

## **NDSU COLLEGE OF PHARMACY, NURSING, & ALLIED SCIENCES**

### **PHARM.D./MPH DUAL DEGREE - COMMUNITY HEALTH SCIENCES TRACK**

Public health is defined as the practice of helping members of society live healthier, longer lives. Public health is both an art and a science and it is practiced by multidisciplinary teams of professionals whose training spans a wide array of medical, social, and physical sciences. Public health focuses on the general health of communities through efforts to monitor the spread of diseases, initiatives (both clinical and policy-oriented) to prevent disease and disability, and by promoting healthy lifestyles through education and community engagement.

The Master of Public Health (MPH) program is a cooperative program between North Dakota State University and University of North Dakota that offers diverse tracks in public health that build upon the strengths of both campuses to meet the practical needs of the public and health care practitioners who serve it. The program focuses on rural health, health promotion and prevention, disease state management, and related activities of interest to North Dakota public health care practitioners and policy makers. Specific specializations at NDSU include community health sciences, health promotion, management of infectious diseases, and American Indian public health.

The MPH degree consists of 42 credits and can be completed in 2 years as a full time graduate student. Pharm.D. students are able to complete a Pharm.D./ MPH dual degree with a community health science specialization in as little as 1 extra year of study. Pharm.D. students who are in good academic standing are eligible to apply for the Pharm.D./MPH program through the graduate school.

#### **Why Public Health?**

Practitioners in our region have limited opportunities for advanced, practical public health training that focuses on the unique challenges facing this largely rural area that encompasses North Dakota and other Northern Plains states. There are many underserved populations living in the region that would benefit from expanded public health interventions. For example, the American Indian communities have typically been underserved and significant health disparities between this population and others have resulted. The North Dakota Master of Public Health (NDMPH) program will strive to reduce these disparities and assist through training, research, and evaluation to ensure needed public health services for all. Overall, there is much to be gained from greater collaboration within the Northern Great Plains, and the education of public health professionals is a natural starting point to facilitate that collaboration.

#### **What are the admission requirements for the PharmD/MPH dual degree?**

You must be enrolled in the Pharm.D. program and in good academic standing. In addition to graduate school requirements (with the exception of the GRE which is waived for Pharm.D. students), the MPH Admissions Committee will invite selected applicants for an interview. Final decisions will be made after all interviews are completed.

#### **How do I apply to the PharmD/MPH dual degree?**

You apply online during the spring semester of your P2 year through the Graduate School at <http://ndusndsugrad.askadmissions.net/emtinterestpage.aspx?ip=application> and choose "Public Health". If you are a P1 student and wish to get started early, apply online at the above website but choose "Non-Degree" in the drop down box. Up to 9 graduate credits can be taken as a non-degree student.

**When can I start the MPH program?**

Applications are reviewed each year beginning in January through April for a fall semester start. You may also take up to 9 graduate credits as a non-degree seeking student with permission of the instructor.

**How much does it cost for MPH courses?**

Tuition for MPH coursework is \$600.00 per credit, not including fees, for ND and Minnesota residents.

**Can I take courses in more than one area of specialization?**

Yes, there is a list of electives in each specialization that are available to all MPH students. You are welcome to take additional credits if you are interested.

**Can I change to a different specialization track after starting the MPH program?**

For change to a specialization at NDSU, there is an established application process. You must be in good academic standing within the MPH program and the admissions committee for the specialization you wish to enter must agree that your background is sufficient for the transition. If you want to transfer to a specialization at UND, you must complete the formal Graduate School application for that campus for transfer students. The admissions committee for that specialization will act upon your application. If you choose a specialization at UND you will not be able to complete the dual PharmD/MPH curriculum but will complete the MPH as a stand-alone degree program.

**Where can I do my Practicum? Can the Practicum be done in another country?**

NDMPH has secured Practicum affiliation agreements with local, national, and global sites in public health. Students can also request a Practicum site without an existing affiliation agreement, but this must be done a minimum of 6 months in advance of the Practicum start date to ensure that a working agreement can be established. Practicums can be done in other countries as long as an acceptable agreement can be established beforehand. The Practicum must be advisor-monitored, and therefore, the advisor must approve the location, as well.

**Is NDMPH accredited?**

NDMPH is not currently accredited, but obtaining accreditation is our top priority. We will be applying for accreditation from the [Council on Education for Public Health](#) (CEPH) during the 2013-2014 academic year. The accreditation process requires a minimum of three years of student data and a graduate in every specialization.

**When are MPH courses offered?**

All MPH core courses are offered in the evening to accommodate students who work. These courses are only offered in the Fall and Spring semesters. There are no summer core courses. See the sample curriculum page for information on course offerings and schedules. Current students are encouraged to talk with their faculty advisors for the most up-to-date information on course offerings.

**Does the MPH program accommodate distance learners?**

MPH students can take their courses on campus at NDSU or off-campus through live broadcasts of classes.

### **What are the hardware and software requirements for off-campus students?**

If you are calling-in from an off-campus location, other than an IVN classroom on a North Dakota University System campus, your computer will need to meet the following hardware specifications and have the following software installed.

#### *Hardware:*

- ☐ Working Webcam
- ☐ Headset

#### *IBM Minimum Requirements*

- ☐ 4GB RAM
- ☐ Windows 7 Basic or Above

#### *Macintosh Minimum Requirements*

- ☐ 4GB RAM

#### *Software:*

- ☐ Microsoft Office Software-you may purchase discounted software from the following:
  - ☐ UND Students <http://www.bkstr.com/CategoryDisplay/10001-85252-95404-1?demoKey=d>
  - ☐ NDSU Students <http://www.ndsubookstore.com/MerchList.aspx?ID=21283>
- ☐ Adobe Flash Player installed
- ☐ Adobe Air Installed
- ☐ Minimum of 200 MB hard disk space available to run the Polycom CMA desktop video application

#### *Other:*

- ☐ Broadband connection of 1 Mg Download and 384kbps upload
- ☐ Test your connection speed by visiting <http://www.dakotacarrier.com/speedTest/index2.asp>

The results will show upload and download speeds from your personal computer to the state network. For good quality audio and video, the download and upload speeds should be a minimum of 384 Kbps.

## MPH PROGRAM REQUIREMENTS

CEPH Core Courses	Course Name	Credits
Epidemiology	MPH 751: Epidemiology	3
Biostatistics	MPH 731: Biostatistics	3
Environmental Health	MPH 720: Environmental Health	3
Social and Behavioral Sciences	MPH 741: Social and Behavioral Sciences	3
Health Policy, Leadership, and Management	MPH 704: Leading and Managing Public Health Systems	3
	MPH 710: Health Care Delivery in the US	3
		<b>18 credits</b>

Required Program Components	Course Name	Credits
Master's Paper	MPH 793, MPH Paper	3
Practicum/Internship	MPH 794, MPH Practicum	3
		<b>6 credits</b>

**The Community Health Science (CHS)** specialization is designed for health professionals and others looking to strengthen their knowledge and skill in applying public health principles to enhancing the health of communities through their discipline. This track is excellent for pharmacists, nurses and other health professionals. It prepares practitioners for diverse roles in promoting public health in conjunction with interdisciplinary health teams. Students will learn how to engage their community with sensitivity to the social context, and to plan, implement, and assess the outcomes of public health interventions in practice settings.

CHS Required Courses	Course Name	Credits
Research and Assessment	Nurs 715: Advanced Community Assessment	3
	PHRM 715: Quantitative Methods for Health Outcome Research	3
Interdisciplinary Community and Public Health Seminar Series	MPH 790—Four semesters of a series of faculty and student led seminars addressing a variety of public health topics from multiple disciplines	1 per semester
Health Disparities	PHRM 665: Health Disparities and Cultural Competence in Health Care	3
		<b>13 credits</b>

CHS Elective Courses (Min. = 5 credits)	Course Name	Credits
<b>Special Topics in Public Health</b>		
Global Health	PHRM 705: Global Health	3
Chronic/ Preventative Diseases	PHRM 700: Chronic Illness	3
Pharmacotherapy	PHRM 632: Infectious Disease	3
	PHRM 620: Special Populations	3
Economic Outcomes Assessment	PHRM 685: Economic Outcomes Assessment	2
Advanced Research Methods	PHRM 716: Pharmaceutical Health Outcomes Research	3
Preparedness	EMGT (MPH) 715 Emergency Management for Public Health Professionals	3

## PHARM.D. / MPH – COMMUNITY HEALTH SCIENCE TRACK DUAL DEGREE CURRICULUM

<b>P1 (37 credits) (40 credits with English 324/325)</b>			
<b>FALL</b>	<b>Cr</b>	<b>SPRING</b>	<b>Cr</b>
PSci 368, Pharmaceutics I	4	PSci 369, Pharmaceutics II	2
PSci 411, Principles of Dynamics	3	PSci 410 Pharmaceutical Biotechnology	2
Micr 470 Basic Immunology	3	PSci 412 Chemotherapeutic Agents (Oncology/ID)	3
Phrm 340, Pathophysiology I	4	PSci 470 Pharmacokinetics	3
Phrm 350, Introduction to Pharmacy Prax	2	Phrm 341 Pathophysiology II	4
Phrm 351, Pharm Care I	1	Phrm 352, Introduction to Healthcare Systems	2
Phrm 351L, Pharm Care Lab	1	<i>Engl 324, Writing for Health Professionals or Engl 325, Writing in the Sciences (if not already taken)</i>	(3)
<b>TOTAL</b>	<b>18</b>	<b>TOTAL</b>	<b>16 (19)</b>
<b>SUMMER: Phrm 355, Introductory Pharmacy Practice Experience (IPPE) I , 120 hours = 3 cr. *</b>			

<b>P2 (38 credits)</b>			
<b>FALL</b>	<b>Cr</b>	<b>SPRING</b>	<b>Cr</b>
PSci 413, Endocrine/Resp/GI Dynamics	3	PSci 415, Neuro-Psych Dynamics	3
PSci 414, Cardiovascular Dynamics	3	Phrm 450, Self Care	3
PSci 417, Pharmacogenomics	2	Phrm 452, Pharm Care II	1
Phrm 480, Drug Literature	3	Phrm 452L, Pharm Care Lab	1
<b>Phrm 532/632, Infectious Disease</b> <sup>Φ</sup> (Community Health Science Track Elective)	3	Phrm 499, Interprofessional Health Care Prax	3
Phrm 535, Neoplastic Disease	3	Phrm 534, Endocrine/Rheum/GI	3
		Phrm 538, Cardiovascular / Pulmonary	4
<b>TOTAL</b>	<b>17</b>	<b>TOTAL</b>	<b>18</b>
<b>SUMMER 2015 - Phrm 455, IPPE II, 120 hours = 3 cr. *</b>			

<b>P3 / PUBLIC HEALTH (32 credits)</b>			
<b>FALL</b>	<b>Cr</b>	<b>SPRING</b>	<b>Cr</b>
Phrm 475, Pharmacy Management	3	<b>Phrm 520/620, Special Populations</b> <sup>Φ</sup> (Community Health Science Track Elective)	3
Phrm 536, Neuro-Psych	3	Phrm 570, Prax Improvement & Proj. Mngmt	3
Phrm 665, Health Disparities & Cultural Competence (Required for Community Health Science Track)	3	MPH 710, Health Care Delivery in the U.S.	3
MPH 741, Social & Behavioral Sciences in Public Health	3	MPH 720, Environmental Health	3
MPH 731, Biostatistics	3	MPH 751, Epidemiology	3
MPH 790, MPH Seminar	1	MPH 790, MPH Seminar	1
<b>TOTAL</b>	<b>16</b>	<b>TOTAL</b>	<b>16</b>

<b>P3 / PUBLIC HEALTH (29 credits)</b>			
<b>FALL</b>	<b>Cr</b>	<b>SPRING</b>	<b>Cr</b>
Phrm 537, Renal, Fluid & Electrolytes	3	Phrm 552, Pharm Care IV	1
Phrm 551, Pharm Care III	1	Phrm 552L, Pharm Care Lab IV – IPPE IV	1
Phrm 551L, Pharm Care Lab	1	Phrm 560, Specialty Care Topics	2
Phrm 555, IPPE III (Public Health)	1	Phrm 572, Pharmacy Law	2
MPH 704, Leading & Managing Public Health Systems	3	Phrm 580, Pharmacotherapy Capstone	3
Phrm 715, Quantitative Methods for Health Outcomes Research ( <i>Required for Community Health Science Track</i> )	3	MPH 790, MPH Seminar	1
NURS 715: Advanced Community Assessment ( <i>Required for Community Health Science Track</i> )	3	MPH 793, Public Health Paper	3
MPH 790, MPH Seminar	1		
<b>TOTAL</b>	<b>16</b>	<b>TOTAL</b>	<b>13</b>

<sup>Φ</sup> Up to 6 credits will count towards the PharmD degree AND MPH degree if taken at the 600 level

<b>P4 (40 credits)</b>
<b>MPH 794 Public Health Practicum 3 cr</b> (6 weeks – 240 hours) <i>Counts towards 3 credits APPE</i>
<b>Phrm 581, 582, 583 – Advanced Pharmacy Practice Experience (37 weeks) 37 credits</b>

\* Students will be assigned away from Fargo/Moorhead for all or part of IPPE/APPE experiences

## Summary of Changes

<b>PharmD Program Curricular Requirements</b>		<b>Dual Degree</b>	<b>MPH Program Curricular Requirements</b>	
Required Didactic Courses	97 credits	No Change ←	<b>Core Courses</b>	<b>18 cr</b>
		No Change ←	<b>Track Credits</b>	<b>18 cr</b>
Phrm 632 ID Phrm 620 Special Populations	} →	Up to 6 credits Applied to	Community Health Science Track Electives	
Phrm 540 Public Health	→	Waived (3 cr)		
Professional Electives	4 cr →	Waived (4 cr)		
IPPE (309 hours)	8 cr →	No Change		
APPE (1600 hours)* *1440 required by ACPE	40 cr (1600 hrs) ←	3 credits Applied to	Practicum (240 hours)	3 cr
		No Change ←	MPH Paper	3 cr
<b>Total Credits</b>	<b>149 Credits</b>	<b>142 + 42 MPH</b>	<b>Total Credits</b>	<b>42 cr</b>