BIOS 543 Graduate Research Methods I 3
EPID 571 Principles of Epidemiology 3
EPID 580 Public Health Ethics 1
EPID 593 Foundations of the Public Health Profession 2
EPID 604 Principles of Environmental Health 3
EPID 693 Public Health Internship 3
EPID 694 MPH Capstone Project 3
HCPR 601 Introduction to Health Policy 3
IPEC 501 Foundations of Interprofessional Practice (satisfied by Pharm.D. curriculum)

SBHD 605 Introduction to Social and Behavioral Health 3

• Concentration requirements (select one concentration) 9

Applied public health concentration

EPID 600 Introduction to Public Health
EPID 628 Public Health Program Planning and Evaluation
SBHD 632 Health Disparities and Social Justice

Epidemiology concentration

BIOS 544 Graduate Research Methods II
EPID 548 Applied Data Analysis Lab
EPID 606 Epidemiologic Methods

Cancer health equity science concentration

EPID 620 Cancer Epidemiology
SBHD 612 Fundamentals of Cancer Health Equity
SBHD 613 Community-engaged Research and Cancer Disparities (Cancer Health Equity Science concentration)

• Electives (minimum) 11

Select courses according to the area(s) of interest in public health; PHAR 509, PHAR 533, PHAR 545, PHAR 546 and PHAR 565 satisfy eight credits toward electives.

Total Hours 191

The minimum number of credit hours required for this dual degree is 191.

Plan of study

Students in the dual program spend the first three years (P1-P3) in the professional Pharm.D. curriculum. In the fourth year, they transition to the M.P.H. program to finish 36 credits of graduate course work. In year five, students return to the Pharm.D. program to complete P4 rotations.

Students may also opt to complete 33 credit hours of didactic M.P.H. course work in year four, and finish the three-credit M.P.H. capstone project during the fifth year while completing the P4 rotations.

Contacts

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Program website: familymedicine.vcu.edu/epidemiology/epidemiology-graduate-programs/mph-program/dual-degrees/ (https://familymedicine.vcu.edu/epidemiology/epidemiology-graduate-programs/mph-program/dual-degrees/)