NORTHEAST OHIO MEDICAL UNIVERSITY

UNIVERSITY CATALOG•2017-2018

















INTERPROFESSIONAL TRAINING FOR THE NEXT GENERATION OF PHYSICIANS, PHARMACISTS AND HEALTH RESEARCHERS

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Disclaimer

This catalog is an official bulletin of Northeast Ohio Medical University and is intended to provide general information. It contains policies, regulations, procedures and fees effective August 1, 2017. The University reserves the right to make changes at any time to reflect current Board of Trustee policies, administrative regulations and procedures, amendments by state law and fee changes. Information provided in this catalog is subject to change without notice and does not constitute a contract between NEOMED and a student or an applicant for admission. The institution is not responsible for any misrepresentation or provisions that may arise because of errors in preparation.

Students are responsible for observing any policies or regulations contained herein or in the online policy library; therefore, they must read this catalog carefully. This catalog does not contain all institutional rules, regulations or policies for which students are responsible. One other University source discusses expectations for and policies applicable to students: the *NEOMED Student Handbook*.

The NEOMED Student Handbook covers policies governing student conduct and responsibilities. It also includes academic policies, which are, in part, discussed herein. The NEOMED Student Handbook is published yearly and may be amended at any time without prior notice.

Note: Printed versions may not be current; the electronic version will always be current.

Contact Information

Northeast Ohio Medical University Office of Enrollment Services 4209 St. Rt. 44 P.O. Box 95 Rootstown, OH 44272 www.neomed.edu

Administrative offices are open weekdays from 8 a.m. - 5:00 p.m. Visitors are strongly encouraged to make appointments before visiting the campus to ensure the availability of the person they would like to see.

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About the University

Northeast Ohio Medical University (NEOMED) is a dynamic public institution of higher learning. Established in 1973, the University trains physicians, pharmacists, researchers and other health professionals in an interprofessional environment. For more than 40 years, NEOMED has been changing the lives of individuals in the region through the innovative teaching of tomorrow's physicians, pharmacists, public health officials and healthcare researchers. Dedicated to our mission of education, research and service, NEOMED strives to improve the quality of healthcare and make a strong economic impact in Northeast Ohio and beyond.

NEOMED is in Rootstown, Ohio, a rural community located in Portage County, about a 30-minute drive from Akron and Youngstown and less than an hour from Cleveland, western Pennsylvania and the beautiful rolling hills of Ohio Amish country. The University's grounds and facilities are conveniently arranged, beautifully maintained and effectively designed to meet the academic, personal and extra-curricular needs and interests of our students. Students typically live in private apartments or housing a short drive from the University, with increasing numbers taking advantage of The Village at NEOMED, a public-private partnership, offering fully furnished upscale apartment suites just steps away from the University.

Mission, Vision, Values – University Mission Statement

The Northeast Ohio Medical University, through education, research and service, improves the health, economy and quality of life of the diverse communities of Northeast Ohio

Vision

To be the premier community-based interprofessional health sciences university in the United States.

Values

Our values are reflected in the Six Cs of our educational, research and work environment: Competence, Communication, Caring, Curiosity, Character and Community.

History – University

In 1972, multiple constituents, including three state-supported universities in Northeastern Ohio (The University of Akron, Kent State University and Youngstown State University), responded to a challenge offered by the Ohio General Assembly to develop a plan for medical education for this area that could address the need for primary care physicians, and one which would use existing facilities of the three universities and of the area community hospitals to the greatest extent possible.

The Northeastern Medical Education Development Center of Ohio, Inc. (MEDCO), was incorporated under Ohio Law on Aug. 18, 1972, to "develop a plan for expanding medical

education opportunities in Northeastern Ohio, including the establishment of a medical school." The directors of MEDCO engaged Stanley W. Olson, M.D., to direct the planning effort. He and a group of experts in medical education prepared a document, "The MEDCO Plan for Medical Education - 1973," which was accepted by the MEDCO directors and forwarded to the Governor of Ohio, the Ohio General Assembly and the Ohio Department of Higher Education (formally known as the Ohio Board of Regents) on Dec. 26, 1972.

In August 1973, the Ohio General Assembly passed legislation establishing the Northeastern Ohio Universities College of Medicine (NEOUCOM). On Nov. 26 of that year, the Board of Trustees of NEOUCOM was officially installed. The Board of Trustees invited Dr. Olson to become the chief executive officer of the College.

The official "founding" date of the University is November 23, 1973.

Early in 1974, the site at Rootstown was chosen for the Basic Medical Sciences and Administrative Campus of the College. In 1975, 42 members were selected for the charter class of the six-year B.S./M.D. curriculum, and Phase I studies commenced at the consortium universities. In 1976, the College of Medicine was awarded a Letter of Reasonable Assurance from the Liaison Committee on Medical Education, and, in 1977, provisional accreditation was granted. In September of that year, charter class members began their freshman year of medical school on the Rootstown campus.

Meanwhile, association agreements with the College of Medicine were signed by hospitals in the area. Teaching hospitals that associated early with the College to function as major teaching hospitals were Akron General Medical Center, Children's Hospital Medical Center of Akron and Summa Health System, all of Akron; St. Elizabeth Health Center and Western Reserve Care System, both of Youngstown; and Aultman Hospital and Timken Mercy Medical Center of Canton. Hospitals that signed as limited teaching hospitals were Fallsview Psychiatric Hospital, Cuyahoga Falls; Robinson Memorial Hospital, Ravenna; Woodside Receiving Hospital, Youngstown; Barberton Citizens Hospital, Barberton; Trumbull Memorial Hospital, Warren; Hillside Hospital, Warren; Edwin Shaw Rehabilitation Center, Akron; and Lodi Community Hospital, Massillon Psychiatric Hospital, Salem Community Hospital, and Wadsworth-Rittman Hospital. In 1994, Barberton Citizens Hospital was reclassified as a major teaching hospital because of its increased role in undergraduate and graduate family medicine education. Ambulatory care centers have been completed at the major teaching hospitals in Akron, Canton and Youngstown.

Full-time basic medical science and community health sciences faculty were recruited to work at the Rootstown campus. A large faculty of full-time, part-time and volunteer clinicians at the associated hospitals and in private offices were recruited to provide the curriculum of the clinical years.

The Medical Education Foundation of the Northeastern Ohio Universities College of Medicine, Inc. (MEFCOM), was established on July 10, 1978. Later known as the NEOUCOM Foundation, the

501(c)(3) corporation serves as a vehicle through which donations, grants and bequests can provide support for students, faculty development, scientific equipment and other projects beneficial to the University.

Full accreditation was accorded the medical portion of the College's six-year combined B.S./M.D. degree program on June 30, 1981, retroactive to March 5, 1981 (the actual date of the LCME site visit). The College's Charter Class of 42 students graduated on May 30, 1981.

Program Expansion

In November 2005, the Ohio Department of Higher Education approved a Doctor of Pharmacy degree program at NEOUCOM, and the College of Pharmacy was ratified in December 2005 by the NEOUCOM Board of Trustees. The pharmacy program was likewise created to meet important regional needs: to address the shortages in the pharmacy workforce and the lack of pharmacy education in Northeast Ohio.

In August 2007, the College of Pharmacy welcomed its first class of 75 students with preferential admissions agreements with four of Northeast Ohio's public universities, The University of Akron, Kent State University, Cleveland State University and Youngstown State University. Recognizing the culture of collaboration at NEOUCOM, the design of the new college incorporated interprofessional education in its model. Today, medicine and pharmacy students learn side-by-side in classroom and clinical settings, building a greater awareness and understanding of each profession and a deeper understanding of working together for the outcome of better patient care.

In July 2008, Governor Ted Strickland, the Ohio Department of Higher Education Chancellor Eric D. Fingerhut and the Ohio General Assembly signed House Bill 562 into law as part of a state initiative to enhance the quality and affordability of postsecondary education. Through this initiative, NEOUCOM welcomed Cleveland State University as its fourth university partner in the College of Medicine's combined B.S./M.D. program.

In 2009, the College of Graduate Studies was established. The University received degree-granting authority for a Master of Public Health degree and a Master of Science and Doctor of Philosophy in integrated pharmaceutical medicine. The Bioethics Certificate program was also housed in the College of Graduate Studies.

In 2009, the Ohio Department of Higher Education called for an expansion of the College of Medicine program to include students from Cleveland State University. This program began in fall 2012.

April 29, 2011 was another historic day for the University, as Governor John Kasich publicly signed House Bill 139 as approved by the Ohio General Assembly to officially change the name of the Northeastern Ohio Universities College of Medicine (NEOUCOM) to Northeast Ohio Medical University (NEOMED). The approval and signing of this bill not only changed our name but also positioned NEOMED as an academic health center and as a free standing public university, one of 14 public universities in Ohio.

In spring 2012, the Ohio Department of Higher Education approved the Master of Science/Residency Program in health-system pharmacy administration. This program is operated by the College of Pharmacy and housed under the College of Graduate Studies. In the same year, the College of Pharmacy also established a Pharmacy Residency Program within the Department of Pharmacy Practice. The program consists of a community pharmacy post-graduate year 1 (PGY1) residency with NEOMED and a federally qualified health center, a PGY1 community pharmacy residency program with Cleveland Clinic, and a post-graduate year 2 (PGY2) residency program with University Hospitals Geauga Medical Center.

In August 2016, the Certificate in Global Health Certificate program was approved. This program provides an opportunity for students to understand core concepts and issues of health and disease, public health literacy, health care delivery, patient and community advocacy, and global bioethics.

In spring 2017, the Ohio Department of Higher Education approved the Master of Arts in Medical Ethics and Humanities. Offering students two tracks, in either medical humanities or ethics as applied to clinical settings. This program is operated in partnership with Kent State University and the University of Akron.

Campus

The 110-acre Rootstown campus houses the University's administrative offices, the departments of anatomy and neurobiology, integrative medical sciences, and pharmaceutical sciences, and the clinical departments of family and community medicine, internal medicine and pharmacy practice.

State-of-the-art facilities range from the Dr. Chatrchai and Eleanor Watanakunakorn Medical Research Building, housing research laboratories and classrooms for collaborative research projects among clinical and basic sciences faculty, to the Aneal Mohan Kohli Academic and Information Technology Center, which has more than 5,000 volumes and 3,000 E-books. Through OhioLINK, patrons have access to more than 100,000 e-books and 24 million electronic articles. Recent renovations to the lecture halls and the addition of the pharmacy labs and multidisciplinary Labs have enhanced the educational setting for students.

The William G. Wasson, M.D., Center for Clinical Skills Training, Assessment and Scholarship is a unique self-contained facility that enables students to assess research and learn clinical skills. Standardized patients – individuals trained to role-play a variety of clinical cases – are used to evaluate medical students' ability to take patient histories, perform physicals, communicate with patients, and determine diagnosis and treatment. The Center also uses computerized robotics to simulate patient response to therapeutic interventions.

In 2009, The BeST Center was established at NEOMED with a \$5 million grant from The Margaret Clark Morgan Foundation of Hudson, Ohio. The Center's mission is to ensure that people with schizophrenia and related disorders maximize their ability to achieve recovery by receiving early intervention treatments shown to be best practices. To do so, the Center works with clinical partners from Summit County, Ohio and the surrounding areas.

In 2013, the University opened the Research and Graduate Education Building, a four-story, 80,000 square-foot facility that includes state-of-the art open biomedical laboratories that support collaborative research along with sophisticated core facilities. In addition, there are faculty offices, areas for students and technicians and seminar, small group conference and teaching rooms.

The University also opened its first on-campus residential housing in 2013. "The Village at NEOMED" is located on the northwest corner of the NEOMED campus. The 270,000 square-foot luxury residential housing village includes private parking and paved walkways for easy access to existing campus facilities. More information is available online at http://www.thevillageatneomed.com/.

In 2014, the University opened its Health, Wellness and Medical Education Complex, the "NEW Center", a 177,338 square-foot addition that houses numerous community-centered services including a fitness center, pools, therapy services, conference services, classroom and lecture hall space, a coffee shop, eateries, a retail pharmacy (Ritzman), and even primary care offices (Summa). The complex is located on the east side of campus along State Route 44.

University Mascot

In 2013, the University unveiled "Nate" the Walking Whale as its first ever mascot. The Walking Whale is better known as *Ambulocetus natans*, an early cetacean that could walk as well as swim. It is the only species classified under the genus *Ambulocetus* and is a transitional fossil that shows how whales evolved from land-living mammals. NEOMED scientist Dr. Hans Thewissen discovered it in Pakistan in 1993. The mascot represents the great scientific discoveries made at the University, and in the fields of medicine and pharmacy, and helps NEOMED stand out as a center of academic innovation and discovery. The walking whale also represents NEOMED's impact on not only our own community, but also the world community. While walking whales no longer exist, they have evolved into some of the most elegant and majestic creatures that this world has seen. In addition, no matter what trials, tribulations or successes have arisen, the walking whale serves as a reminder that there are always great things lying ahead.

Partner Universities

NEOMED's College of Medicine is the only medical college in the country that has Baccalaureate and Post-Baccalaureate partnerships that are either active or in development with six state universities and two private colleges.

Baldwin Wallace University

www.bw.edu Admission Office: (440) 826-2222

Bowling Green State University

www.bgsu.edu Admission Office: (419) 372-2478

Central State University

www.centralstate.edu Admission Office: 937.376.6348

Cleveland State University

www.csuohio.edu Admission Office: 216.687.5411 or 888.CSU.OHIO

Hiram College

www.hiram.edu Admission Office: 800.362.5280

Kent State University

www.kent.edu Admission Office: 330.672.2444 or 800.988.KENT

The University of Akron

<u>www.uakron.edu</u> Admission Office: 330.972.7100 or 800.655.4884

Youngstown State University

<u>www.ysu.edu</u> Admission Office: 330.941.2000 or 877.468.6978

Accreditation – University

The Higher Learning Commission of the North Central Association (NCA) of Colleges and Schools accredits the University regionally. The NCA evaluates how the University fulfills its mission and achieves its strategic goals by assessing the educational aspect, governance, administration, financial stability, admissions, student services, institutional resources, student learning and institutional effectiveness.

The University is fully accredited by the NCA, and our most recent comprehensive evaluation took place in April 2013. Questions or concerns regarding the University's accreditation should be directed to the Higher Learning Commission of the North Central Association of Colleges and Schools.

The Higher Learning Commission of the North Central Association of Colleges and Schools 230 North LaSalle St., Suite 7-500 Chicago, IL 60604 (800) 621-7440

For information about degree/program-specific accreditation, please refer to each college's section of the catalog.

Associated Hospitals, Health Departments, and Pharmacies

The clinical teaching facilities of the University include more than 24 associated hospitals, a range of private and corporate pharmacies and 6 health departments.

Clinical Teaching Sites for the College of Medicine

The College of Medicine partners with a variety of health care systems, hospitals, outpatient providers and other agencies to provide NEOMED students a rich and varied clinical experience. Our volunteer clinical faculty numbers more than 2,000 providers in a wide variety of specialties and subspecialties.

Clerkship Affiliates

Akron Children's Hospital – Akron, Boardman Aultman Hospital **Cleveland Clinic Akron General** Heartland Behavioral Health Mercy Health - Youngtown, Boardman, Toledo Mercy Medical Center - Canton MetroHealth System Mount Carmel Health System - Columbus Northcoast Behavioral Healthcare **Riverside Methodist Hospital** Salem Regional Medical Center Steward Health Care, Northside Hospital St. Vincent Charity Medical Center Summa Health System – Akron, Barberton Union Hospital - Dover University Hospitals - Portage, Elyria, southwest

Additional Affiliates

Alliance Community Hospital Ashtabula County Medical Center Cleveland Clinic Edwin Shaw Rehabilitation Hillside Rehabilitation Hospital Med Central Health System - Mansfield Medina Community Hospital Steward Health Care - Trumbull Summa Health system – Wadsworth, Rittman

Health Departments/Agencies

Canton City Health Department Mahoning County District Board of Health Portage County Combined Health District Stark County Health Department Summit County Public Health Department County of Summit Alcohol, Drug Addiction and Mental Health Services (ADM) Board

Clinical Teaching Sites for Pharmacy

The College of Pharmacy is pleased to partner with many nationally recognized pharmacy chains, locally owned pharmacies, hospitals, health centers, associations and other locations to provide pharmacy practice opportunities and training to its students.

- 88th Medical Group Wright Patterson AFB
- Absolute Pharmacy, Inc.
- Acme Pharmacies
- Advanced Infusion Services
- **AHF Pharmacy**
- Ahuja Medical Center
- Akron Children's Hospital
- Akron Children's Hospital Beeghly Campus
- Akron General Medical Center
- Allen's PharmaServ, Inc.
- Alliance Community Hospital
- American Pharmacists Association
- American Society of Health System Pharmacists
- Ameriwell Pharmacy
- Ashtabula County Medical Center
- Aultman Hospital
- Aultman Orrville Hospital
- Axess Pointe Community Health Center
- Beachwood Family Health Center Pharmacy
- **Bedford Medical Center**
- Brewster Family Pharmacy
- **Brunswick Family Health Center**
- Buckley's Pharmacy
- Buderer Drug Company
- Center for Families and Children
- Chemawa Health Center

- **Church Square Pharmacy Cleveland Department of Public Health Clinical Apothecaries Compounding Pharmacy of Green** Crile Pharmacy CVS **Davies Drug Dearborn Hills Pharmacy Diplomat Pharmacy Discount Drug Mart** East Village Pharmacy Easterday Pharmacy Eli-Lilly & Company **Envision Rx Options Euclid Avenue Pharmacy Euclid Hospital** ExactCare Pharmacy Fairview Health Center Pharmacy **Fairview Hospital** Federal Correctional Institute in Elkton **Geauga Medical Center** Genoa Qol Healthcare **Giant Eagle** Good Samaritan Medical Center Grace Hospital **Great Lakes Pharmacy** Hart Pharmacy Hattie Larlham Heather Hill Care Communities Heartland Behavioral Healthcare Hospital Heritage Square Pharmacy Hillcrest Hospital Home Delivery Pharmacy Hometown Pharmacy Hospice of the Western Reserve Independence Family Health Center Pharmacy Independence, Inc. Infusion Pharmacy at Home Jacobs Health Center Pharmacy
- KelseyCare Advantage
- Kent State University Health Services

Klein's Pharmacy

- Kmart
- Kroger
- Lake Health-Tripoint
- Lakewood Hospital
- Lee Memorial Hospital
- Louis Stokes VAMC Cleveland VA Medical Center
- Lutheran Hospital
- Marc Glassman, Inc.
- Marion General Hospital
- Marymount Family Pharmacy
- Marymount Hospital
- MedCentral Health System
- Medi-Wise Pharmacy
- Medical Mutual
- Medina Family Pharmacy
- Medina General Hospital
- Menorah Park Pharmacy
- Mercy Medical Center
- Metrohealth Medical Center
- Nationwide Children's Hospital
- Northeast Ohio Neighborhood Hough Health Center
- New Choice Pharmacy
- New Hanover Regional Medical Center
- Newton Falls Family Pharmacy
- North Coast Cancer Care Pharmacy
- Northcoast Behavioral Healthcare
- Northside Medical Center
- Ohio Pharmacists Association
- **Orchard Specialty Pharmacy Services**
- **Pharmacy Care**
- Pharmacy Innovations
- PharmCare Compounding Pharmacy
- PharMerica
- Prescription Assistance Network Charitable Pharmacy
- Professional Compounding Centers of America
- Quality Compounding Specialty Rx
- Rainbow Babies and Children's Hospital
- Richmond Medical Center
- Rite Aid Pharmacy
- **Ritzman Pharmacies**
- Riverside Methodist Hospital

Ronci Family Discount Drug

- Rx Institutional Services
- Salem Regional Medical Center
- Sand Run Pharmacy
- Scriptshop Pharmacy
- Select Specialty Hospital
- Sharon Regional Health System
- Skilled Care Pharmacy
- Solon Family Health Center Pharmacy
- South Pointe Hospital
- Southwest Community Pharmacy
- Southwest General Health System
- St. Elizabeth Boardman Health Center
- St. Elizabeth Health Center
- St. John Medical Center
- St. Joseph Health Center
- St. Vincent Charity Hospital
- Stephanie Tubbs Jones Center Pharmacy
- Strongsville Family Health Center Pharmacy
- Summa Akron City Hospital
- Summa Barberton Hospital
- Summa Rehab Hospital
- Summa St. Thomas Hospital
- Summa Western Reserve Hospital
- SummaCare, Inc.
- Surgical Center Pharmacy
- Taussig Cancer Center Pharmacy
- The Cleveland Clinic Foundation
- The Free Medical Clinic of Greater Cleveland
- The Medicine Shoppe
- The University of Akron Nursing Center for Community Health
- Twinsburg Family Health Center Pharmacy
- Union Hospital
- University Hospitals Health System
- University of Washington Medical Center
- Vibra Hospital of Mahoning Valley
- Walgreen
- Wal-Mart
- Western Reserve Hospital
- Willoughby Hills Family Health Center Pharmacy
- Wolters Kluwer Health
- Wyandot Memorial Hospital

ZellMed Solutions

Ohio Resident Priority and Citizenship Status

NEOMED is a publicly chartered and funded university in the state of Ohio. Because of this public support, our charter mandates giving admission preference to residents of the state of Ohio, as defined by the Ohio Department of Higher Education. Approximately 15% of our incoming students are non-Ohio residents.

U.S. citizens, permanent residents, and J1 Visa holders are considered for admission to the University at this time; candidates must have such status upon application. J1 Visa holders may apply for admission in the College of Pharmacy and the College of Graduate Studies. NEOMED is actively seeking permission to host F1 students in the future (perhaps as soon as the 2019 application cycle), but has not yet been approved to do so. Admission to the College of Medicine is not available to international students.

International students may, however, apply to the M.P.H. program through one of our consortium universities (The University of Akron, Cleveland State University, Ohio University or Youngstown State University).

2017-18 Academic Calendar

	COM	COP	COGS	
JUNE 2017				
1		P4		Fall Classes Begin
JULY 2017	<u> </u>			-
4	A	Il Students*	***	4 th of July Holiday (no class)
10	M4			Fall Classes Begin
17	M3			Fall Classes Begin
AUGUST 2017	<u> </u>			
21	M2	P2		Fall Classes Begin
28	M1	P1	ALL*	Fall Classes Begin
		P3		
SEPTEMBER 2017				
4	A	ll Students*	***	Labor Day Holiday (no class)
OCTOBER 2017				
NOVEMBER 2017				
10	M1	P1	ALL	Veteran's Day Holiday (no class)
	M2	P2		
		P3		
23-24 All Students***		***	Thanksgiving Holiday (no class)	
30		P4		Fall Classes End
DECEMBER 2017				
15	M1	P1		Fall Classes End
	M2	P2		
	M4	P3		
17			ALL*	Fall Classes End
22	M3			Fall Classes End
	Cycle 7			
	Cycle 8			
	M4			
JANUARY 2018	N 4 1	D1		Craine Classes Danin
2	M1 M2	P1 P2		Spring Classes Begin
	M3	P2 P3		
	Cycle7	P3		
	Cycle 8	14		
	M4			
8			ALL*	Spring Classes Begin
-				1 0 1 1 1 1 0

(2017-18 Academic Calendar – continued)				
15	M1 M2	P1 P2 P3	ALL	Martin Luther King, Jr. Holiday (no class)
19	M3 cycles	1-6		Fall Classes End
22	M3 cycles	1-6		Spring Classes Begin
FEBRUARY 2018 MARCH 2018				
APRIL 2018				
9-13	M1 M2	P1 P2 P3	ALL	Spring Break
13	M3, Cycle 3-8			Spring Classes End
16	M3, Cyc 3-8			Summer Classes Begin
MAY 2018	<u> </u>			
4	M3, Cyc 3-4			Spring Classes End
6			ALL*	Spring Classes End
7	M3, Cyc 3-4			Summer Classes Begin
11	M4	P4		Spring Classes End
18	M2	Р2 Р3		Spring Classes End
19	M4	P4	Seniors	Commencement Ceremony **
21			ALL *	Summer Full-term Classes Begin
25	M3, Cyc 1-2			Spring Classes End
28	All Students*** Memorial Day Holiday (no class)			
29	M3, Cyc 1-2			Summer Classes Begin
JUNE 2018				
4			ALL *	Summer I Classes Begin
9	M1	P1		Spring Classes End

(2017-18 Academic Calendar – continued)						
JULY 2018	JLY 2018					
4	All Students***	4 th of July Holiday (no class)				
6	M3	Summer Classes End				
8	ALL *					
9	ALL *					
AUGUST 2018						
12	ALL *	Summer Full-term, Summer II classes end				

*College of Graduate Studies courses offered at partner institutions or in conjunction with the College of Medicine or College of Pharmacy may have start/end dates that vary slightly from the COGS master calendar. Students should consult the individual course listings to identify courses that may be affected.

**Anticipated Commencement Date; subject to change based on venue availability.

*** M3 and M4 student holidays are dependent on the schedules at their clinical sites.

Colleges and Programs

College of Graduate Studies

The College of Graduate Studies was founded in 2009 and offers graduate programs in integrated pharmaceutical medicine, public health, health-system pharmacy administration, medical ethics and the humanities, as well as a certificate in bioethics. The College of Graduate Studies provides support to students who are pursuing graduate-level degrees at NEOMED and in partnership with other Ohio universities. For more detailed information, please refer to the College of Graduate Studies Studies section of this Catalog.

College of Medicine

Founded in 1973, the College of Medicine is our oldest program, as well as our largest in terms of student enrollment and faculty engagement. Through unique partnerships with multiple health systems and major universities in the region all leading to the Doctor of Medicine degree - facilitating novel developments in biomaterials and skeletal biology, community health, healthcare simulation and commercialization efforts - the College of Medicine is known for balancing education, research, clinical care and service. For more detailed information, please refer to the College of Medicine section of this Catalog.

College of Pharmacy

The College of Pharmacy, founded in 2005, offers the only four-year Doctor of Pharmacy degree (Pharm.D.) program in Eastern Ohio. The College is dedicated to interprofessional healthcare education and research - pharmacy and medicine students learning together. It graduates pharmacy professionals who proactively integrate into the healthcare team to collaboratively advance and deliver optimal patient care. The College also provides pharmacy residency education and teaching certificate programs. For more detailed information, please refer to the College of Pharmacy section of this Catalog.

Administration & Academic Departments

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College of Graduate Studies Administration

Program Directors

Ethics and Humanities Programs	Julie M. Aultman, Ph.D.
Health-System Pharmacy Administration	Scott Wisneski, Pharm.D., M.B.A.
Integrated Pharmaceutical Medicine	Denise M. Inman, Ph.D.
Public Health	Amy Lee, M.D., M.P.H.

College of Medicine Administration

Interim Dean	Elisabeth H. Young, M.D.
Interim Vice Dean	Eugene M. Mowad, M.D.
Associate Dean for Clinical Affairs	Eugene M. Mowad, M.D.
Associate Dean for Research	Jeffrey J. Wenstrup, Ph.D.
Associate Dean for Curriculum and Medical Education	Lisa N. Weiss, M.D., M.Ed.
Assistant Dean for Curriculum and Quality Measures	. Susan Labuda-Schrop, Ph.D., M.S.Ed.
Assistant Dean for Curriculum and Outcome Measures	Janet L. Holliday, Ph.D.

Department Chairs

Anatomy/Neurobiology	Jeffrey J. Wenstrup, Ph.D.
Emergency Medicine	Nicholas J. Jouriles, M.D.
Family and Community Medicine	John M. Boltri, M.D.
Integrated Medical Sciences	William M. Chilian, Ph.D.
Internal Medicine	Joseph Zarconi, M.D.
Obstetrics and Gynecology	Praghcharan Gill, M.D.
Orthopedic Surgery	Thomas S. Boniface, M.D.
Pathology	Jennifer Baccon, M.D.
Pediatrics	Norman C. Christopher, M.D.
Psychiatry	Mark R. Munetz, M.D.
Radiology	William F. Demas, M.D.
Surgery	John P. Crow, M.D.
Urology	Raymond A. Bologna, M.D.

College of Pharmacy Administration

Dean	Richard J. Kasmer, Pharm.D., J.D.
Vice Dean, COP	TBD
Associate Dean, Clinical and Strategic Partnerships	Louis L. Barone, Pharm.D., R.Ph., FASHP
Associate Dean, Assessment	Seth P. Brownlee, Pharm.D.
Associate Dean, Pharmacy Education and	
Interprofessional Studies	Susan P. Bruce, Pharm.D., BCPS
Acting Associate Dean, Pharmacy Research and	
Faculty Advancement	Jason R. Richardson, Ph.D.,DABT, ATS
Associate Dean, Workforce Development and	
Practice Advancement	Timothy R. Ulbrich, Pharm.D., R.Ph.

Department Chairs

Pharmacy Practice	Susan P. Bruce, Pharm.D., BCPS
Pharmaceutical Science	TBD

Academic Departments

Northeast Ohio Medical University (NEOMED) is comprised of 17 academic departments, which reside within the College of Medicine and College of Pharmacy.

Anatomy and Neurobiology

The Department of Anatomy and Neurobiology contributes to medical, pharmacy and graduate education in anatomy and neuroscience. Departmental research is focused within two areas of strength – musculoskeletal biology and auditory neuroscience. Our Body Donor Program and Gross Anatomy Laboratory support NEOMED and regional instruction in gross anatomy and neurobiology.

Research and Graduate Education

Research in the department is focused in the areas of auditory neuroscience and skeletal biology. In each focus area, faculty emphasize a multidisciplinary, collaborative approach to research and training at the graduate and postdoctoral levels.

Departmental faculty have primary teaching responsibilities in courses offered during the first year of medical and pharmacy professional education, and they also contribute to teaching throughout the medical, pharmacy and graduate school curriculum. Departmental faculty are active in service to NEOMED and beyond, contributing to biomedical and scientific education in Northeastern Ohio, and consulting on scientific issues at the national and international levels.

Integrative Medical Sciences

The mission of the Department of Integrative Medical Sciences (IMS) is to provide scholarly teaching to medical, pharmacy and graduate students; to provide service to the institution and to the scientific community; and to accomplish innovative scientific research to better the health of our society.

The IMS Department at NEOMED is an interdisciplinary department comprised of investigators with a range of interests and disciplines, but with common intersections among their respective areas of research. Two research focus areas reside in IMS: metabolic disease and cardiovascular disease.

The faculty of IMS represent several disciplines, e.g., physiology, pharmacology, biochemistry, molecular biology and virology, and are actively combining their efforts to provide interdisciplinary approaches to understanding basic mechanisms underlying normal physiological function and the basis of disease.

Pathology

Pathology is a bridge between the structural and laboratory sciences and clinical medicine. During the first two years of medical school, the Department of Pathology participates in teaching that

introduces students to the morphology and pathophysiology of disease processes that they will encounter the rest of their professional careers.

In the clinical years, the Department of Pathology – through electives in the affiliated hospital departments, teaching conferences and diagnostic presentations – provides the basis for clinical decision-making and patient care. Within the departments of pathology at affiliated hospitals, residency and fellowship programs train pathologists of the future. The goal of the Department of Pathology is to provide objective data and instruction in the ability to analyze it to our students, trainees and the clinicians in our region.

College of Medicine Clinical Departments

The clinical departments within the College of Medicine include the following disciplines:

College of Medicine Clinical Departments		
Emergency Medicine	Pathology	
Family and Community Medicine	Pediatrics	
Internal Medicine	Psychiatry	
Obstetrics and Gynecology	Radiology	
Orthopedic Surgery	Surgery	

Faculty in our clinical departments include those based at our Rootstown campus and a large number of volunteer faculty at our affiliate health care systems throughout northern and central Ohio. These healthcare professionals model the University's core values of competence, communication, caring, character, curiosity and community in their daily practice. They fulfill the University mission of teaching, patient care, and scholarly activity. The clinical departments emphasize a strong foundation in primary care, and provide rich diversity among the various medical and surgical subspecialties. While the clinical faculty are deeply involved in both the leadership and the day-to-day teaching of the required clerkships during the M3 year and core and elective rotations in the M4 year - their activities span the entire curriculum offering essential clinical perspectives throughout the M1 and M2 years. They also are engaged teaching and assessing clinical skills longitudinally throughout the entire medical school experience. Our clinical faculty are leaders in undergraduate medical education as well as instrumental in the wide variety of residency and fellowship programs affiliated with NEOMED. This involvement along the continuum of medical education strengthens opportunities for mentorship and networking for students as they seek residencies among our affiliate healthcare systems and beyond.

College of Pharmacy Departments

Pharmaceutical Sciences

The Department of Pharmaceutical Sciences is driven by its commitment to educational excellence and advanced research, and ultimately aims to address the current healthcare issues facing society, while enhancing the knowledge of our students through classroom experiences, discoveries and innovations. Department research focuses on the investigation of mechanisms causing chronic illness and developing novel therapeutics and drug delivery systems. A few of these include alcoholic liver disease, nanoparticle drug delivery, Parkinson's disease, traumatic brain injury and vision-related neurodegeneration; working in collaboration with our colleagues in the College of Graduate Studies and the College of Medicine.

Pharmacy Practice

The mission of the Department of Pharmacy Practice is to advance the practice of pharmacy through interprofessional education of exceptional and well-rounded pharmacists who will deliver optimal patient care.

Division of Academic Affairs

The Vice President of Academic Affairs is the chief academic officer of the University reporting to the President, and is responsible for ensuring the academic quality of all programs and services within the educational enterprise of the University through the establishment and coordination of policies and priorities. The Division of Academic Affairs supports all aspects of enrollment, student affairs, and curriculum and instruction at the University, including the oversight and implementation of current and future programs. The division is comprised of the following areas: the Office of the Vice President for Academic Affairs, the Office of Academic Services; the Office of Enrollment Services; the Office of Student Affairs; and the Oliver Ocasek Regional Medical Information Center (library).

The Office of the Vice President for Academic Affairs

The Office of the Vice President for Academic Affairs is responsible for the administration, coordination, and development of all academic functions of the University, including continued development of an interprofessional, student-centered environment. The office provides oversight for resources related to academic programs and the shared services that support students, the curriculum, and the faculty. The office administers academic and faculty affairs; develops academic strategic initiatives including international programs; develops academic/education policy; and works with the Office of Institutional Research to monitor and address accreditation requirements for the University and its educational programs.

The Office of Academic Services

The Office of Academic Services manages the implementation of NEOMED's professional and graduate programs. The staff provides operational support to the curricular committees and coordinates the details of routine educational operations. Members of the office serve as support to courses in the curriculum. The office administers scores, analyzes and reports the results of examinations and provides data on student performance. Routine evaluations of courses and faculty are managed and reported to course directors. In general, many of the problems and issues that arise within the educational program are identified first through the Office of Academic Services, which in turn offers the data and preliminary responses to individual faculty, course directors, committees and other offices. The office also responds when others identify issues that require data, support and solutions.

The Office of Enrollment Services

The Office of Enrollment Services is comprised of three functional units: Admissions, Registrar and Financial Aid. The office provides a one-stop-shop environment that assists students from the point of application through graduation from the Institution. Enrollment Services coordinates the selection of students for admission, assists with pre- and post-matriculation processes and serves as the first point of contact for many issues related to student needs. Enrollment Services is committed to providing exemplary service to both internal and external constituents, and its primary goals are to foster a culture of shared responsibility for achieving enrollment and

retention goals based on data supported strategic initiatives and to help create the conditions that enhance the student experience and the potential for academic and personal success.

Admissions

Through targeted recruitment strategies, the office seeks to inform and counsel students, parents, college advisors and stakeholders about the University's academic programs. The office coordinates the selection of students by the designated faculty-led committee into the M.D. program, the Pharm.D. program and selected graduate programs.

For details on the admissions processes for each program, please review the respective College's section.

Registrar

The Registrar serves as the primary custodian of student academic records and is the certifying officer for the University. The Registrar and student records team is responsible for student grades, records and transcripts; enrollment/graduation verification; student addresses; course scheduling and registrations; Ohio residency determinations; alumni certifications; student letters of recommendation; and academic promotion.

Educational records retained by the Registrar for students include admissions, academic and financial aid records. The Family Educational Rights and Privacy Act (FERPA) of 1974, as amended, governs access to student records by the students and others.

Additional information regarding FERPA, student records and academic/enrollment policies are provided in the academic policy and records section of this catalog and NEOMED Student Handbook as appropriate.

Student Financial Aid and Planning

The Financial Aid team within Enrollment Services is responsible for processing financial aid applications, applicant verification and the awarding of federal, state and institutional aid. In addition, extensive counseling and programming is available in areas of financial planning, including debt management. Individual financial aid advising is available to students on topics such as aid eligibility, student budgeting, student loan terms, entrance and exit counseling, establishing and maintaining good credit, financial independence, student loan debt management and loan repayment strategies.

Please see the Financial Aid section of the catalog for more information on this topic.

The Office of Student Affairs

Student Affairs exists to support the academic and personal success of students at NEOMED through career development, learning support and advising, student wellness and counseling

services, and student advocacy and student involvement. An expert staff of student affairs professionals works to promote student-centered learning and support, student identity and personal development and a philosophy of student engagement in the campus community. The Chief Student Affairs Officer provides the leadership and coordination for these various student services aimed at promoting students' rights and responsibilities as well as their personal and professional development. Components of Student Affairs include:

- Advising and Mentoring
- Career Center
- Center for Student Wellness & Counseling Services
- Learning Center
- Student Conduct and Professional Behavior
- Student Development and Leadership
- NEOMED Student Council

Advising and Mentoring

One of the most important steps in the career development process is developing a professional network of advisors, a personal "board of directors", who will provide guidance to students through each step of their career. This personal board of directors can aid students in:

- o Obtaining career advice & planning assistance
- o Modeling work/life balance
- Gaining important connections
- Gaining understanding about the heath-care culture, appropriate behaviors, attitudes and protocols

NEOMED's structured system of advising and mentoring is designed to provide students with the resources to build their professional network beginning with the first day of professional school.

The Professional Development Advising Team (PDAT) is the central model for advising at NEOMED. PDAT includes NEOMED professional staff, peers and clinical faculty interacting to ensure continuity of advising throughout professional school. Students interact with advisors as a team and on an individual basis beginning the first year of professional school. PDAT offers students the benefit of advising from several perspectives:

- The <u>clinical perspective</u> of practicing physicians and pharmacists who serve as mentors and advisors
- The <u>peer perspective</u> of upper level peer advisors
- The <u>colleague perspective</u> of fellow team members

Students also have an opportunity to interact with NEOMED alumni and faculty mentors in a variety of formal and informal settings.

Career Center

Career development is an integral part of the formal and informal curriculum at the University. The career development curriculum is designed to assist students in synthesizing their knowledge and self-understanding with their personal career decision. The goals of the career development curriculum are to help students:

- Develop the knowledge, skills and attitudes required for making good career decisions
- Develop life-planning activities that integrate and balance career with family, leisure, friendship and community
- Understand various specialties and settings within the medical and pharmacy professions in order to make good residency and career decisions

The Career Center staff provides advising and resources to help students assess their interests, skills and abilities, explore potential career paths and specialties, navigate the residency application and match process, and obtain employment. Career and residency fairs offer on-campus opportunities to network, gather information and meet prospective employers, while mock interviews, resume building tools, a career portal and more help develop the skills students need in their residency and job search.

Center for Student Wellness & Counseling Services

A successful transition into professional school requires the ability to maintain a healthy balance between one's academic and personal life; however, matriculation into professional school too often leads to the abandonment of healthy practices. The Center for Student Wellness promotes the practice of preventive medicine and focuses its services on providing confidential clinical counseling, immunization clinics and health and wellness education. The goals of the Center for Student Wellness & Counseling Services are to:

- Communicate the importance of achieving balance between one's academic and personal life, and demonstrate strategies for maintaining this balance throughout professional school and beyond
- Teach students how to create, achieve and maintain personal wellness goals
- Teach students healthy coping strategies
- Promote a healthy and active lifestyle through good nutrition and exercise
- Maintain students' immunization and insurance records for the institution

Counseling Services

Within the Center for Student Wellness and Counseling, NEOMED provides confidential mental health counseling on campus to all enrolled students at no cost. Counseling provides the opportunity for personal growth and development and can address academic concerns, time management, anxiety, depression, sexual orientation/identity and much more. When appropriate and relevant to maximize care, students may be referred for community-based counseling or for psychiatric services. Referral resources for counseling, psychiatry, and alcohol and drug treatment facilities are available on the NEOMED website.

Drug/Toxicology Screening

NEOMED is committed to providing the highest quality of educational activity and professional conduct throughout our programs and has an equal responsibility to ensure that students are functioning without the involvement of legal and/or illegal substances. We are committed to safe and drug-free environments wherever educational experiences and patient care is being delivered. As such, NEOMED requires a toxicology screening for all students pursuing professional degrees as they enter their M1, M3, P3 years and when a clinical setting requires testing.

Health and Immunization Requirements

The University through the Student Health Committee establishes immunization requirements for all students pursuing professional degrees, as appropriate. These requirements are based on the recommendations of the American College Health Association (ACHA), The Centers for Disease Control (CDC), the Association of American Medical Colleges (AAMC), and our consortium hospitals. No student will be permitted to continue in the curriculum without meeting these requirements. Requirements are outlined on the Student Affairs <u>Center for Student Wellness & Counseling</u> website.

Insurance - Medical, Dental, Vision, Life and Disability

All students pursuing professional degrees are required to carry medical, life and disability insurance. All students are required to purchase life and disability insurance through the University's carrier. Students may elect to purchase medical coverage through the University's carrier if they do not have coverage by an outside carrier. Students who do have medical insurance coverage through an outside carrier must provide proof of coverage by uploading a copy of the insurance card (front) in ImmunU, NEOMED's immunization tracking system. The University provides elective coverage to students who do not have dental and vision coverage through another carrier and may elect to enroll on a voluntary basis in the University's plan. Medical, dental, vision, life and disability insurance information is available through the <u>Center for Student Wellness & Counseling</u> website.

Learning Center

To achieve academic success in graduate and/or professional school, students must adapt academic strategies and self-management skills that differ from what was necessary for undergraduate success. The Learning Center assists students through the identification and evolution of current academic practice into a more efficient and effective study process. This program promotes students' academic success through various services, including:

- Individual academic strategy consultation and planning
- Peer tutoring
- Identification of university, community and online academic resources
- Seminars for course exam and licensure exam preparation

Student Advocacy

The Chief Student Affairs Officer provides leadership and coordination for all efforts pertaining to student affairs and services, and serves as the students' chief representative to the faculty and administration, and as the faculty adviser to a number of student councils. Advocating for students entails maintaining a student-centered approach to decision-making, creating procedures and policies that provide consistent and fair treatment of students and ensuring student rights are protected while holding students responsible for actions that may be inconsistent with the expectations and policies of the institution. In addition, the Chief Student Affairs Officer also is responsible for student conduct, student support during academic promotion decisions, orientation activities and commencement.

Student Conduct and Professional Behavior

Students at NEOMED are expected to maintain the highest level of conduct and professionalism in their actions both in and out of the classroom, as well as in activities associated with the institution. In addition, students in professional education are expected to develop and maintain the ethical and moral values consistent with all social behavior, but especially those values that must be an integral part of the working attitude of professionals in the fields of healthcare. Further, it is implicit in the very purpose of the University that honesty and integrity be part of a student's behavior throughout his or her education, as well as after formal education is completed. Lack of professional behavior, including unethical behavior of any sort, is contrary to the fundamental principles of the profession and represents a deficiency on the part of the student in the medical and pharmacy curriculum. Such a deficiency may result in adverse action regarding the student's education, including dismissal.

Each student admitted to NEOMED is expected to possess a well-developed concept of conduct, honor and personal integrity and maintain it throughout his or her practice. This responsibility encompasses all public, academic and professional activities of the student, particularly in regards to the handling of privileged information derived from patients and hospital records. Each student shall demonstrate behavior that, by its nature and interpretation, is considered appropriate for a professional. Such appropriate behavior includes, but is not limited to, the demonstration of good judgment, personal insight and accountability, responsibility to patients, ability to recognize personal limitations and ability to function under pressure. Students also must be aware of the social impact of their behavior as a professional student and later as physicians and pharmacists. All students enrolled in the University are expected to participation in the conduct code and the Expectations of Professional Behavior and Student Conduct. Students annually subscribe in writing to the principles of this code.

Student Development and Leadership

It is vital that NEOMED students have advanced opportunities to develop into citizen leaders with a global perspective on healthcare issues. Therefore, the Office of Student Affairs' goal is to meet the diverse needs of NEOMED students by creating and communicating a welcoming environment that accepts differences, promotes tolerance and respect for others and creates opportunities for students to learn from each other. Continually, students develop through campus community-building activities, leadership development, student organization involvement and community service opportunities.

Student development and leadership coordinates many university events that bring the university community together, celebrate our traditions, promote student involvement and educate students outside of the classroom. Student Development also supports the efforts of peer-elected councils and committees and more than 70 student organizations. Such NEOMED leadership roles and opportunities represent the vast personal, social, professional and career interests of our diverse student body.

NEOMED Student Council

Students elect representatives to serve on the NEOMED Student Council (NSC). This student government body oversees funding for all student organizations. To assist with students' leadership and professional development, these organizations range from specialty interest groups to religiously affiliated groups, to activist and educational groups. All student organizations are required to complete at least one service project annually, so there are many opportunities to make a positive difference in the community. In addition, all registered NEOMED student organizations provide support for professional development and presentations, guest lectures and educational activities, social and recreational activities, and a myriad of career-minded development programs.

Students also may serve as a leader on many other University committees such as the Student Curriculum Council, Diversity Council and Student Conduct Council. Overall, the University continues to educate students on leadership development and the importance of having a role on the NEOMED Rootstown campus and in the community.

The Aneal Mohan Kohli Academic and Information Technology Center

The NEOMED Aneal Mohan Kohli Academic and Information Technology (AMKAITC) is an active partner in the education, research and information needs of the students, faculty and staff of the Colleges. The library houses a collection of more than 10,000 electronic and print volumes in a 30,000-square foot facility that is open 24 hours per day, 7 days per week for NEOMED keycard holders. This facility includes a large, quiet study area with 52 individual study carrels; wireless access; 20 public computer stations; 12 group study rooms; informal seating areas for 300 people and the Read Distance Education Center (RDEC). The RDEC is a multimedia classroom with 40 computer workstations; 2 smartboards; an instructor's computer; remote classroom and videoconferencing capabilities. All library computer workstations have Microsoft Office products, full Internet and e-mail access.

The library group-study rooms offer a variety of learning and discovery tools. All group study rooms are equipped with LCD screens and PC's. One group room is also outfitted with white board

tables that are conducive to brainstorming sessions. Another group room is outfitted with tiered seating and BIODIGITAL Human, a 3D platform that simplifies the understanding of anatomy and disease. Dissection of the BIODIGITAL Human is done using a touch screen.

There are opportunities for faculty, preceptors and students to learn effective and efficient use of the library and other educational resources through course-integrated library instruction. Additional library services include reference assistance, document delivery, and interlibrary loan and course reserves. Access to library resources is available onsite and remotely.

The Aneal Mohan Kohli Academic and Information Technology Center is a member of the Ohio Library and Information Network (OhioLINK), a consortium of 121 member libraries. Through the OhioLINK online catalog, NEOMED students, faculty, staff and associated hospital clientele have access to the statewide collection of more than 50 million items: 10,000 electronic journals, 100 electronic research databases and 57,000 theses and dissertations, 125,000 electronic books and 36 million print resources.

For a complete description of library services, current awareness information and library resources and guides, please visit our website at <u>www.neomed.edu/library</u>.

Health Affairs

The Vice President for Health Affairs is responsible for developing NEOMED's strategy for clinical service delivery including health and wellness efforts and those through clinical initiatives; for assuring superlative clinical sites for educational programs and new program development; for fostering community partnerships that seek to enhance health equity and eliminate health disparities; and for supporting research that transforms clinical care and communities. In addition, the VPHA has accountability for NEOMED's overall approach to continuous professional development, simulation (Wasson Center) and interprofessional education.

The VPHA leads a continuum of clinical care and wellness activities including services at the Wasson Center, new and on-going clinical initiatives, locations for clinical clerkships and rotations, and partnerships with the community. Important goals include sustaining a robust safety net; fostering a continuum of health care providers such as physician assistants, advanced practice pharmacists, public health workers, community health workers, care managers, patient navigators and health advocates; and collaborating in regional community health efforts including the Akron Accountable Care Community and Better Health Partnership. Examples of programming supported by the VPHA include the Partnership for Urban Health, the Ohio Sullivan Alliance, the Health Professions Affinity Communities and AmeriCorps, and clinical and translational research efforts.

The William G. Wasson, M.D., Center for Clinical Skills Training, Assessment and Scholarship

The William G. Wasson, M.D., Center for Clinical Skills Training, Assessment and Scholarship is a state-of-the-art simulation facility that allows NEOMED students and other healthcare professionals from around the region to train and practice discipline-specific and interprofessional clinical skills, patient-centered care and patient safety. Wasson Center accomplishments include: 20 years' of experience in simulation methods for education training and research; expertise in assessing interpersonal and communication skills, both verbal and non-verbal; and expertise in developing assessment tools for students, residents (ACGME Competencies) and other healthcare professionals. Those wishing to develop a program are encouraged to visit our website at <u>Wasson Center | NEOMED</u>.

Interprofessional Education Services

NEOMED's Interprofessional Education (IPE) Services promotes an interprofessional environment to train physicians, pharmacists, and health professions students. An interprofessional education continuum supports development of high performing, collaborative, and practice-ready teams. Specifically, learners include pre-professional students, health professions students, and practitioners. Key services include support of IPE including pipeline and pathways to practice, longitudinal curriculum in the health professions, and continuing professional development. Interprofessional Education Services manages and guides standing and ad hoc committees to oversee and improve interprofessional education. Two key aspects that are managed include longitudinal inclusion and assessment of IPEC competencies and team competency outcomes. Teaching and assessing these competencies insures a collaborative practice-ready healthcare workforce able to provide improved health outcomes in the community, better care, and enhanced efficiency in healthcare delivery.

The Office of Faculty Relations and Professional Development

The Office of Faculty Relations and Professional Development has two key functional areas. The Faculty Relations portfolio serves as the central resource for faculty affairs providing continuous support to faculty through the duration of their careers with NEOMED. More specifically, the office provides programs to help faculty achieve their professional teaching, research and service goals; manages academic appointment, promotion and tenure processes; provides oversight and guidance for standing committees of the University; and serves as the central repository for recording, analyzing and distributing information about faculty.

The Continuing Professional Development portfolio provides ACCME- and ACPE-accredited continuing education programs for health professionals in Northeast Ohio to improve population level health outcomes. The office also supports lifelong-learning and stands as a resource for leadership development, talent development, quality improvement and lean initiatives.

Diversity, Equity and Inclusion

Importance of Diversity to our Mission

NEOMED embraces diversity with its benefits and values, which entails a work and learning environment that is grounded in respect and inclusion of all. Diversity encompasses race, culture, ethnicity, gender, socio-economic status, religion, age, sexual orientation, disability and military/veteran status. Everyone is diverse and brings unique aspects of who they are to the NEOMED Community. We value the unique qualities that each person possesses.

NEOMED believes that it is critical to have educational programs that inspire learners and educators to understand and interact with the diverse world of patients, one another and the healthcare team to improve the health of individuals and communities. Central to NEOMED's mission is the diversity of the students, faculty and staff.

Diversity, Equity and Inclusion Leadership

The NEOMED Diversity Council ensures the University is dedicated to increasing and sustaining a diverse learning and work environment that is grounded in respect and inclusion. The Council functions as a catalyst for the identification and development of initiatives for improvements in diversity at every level of the University. The Council also serves as a forum for diversity-related concerns from the University's work force and education community.

The NEOMED Diversity Council leads many activities, some of which include developing a campuswide plan for diversity, enhancing organizational competency of diversity, building a welcoming and affirming environment for all people and providing a forum to address diversity issues within the NEOMED community.

In tandem with the efforts of the Diversity Council are the support and leadership of the Vice President for Diversity, Equity, and Inclusion and the Executive Director of Diversity, Equity and Inclusion, who are responsible for implementing practices, processes, support services, and programmatic and educational initiatives that support diversity and creates a welcoming and inclusive environment at NEOMED. The Executive Director leads the charge advocating for students, and building bridges of understanding between individuals and groups in order to develop a more culturally competent and globally aware campus community.

The Office of Global Engagement

The Office of Global Engagement was created in September 2016 as the unit that facilitates and leads the internationalization efforts at NEOMED while further promoting campus diversity.

This office provides immigration guidance and support for all NEOMED students, faculty and staff who are here on a non-immigrant visa (J1, H1B, etc.). The office also supports the creation and

promotion of international programs for our students to engage in study abroad opportunities, and helps orient students who are planning to engage in an international experience. Since its creation, the office has secured designation for NEOMED to be a sponsor for the Exchange Visitor Program from the U.S. Department of State, and is in the process of gaining certification for some of NEOMED's academic programs to foster international students from the U.S. Department of Homeland Security.

Campus Life & General Information

Criminal Background Check (CBC)

All new medical and pharmacy students are required to undergo criminal background checks as a matriculation requirement, and M2 and P3 students must undergo a second CBC in preparation for their clinical experiences and for continued enrollment eligibility. The Colleges reserve the right to revoke an offer of acceptance, decline promotion or terminate participation in any or all curricular activities after information obtained in the course of the background check is considered. In addition, students are required to self-disclose to NEOMED immediately if the student has been convicted of, pled guilty to, or pled no contest to any criminal offense including misdemeanors, felonies and traffic offenses other than minor offenses that may occur after a CBC is completed. Violations of Law forms are available online at Forms & Resources | NEOMED

To facilitate the background screening process, students are required to complete consent forms. These authorize the Colleges to seek a review of records that will disclose past misdemeanors, felonies and/or presence of the student's name in a registry that would indicate a past incident of child, dependent adult or sex abuse. Background information is obtained through using the student's social security number and birth date and is done with the assistance of a reputable outside company. Background information is shared only to the extent necessary to make decisions about admission, matriculation, promotion and continuation in the program. Additional details regarding Criminal Background Checks are available in the *NEOMED Student Handbook*.

Disabilities and Accommodations

It is the policy of the University to comply with the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, and state and local requirements regarding persons with disabilities. Under these laws, no otherwise qualified individual with a disability shall be denied access to participation in services, programs or activities of the University solely because of his or her disability. Federal law applies to individuals with substantial impairments affecting one or more major life activity (e.g., walking, seeing, speaking, breathing, learning, working or performing manual tasks), those with records of such impairments, and those who are regarded as having such impairments.

Upon request of persons with disabilities, the Disabilities and Accommodations Committee will review the request for registering a disability and/or requesting an accommodation. The University will make efforts to provide reasonable accommodations; however, the University is unable to make accommodations that impose an undue burden, present a direct threat to the health or safety of others, or fundamentally alter the nature of its programs, services or activities. All individuals will be held to the same standards and must be able to carry out the essential functions of their positions or programs with or without reasonable accommodation. Qualified students are encouraged to disclose known disabilities and to request reasonable accommodation as early as possible. Additional information regarding accommodations and the process of requesting accommodations is available in the *NEOMED Student Handbook*.

Electronic Mail (email)

NEOMED provides electronic mail resources in support of its instruction, research and service activities. Students can access their email account through the Email link under Academic Tools and Support on the Student Resources page of the NEOMED website, or by going to https://portal.office.com to log into their account. Because electronic mail (email) is the official method for communicating to students, a NEOMED email address is issued to all students upon acceptance. Students are responsible for using the neomed.edu address as their email address for all official communication with NEOMED faculty, staff and administration. Students are responsible for forwarding all NEOMED emails to their non-NEOMED email account if appropriate. It is the student's responsibility to check his or her email regularly for distribution of official communications. Failure to read email messages does not alter a student's responsibility to be informed about NEOMED events, announcements and policy changes. Therefore, it is recommended that email be checked once per day when practical.

Each computer is required to have real-time virus-scanning software with a current virus definition file. Students are encouraged to review and utilize the resources on the link below to purchase anti-virus software for their personal device.

https://support.microsoft.com/en-us/help/18900/consumer-antivirus-software-providers-forwindows

Harassment/Non-Discrimination

The University is committed to maintaining a professional and collegial work and learning environment in which all individuals are treated with respect and dignity. Each individual has the right to work and learn in a professional atmosphere. The University seeks to promote an environment in which all students, faculty and staff interact based on individual strengths and characteristics, without having such interactions shaped by generalizations or stereotypes based on age, race, gender, religion, sexual orientation, national origin, disability or veteran status; and to encourage constructive thoughtful and sensitive behavior. Harassment and unlawful discrimination are serious offenses that may be cause for disciplinary action including, as appropriate, dismissal or expulsion. The University will not tolerate harassment or unlawful discrimination on the Rootstown campus, or in any affiliated institution, program or agency. For additional information, please refer to the *NEOMED Student Handbook*.

Health and Immunization Requirements

The University, through the Student Health and Advising Committee, establishes immunization requirements for all students, as appropriate. These requirements are based on the recommendations of the American College Health Association (ACHA), the Centers for Disease Control (CDC), the Association of American Medical Colleges (AAMC), and our consortium hospitals and clinical teaching sites. No student will be permitted to start and/or continue in the curriculum without meeting these requirements. Requirements are outlined on the <u>Student</u> Affairs Wellness website.

Drug/Toxicology Screening

NEOMED is committed to providing the highest quality of educational activity and professional conduct throughout our programs and has an equal responsibility to ensure that students are functioning without the involvement of misuse of legal and/or us of illegal substances. We are committed to safe and drug-free environments wherever educational experiences and patient care is being delivered. As such, NEOMED requires a toxicology screening for all students pursuing professional degrees as they enter their M1, M3, P4 years and when a clinical setting requires testing.

Accepted applicants who have positive results of a drug test prior to matriculation may have their offer of admission rescinded. Additional details relevant to matriculated students are outlined in the NEOMED Student Handbook.

Identification/Building Access Cards

For the safety of our students, faculty, staff and guests, access to the campus is restricted to NEOMED identification card holders. Generally, all exterior doors to the campus are locked and alarmed, except for the main entrance to the N.E.W. Building and the old Conference Center, which is unlocked for the public and/or certain events. Several exterior doors have key card access allowing personnel and student's convenient access to their work and study areas. Access cards also serve as student identification badges and are required to be displayed prominently by students at all times above the waist, preferably in the upper torso region, visible from the front. Students are prohibited from transferring access cards to other individuals or allowing others to use them at any time. Students are expected to keep their ID badges/access cards during their entire educational career at the University. Lost, stolen or misplaced badges must be reported promptly to Campus Security and replaced immediately; a fee may be assessed for the replacement badge. All campus visitors must report to the NEOMED Lobby to sign in and obtain a guest ID. For complete access guidelines, open the NEOMED Police link under Emergency & Security on the Student Resource's page of the NEOMED website, and from there choose <u>NEOMED ID Cards</u>.

Insurance - Malpractice Liability

All professional program students are required to carry malpractice liability insurance coverage through the University's carrier. This coverage is provided by the University at the lowest possible cost, through a third-party insurance company. Malpractice insurance premiums are assessed and included in the University's student fees. Malpractice insurance covers only those activities officially sanctioned by the University as part of the curriculum in which a grade is assessed or for special, pre-approved academic activities and does not cover students on a leave of absence from the curriculum.

Insurance – Medical, Dental, Vision, Life and Disability

All professional program students are required to carry medical, life and disability insurance through the NEOMED carrier. For additional details, please refer to the *NEOMED Student*

Handbook or visit the NEOMED Center for Student Wellness and Counseling Services, a unit within the Office of Student Affairs, either in person or on the NEOMED website. <u>Student Health Services</u> <u>NEOMED</u>

Lockers

All first-year (M1/P1) medical and pharmacy students have access to a locker. First year students will be assigned a locker and receive a key during the first week of classes. Remaining lockers will be assigned to M2 and P2 students as availability permits. There are also open, unassigned lockers near Liebelt Hall that are available to all other students who wish to use one, however, students must provide their own locks.

Parking

The University makes parking available for employees and students on a first-come, first-served basis. Students are provided one parking permit as part of their fees and must register their vehicle on Banner Self-Service Personal Information located under <u>Academic Tools & Support</u> on the Student Resource page of the NEOMED website. Once the vehicle is registered, students may stop by the Security Office to pick up their permit between the hours of 8am and 4pm, Monday through Friday. Students may not park in areas designated as reserved or "visitor only." Handicapped parking spaces are authorized only for individuals with physical disabilities. Temporary use of a handicapped space for certain injuries can be arranged through the Security Office at 330.325.6489. Overnight parking is prohibited unless the Security Office is notified in advance. Please refer to the *NEOMED Student Handbook* for parking regulations.

Research

NEOMED is actively engaged in research. In fact, we believe it is of paramount importance to both our mission and the well-being of our communities. The Office of Research and Sponsored Programs (ORSP) administers, oversees, advises and assists members of the NEOMED community who are engaged in research, scholarly and creative activities, and extends this service to students by administering the University's Summer Research Fellowship Program.

The Summer Research Fellowship Program is a mentored research program, offered to currently enrolled medical and pharmacy students at the University. It is designed to provide intensive training in research procedures and principles on projects in basic and clinical disciplines; to enhance students' research horizons; and to develop scientific presentation and writing skills. It is offered for an eight-week period over the summer and includes a student stipend. Additional information is available in the *NEOMED Student Handbook*.

Security and Safety on Campus

Northeast Ohio Medical University is in a rural, small town with low crime. However, NEOMED has instituted certain security measures for student safety, including the utilization of electronic emergency notifications and a card access system for all building entrances. Students are encouraged to remain alert and cautious when on campus, to keep personal items out of sight

and to keep their vehicles locked. NEOMED campus security operates 24 hours a day, seven days a week. Security officers routinely patrol the campus to detect and deter crime, and students may request a security escort to their car. Security personnel are readily available to help in emergencies and to render assistance in motorist challenges. The department also enforces parking regulations.

Emergency blue-light phones are also available in University parking lots. These two-way call boxes allow individuals to speak directly to an on-duty security officer in the event of an emergency.

Fire exits and fire extinguishers are located throughout all buildings. If evacuation of a building becomes necessary, patrons are directed to use the stairways. Elevators should not be used under any emergency evacuation circumstance. Tampering with fire alarms or fire prevention equipment is forbidden and may result in dismissal. Additional details are available in the *NEOMED Student Handbook*.

Sequoia Wellness Center

Sequoia Wellness is a fitness facility unlike traditional gyms; it also offers overall wellness programming inclusive of wellness education, nutrition services and cooking demonstrations. While open to the larger community on a paid membership basis, professional degree students receive automatic membership to Sequoia as part of their student fees.* The 25,000-square-foot facility houses the following:

- Spacious fitness floor with state-of-the-art equipment
- Lap and warm-water therapy pools
- Multi-use gymnasium with three basketball hoops
- Physical therapy area
- Free weight area
- Steam rooms, saunas and whirlpool
- Group exercise classrooms
- Rock climbing wall
- Activity-based babysitting

For more information about Sequoia Wellness visit <u>www.sequoia-wellness.com/neomed</u> or call 330.578.9030.

*Students who take a leave of absence or who voluntarily withdraw from the University in good standing are subject to deactivation of their student Sequoia membership based on the date the semester ends for the academic semester for which they were last officially enrolled. Students who start the fall semester but then become dis-enrolled within that same semester will maintain their Sequoia membership through the conclusion of the fall term, and students who start the spring semester but then later become dis-enrolled within that same semester will maintain their Sequoia membership through the entire summer. In instances where a student is dismissed or

suspended from NEOMED, their Sequoia membership will be cancelled based on the effective date of the University action.

Smoking/Tobacco Use

NEOMED is a tobacco-free campus. Smoking or the use of other tobacco products is prohibited anywhere on the NEOMED campus. The campus-wide tobacco ban includes the inside and outside of all buildings, any parking areas, all vehicles on campus and any personal residence.

Student Attire

Students are expected to dress appropriately and professionally in all school situations. Students should always check with course directors and/or clerkship directors/preceptors in the clinical settings for specific requirements regarding appearance, since courses, clerkships/rotations, consortium hospitals and pharmacies may have different requirements. Whenever students interact with the public, high standards of professional dress are expected. Students should keep in mind that they represent the NEOMED student body to speakers, faculty, staff, visitors, hospital and pharmacy staff, and patients and strive to dress in a manner that reflects positively on themselves and the University. For additional information on appropriate attire, please refer to the NEOMED Student Handbook.

Student Counseling Services

NEOMED provides confidential mental health counseling on campus to all enrolled students at no cost. Counseling provides the opportunity for personal growth and development and can address academic concerns, time management, anxiety, depression, sexual orientation/identity and much more. When appropriate and relevant to maximize care, students may be referred for community-based counseling or for psychiatric services. Additional information about student counseling services is available in the *NEOMED Student Handbook*. Referral resources for counseling, psychiatry, and alcohol and drug treatment facilities are available on the NEOMED website.

Student Employment Guidelines College of Medicine

The primary responsibility of every medical student is mastery of the College of Medicine's educational objectives exemplified in knowledge, skills and attitudes. The academic program of medical school is fast-paced, with a sheer volume of content that is often overwhelming. For these reasons, the College of Medicine strongly discourages all students from engaging in any outside employment.

College of Pharmacy

Students enrolled in the doctor of pharmacy program at Northeast Ohio Medical University (NEOMED) are encouraged to seek employment in a pharmacy setting while pursuing their degree. Anecdotal feedback suggests that students who work while enrolled in pharmacy school

are academically stronger and are more likely to have employment opportunities following graduation. However, students who prioritize work hours over academic studies, or who work excessively are more likely to struggle with completing academic milestones. It is important to remember that as a student in a graduate-level program, academics are the primary focus. With this in mind, students should adhere to the following guidelines regarding employment and academics:

- During the academic year, students are encouraged to retain employment in a pharmacy setting if it does not interfere with scheduled classes or inhibit study time.
- Faculty recommend working no more than 8 hours OR one shift per week on average for students with consistently positive academic performance. It is understood that each student will need to assess their ability to effectively balance work and academic responsibilities. The recommendation provided may not apply in all situations, but rather is intended to be an initial guide.
- Students are encouraged to re-evaluate any work commitments on a regular basis to consider previous experiences and expected academic workload.
- Avoid situations where the time committed to work ultimately creates an unfortunate situation where a student is in a position of academic difficulty.
- Employment in a pharmacy, preferably as a pharmacy intern, during summers and vacation breaks during the academic year, is strongly encouraged.
- When it is determined that a student missed class, an assessment, or any other required academic activity due to a work commitment, the absence will be considered unacceptable / unexcused and will be noted as such.
- Remember that work experience during pharmacy school reflects on overall work ethic as a professional. Consider the experience of working in a pharmacy as an extended interview for a potential role as a pharmacist in that organization. It is in your long-term best interests to remain in good academic standing to successfully complete the program.
- Students are encouraged to discuss their individual balance of academics and employment with their PDAT advisor.

Student Housing

Students have the option of living on campus in The Village at NEOMED. The Village, a residential community located on the NEOMED Rootstown campus, is independently owned and provides students the opportunity to engage in apartment-style living on campus. More information is available online at <u>http://www.thevillageatneomed.com/.</u>

The Office of Student Affairs also makes available an Off-Campus Housing Directory that includes the surrounding areas and cities in which NEOMED has clinical partnerships. The directory is available online at <u>Housing & Dining | NEOMED</u> and includes information on leasing and local maps.

Student Organizations

The diversity of interests among NEOMED students is reflected in the more than 70 clubs and student organizations that are supported on campus. Students find and create opportunities to pursue their passions and explore new ones, including membership in campus chapters of national professional organizations, specialty interest groups, social and recreational clubs; and fellowship in many religious traditions. Please refer to the NEOMED website or *NEOMED Student Handbook* for additional details.

Technology Requirements

All medical and pharmacy students are required to have a laptop computer. Minimum requirements are shown below. COM coursework will require videoconferencing capabilities in addition to the technical specifications listed below. All pharmacy and medicine students are required to have a PDA or smart phone.

Laptop/Tablet A Windows Win 7 or Win 10 PC that includes at least:				
OR				
Apple MacBook				
Version OS X 10.9 and above				
Smartphone				
	for medicine and pharmacy students. I within the <u>Library</u> page on NEOMED.edu **			

Students have access to purchase from the NEOMED discount Dell program: To inquire about products and pricing, please go to **www.dell.com/neomed.** Member ID: US25158355

Travel for Educational Purposes

Students in the Colleges of Medicine and Pharmacy will be required to participate in educational and community service events that require travel to various locations and venues as part of the curriculum. While the University may provide transportation to some of these events, the cost of most travel will be the sole responsibility of the student. Students are not considered agents or employees of the University and are not insured for any accidents or mishaps that may occur during any travel to and/or from educational activities unless the travel is completed as a group in direct supervision of a University Official and in direct connection to the educational and/or

University sponsored event. Students are responsible for all out-of-pocket expenses associated with clinical education, such as transportation, housing, meals, professional attire, laboratory fees, etc.

International Travel Policy

A student's eligibility to participate in an international experience is conditional upon written approval of the individual international experience by the course director in collaboration with the Office of Academic Services, receipt by the Office of Student Affairs of all documentation as required by the procedures outlined in the *NEOMED Student Handbook*, and verification by the Registrar that the student is in good academic standing as determined by his/her individual degree program.

Students participating in international activities/educational experiences sponsored/approved and/or funded by NEOMED must comply with all procedures described in the *NEOMED Student Handbook* and the International Travel Policy and Forms posted on the University website.

University Communication Venues

Prospective Student Portal

Prospective students interested in attending NEOMED should open a student portal account by visiting <u>www.Discover.NEOMED.edu</u>. The prospective student portal allows future NEOMED candidates the ability to explore academic program information tailored to their interests, access visit dates and schedule visits, and opt in to receive important email and text message reminders about program offerings, dates and deadlines.

Web Admit

Prospective students that wish to become candidates for admission apply through NEOMED's Web Admit service. Web Admit also serves the role of NEOMED's common application service for transcripts and other required credential certification and review as determined by each program.

NEOMED Website

The goal of the NEOMED website, <u>www.neomed.edu</u>, is to inform the public about NEOMED and to provide NEOMED constituents with valuable resources and information. The NEOMED website serves as the portal for many other applications, such as AIMS, Banner Self-Service, etc.

AIMS

AIMS is the online, learning management system that NEOMED uses to provide curriculum information and supplemental instruction to students. AIMS is an integral part of the multimedia learning process and course schedules are housed there under the "schedule" tool. Students can view their entire course schedule via the "My Workspace" tab within AIMS. All course schedules are subject to change. Schedules are updated and made available to students by 8:00 a.m. daily. It is the sole responsibility of the student to check for schedule and assignment updates on AIMS on a daily basis.

Banner Self-Service

Self-Service is the web-based or online service component of our primary student administrative software system. Self-Service provides current students, faculty, administrators and other members of NEOMED's academic learning community with anytime, anywhere access to student information housed within Self-Service. Information available via Self-Service includes course registration information, unofficial grade reports, class rosters, etc.

Academic Policies & Records

Responsibility of the Student

Students are expected to become familiar with the academic policies, curriculum requirements and associated deadlines as posted to the *University Catalog* and the *NEOMED Student Handbook*. Advisors will aid students in understanding the academic program requirements as well as interpretation of policies whenever necessary; however, it is ultimately the student's responsibility to be cognizant of and comply with all University policies and procedures and to meet all stated requirements for the degree. It is also the student's responsibility to monitor their NEOMED email, the University website and intranet, and their AIMS accounts frequently; these communication venues have replaced mass mailing as the University's most effective and efficient ways to disseminate important information to the campus community. Failure to monitor University communications effectively does not relinquish or otherwise lessen students' responsibility to meet their academic, professional or financial obligations to the University.

Academic Advising

Professional Programs

Upon matriculation, College of Pharmacy students are assigned to a Professional Development Advising Team (PDAT) that includes a PDAT Advisor, two Peer Advisors and a small group of peers. PDAT Advisors are practicing and pharmacists who provide leadership and direction to student advisees with primary responsibilities in areas of career advising and orientation to the practice of pharmacy. Initially, College of Medicine students are assigned to a PDAT team that includes two Peer Advisors and a small group of peers. In the M3 year, academic advising is provided by M4 Schedule Advisors, clinical faculty members who receive specific training related to M4 scheduling and the residency application process.

Graduate Programs

Students in the graduate degree programs are assigned a faculty advisor upon matriculation. Faculty advisors provide advice and guidance regarding academic program requirements, student career aspirations, University policies and procedures and other campus life events. Refer to your individual program materials for additional information.

Academic Dishonesty/Misconduct

The University holds its students to the highest standards of intellectual integrity. Therefore, the attempt of any student to pass any examination by improper means, present work that the student has not performed, or aid and abet a student in any dishonest act may result in disciplinary action, including dismissal. Any student witnessing or observing a perceived violation of academic dishonesty is required to report it as outlined in the *NEOMED Student Handbook* under Expectations of Student Conduct and Professional Commitment. Students failing to report an observed violation may also receive disciplinary action.

Academic Enrollment (Graduate College)

- (1) Graduate Students must be enrolled in at least one academic term every 2 years (fall, spring, summer) to be considered an active, degree-seeking student in the College of Graduate Studies. The registrar determines enrollment status based on the number of credit hours attempted. Fall and Spring semester enrollment status identifiers are:
 - (a) "Full-Time" students are enrolled in 9 or more semester credits
 - (b) "Three-Quarter Time" students are enrolled in 6.50-8.50 credits
 - (c) "Half-Time" students are enrolled in 4.50-6.00 credits
- (2) The number of credit hours attempted each semester or each summer term is mutually determined by the student and the advisor and reflects faculty and student effort and the extent to which university resources are utilized. Course loads for fulltime students can vary. A student may not enroll for more than 18 credit hours per semester or 12 credit hours in summer, including audited courses, without advisor and the College of Graduate Studies approval.
- (3) While the College of Graduate Studies and the individual graduate programs will monitor the enrollment of all students, it ultimately will be the responsibility of each student to ensure that the enrollment provisions of this policy as well as any other requirements of individual programs are being met.

Status	Definition
Active -	Registered for coursework this semester
Enrolled	
Active -	Not registered for coursework this semester, still within the
Stop Out	length of program requirements, and in contact with program
	directors or coordinators
Inactive	Not registered for coursework, not actively in contact with
	program directors or coordinators
Withdrawn	Withdrawn from courses, voluntarily or as part of a CAPP
	mandate
Dismissed	Dismissed from COGS
Leave of	On an approved Leave of Absence. See Leave of Absence policy
Absence	for more information

(4) Student status will be recorded as one of the following in the Banner system:

(a) Minimum enrollment requirements exist to ensure students are moving forward in their program of study. The minimum enrollment requirement for the College of Graduate Studies is at least one class every 2 years. This minimum enrollment requirement should not be confused with the length of study limitations that each program has identified. See your individual program handbook to locate your length of study limitations.

- (b) Students who do not meet the minimum enrollment requirement will be considered as having voluntarily withdrawn from the College of Graduate Studies. After two consecutive calendar years with no enrollment, students will be inactivated as a degree-seeking student.
- (c) Students returning after an approved leave of absence of one or more semesters can obtain registration information from Enrollment Services.
- (d) Students who have not been actively enrolled in the College of Graduate Studies for two years or more should contact their Program Director and the registrar about re-enrollment and/or re-application.

Academic Record Requests

Enrollment Services will process requests for academic records (excluding Medical Student Performance Evaluations) in the order they are received. Federal regulations mandate a signed request to authorize the release of student academic records in most instances. Consequently, phone requests for transcripts or other materials are not acceptable. Students and former students are encouraged to submit requests for records either in-person, by fax, by mail or through Banner Self-Service, our online service utility that is available to current students. Requests submitted by email are only acceptable if initiated from a NEOMED email account.

Enrollment Services makes every effort to respond to academic record requests in a timely manner and has traditionally been able to process transcript, enrollment and graduation verification requests within three to five business days from the time the request is received. Depending on staff workload, the office is frequently able to process transcript requests within one day. Requests for multiple transcripts, several different documents (e.g., a request for a transcript as well as copies of admissions correspondence) or requests during peak operating times (e.g., registration, graduation, etc.), may require additional processing time. Information that is required to meet a third-party deadline should be requested with at least two weeks leadtime to ensure expedient delivery and appropriate recording. Copies of transcripts and other student records are provided free of charge.

The Medical Student Performance Evaluation (MSPE), often referred to as the "dean's letter," is a University initiated document designed to assist medical students in obtaining admission to postgraduate programs, specifically internships and residencies. Due to the nature of this document, requests for copies are only honored after the internship/residency selection process for which the MSPE was intended has concluded.

A <u>replacement diploma</u> may be ordered from Enrollment Services if the original diploma has been lost or destroyed. The graduate requesting the new diploma must submit an original notarized statement explaining the reason for the request. The new diploma will be stamped "official replacement." If a replacement diploma is required due to the condition of the original diploma, the original must be surrendered to Enrollment Services prior to a replacement being ordered.

The cost for a replacement diploma is \$50.00. Graduates may pay by check, money order or by credit card via the Accounting Office during normal business hours. Replacement diplomas are sent by U.S. certified mail in approximately 30 days.

For graduates who seek to replace their diploma, the new diploma will bear the current name of the University and signatures of the current administration. It will be stamped "official replacement". Replacement diplomas will bear the alum's name that is on file at the time of his/her graduation, unless the request is accompanied by documentation certifying a legal name change (certified copy of a court order or marriage certificate plus either a driver's license, passport or Social Security card).

Withholding Academic and Enrollment Information and Restricting Enrollment

The University maintains the right to withhold the release of academic and enrollment information, and restricts enrollment for cause. Academic and enrollment information includes grade reports, transcripts, diplomas, certifications or other information about a given student. Enrollment restrictions include cancelling a student's existing course registration and/or preventing future registrations. Cause includes, but is not limited to, unmet financial obligations, loan default and violations of non-academic regulations such as neglecting to provide Enrollment Services with final official transcripts for matriculation.

For additional details about educational/academic records, please refer to the Official Academic Documents section of the *NEOMED Student Handbook*.

Academic Standing

A student who is allowed continued enrollment at NEOMED is considered to be in good academic standing. This definition applies only to enrolled students currently attending courses for credit, and the definition is only to be applied for verification of enrollment and insurance purposes. Graduate students are encouraged to review their individual program materials for specific details as they may include minimum grades that must be achieved. Students on an academic leave of absence, who have withdrawn in response to a decision by the Committee on Academic and Professional Progress (CAPP), or who have been dismissed or suspended from any NEOMED professional degree program are not in good standing. This definition should not be confused with the standards of Satisfactory Academic Progress policy for maintaining financial aid eligibility.

Academic Intervention

To promote student success at NEOMED, all professional degree students who meet one or more of the criteria associated with academic risk are highly encouraged to participate in the academic intervention process. This process may include, but is not limited to, meetings with a learning

Center advisor, faculty, and tutor and/or college specific leadership. Noncompliance with academic intervention will result in a letter in the student's file.

Academic risk factors include: (1) a failed course, (2) a failed exam or assignment within a course or (3) marginal performance on a course exam. Marginal performance is defined as scoring within 3-5% of the lowest passing score. For additional information, please refer to the *NEOMED Student Handbook*.

Academic Load

Professional Programs

Professional programs, including the Doctor of Medicine (M.D.) degree in the College of Medicine and Doctor of Pharmacy (Pharm.D.) degree in the College of Pharmacy, require students to follow the established curriculum for each year of the program. These requirements may be measured by contact hours (in the case of lecture, lab and small group activities), weeks (in the case of experiential or clinical components) or semester credits depending on your program of study and matriculation date. There are no student-initiated options for students to carry reduced course loads; all students must take the full curriculum designed for that semester and are full-time as a result. Students who are directed to take a modified curriculum by the Committee on Academic and Professional Progress and/or College Dean will have their academic load determined by the University Registrar if required. For the purposes of determining financial aid eligibility, full-time status for professional degree programs is equal to the credit value associated with the fall or spring semester with the least number of required courses over the entire length of the four-year program or a minimum of 9* semester credits.

Graduate Programs

Graduate student may not enroll for more than 18 credit hours per semester or 12 credit hours in summer, including audited courses, without advisor and the College of Graduate Studies approval.

Additional details related to semester credit hour equivalencies and academic load for financial aid purposes are identified below:

Academic Load for Financial Aid Purposes

All Programs*

Full-time	9.00 or more semester credits
Three-quarter time	6.50 - 8.50
Half-time	4.50 - 6.00

*Denotes a correction to an earlier publication which erroneously stated that full-time status for professional programs was 12 or more semester credits.

Academic Minimums for Continued Enrollment, Promotion and Graduation *Professional Programs*

All students are required to achieve at least a passing grade in all courses required by the faculty, and successfully complete all other pre-matriculation and matriculation requirements for the Doctor of Medicine or Doctor of Pharmacy degree and successful completion of the yearly comprehensive examination for pharmacy students. College of Medicine students cannot begin M4 electives until they have successfully completed all course requirements of the M3 year, and must take and achieve passing scores on United States Medical Licensing Examinations (USMLE), as specified below.

USMLE Step 1 Examination

- Students must have successfully completed all courses in first (M1) and second (M2) year curriculum in order to sit for the examination.
- Students must take the examination by the third or fourth Friday in June, dependent on the calendar of that year, at the end of M2.
- A passing score on Step 1 of the USMLE is a requirement for promotion to M3.

USMLE Step 2 Examinations

Passing Step 2 Clinical Knowledge (CK) and Step 2 Clinical Skills (CS) are graduation requirements.

- Clinical Knowledge (CK)
 - A passing score on the first attempt of Step 2 CK is a requirement to continue in the M4 year.
 - Students must take Step 2 CK after successfully passing all requirements of the M3 year and by October 1 of their M4 year. Students applying to a specialty with an early application deadline (before September 15th) must take Step 2 CK by January 1 of their M4 year.
- Clinical Skills (CS) Examination
 - All students must take Step 2 CS by December 1 of their M4 year after successfully passing all requirements of the M3 year.

Graduate Programs

The COGS and each of the graduate program directors share responsibility for monitoring graduate student academic performance and degree completion. Each semester the Dean of the COGS will review the academic standing of all students in the college in consultation with the program directors.

The minimum academic standards for students enrolled in the COGS graduate programs are as follows:

- (1) Grading
 - Grades used by the COGS include A,B,C,F, Pass, and Fail
 - (a) A graduate student who receives two course grades of a C or lower is subject to referral to the COGS Committee on Academic and Professional Progress (COGS-CAPP).

- (2) Good Standing
 - (a) To be considered in good standing within the COGS, a student must maintain a graduate grade point average (GPA) of 3.00 or better in all graduate credit courses and must maintain reasonable progress (defined below) toward meeting graduate program progression requirements.

(3) Reasonable Progress

Students are required to make reasonable progress toward their degree or certificate as set by the parameters for graduation by each program. It is the student's responsibility to ensure reasonable progress is made toward the completion of individual programs of study. Examples of reasonable progress include:

- (a) Maintaining status as a degree-seeking student by enrolling in coursework required by the program.
- (b) Maintaining enrollment standards as outlined in the COGS policy 3349-AC-310.
- (c) Taking an approved Leave of Absence.
- (d) Maintaining a GPA at or above 3.00.

A student who does not maintain reasonable progress toward a degree or who does not fulfill other graduate program requirements, including those regarding professional standards and misconduct, may be denied further registration in that program by the COGS. The Dean of the COGS will make recommendations to the COGS-CAPP if necessary and will direct enrollment services to place a hold on registration.

- (4) Probation
 - (a) Review of a student's performance and progress may result in a recommendation for probation. Probation is a predetermined period of time in which students must correct their academic performance. If academic performance is not corrected, dismissal from the COGS may follow. Probation may be recommended for a student who has failed to meet program expectations. Recommendations for probation must be transmitted to the COGS-CAPP from the Dean of the COGS, along with a written explanation of the recommendation. Recommendations must include expectations for future performance and a timetable for the correction of deficiencies (not to exceed 3 semesters, inclusive of summer). The final decision to place a student on probation rests with the COGS-CAPP. The Chair of the COGS-CAPP will provide the student with written communication regarding the decision and expectations for future performance. If the COGS-CAPP determines that probation is appropriate, Enrollment Services will be notified by the Dean of the COGS, and the student will be placed immediately on probation.
- (5) Removal from Probation.

Students on probation will be reviewed by the program director and Dean of the COGS at least once each semester. That review shall be transmitted to COGS-CAPP and may result in a recommendation of:

- (a) return the student to good academic standing,
- (b) continued probation, or
- (b) dismissal from the program.

To return to good academic standing, the student must have corrected the deficiency that caused the probation decision, as well as continued to meet other program and university

requirements. Coursework used in raising the student's GPA must be a part of normal degree requirements.

(6) Dismissal from COGS

A student who is on probation and who does not raise the graduate GPA to 3.00 or better at the end of the next semester or summer term of enrollment may be dismissed from the COGS. At the end of two consecutive semesters or terms on probation, the student is automatically dismissed from the University unless good standing is achieved. If there are extenuating circumstances, the COGS-CAPP will recommend a course of action.

(7) Dismissal Appeal

A student who is dismissed has the right to appeal the decision. Appeals must follow the process outlined in the University's administrative policy and procedures as outlined in the *Student Handbook*.

Program Length Restrictions

Professional Programs

Students are expected to complete their professional school education in four years from the time of initial matriculation. Enrollment in a single professional school, including approved leaves of absence, may not exceed six (6) academic years from initial matriculation in order to remain in good standing with the Colleges of Medicine and Pharmacy. Students who exceed the allowable length of study limits are referred to CAPP. Professional degree students who also enroll in the College of Graduate Studies Ph.D. program may not exceed eight (8) years from the initial date of enrollment to complete all program requirements unless receiving prior approval from both the Dean of the College of Graduate Studies and the Dean of their professional college.

Graduate Programs

Program lengths vary in the College of Graduate Studies. Students enrolled in Master's programs should complete the program within six (6) years. Students enrolled in Ph.D. programs should complete the program in five (5) years, and professional degree students who enroll in a NEOMED Ph.D. program must complete their programs within eight (8) years from their initial date of enrollment, unless receiving prior approval from both the Dean of the College of Graduate Studies and the Dean of their respective professional degree program.

Advanced Standing (Professional Programs)

Advanced Standing is a term used to identify a transfer student into one of our professional degree programs. For additional details, please refer to either the admission requirements for each College/program or the transfer credit section of this catalog.

Attendance

Class attendance requirements for officially enrolled students vary for different components and sessions of the curriculum. Attendance requirements are at the discretion of each course director, and attendance policies for each specific course will be included in the syllabus materials. In some

course activities, participation may be a factor in determining the grade. In no instance shall faculty allow anyone to participate in their course(s) unless said individuals(s) are officially enrolled/registered for the course as confirmed by Enrollment Services. Respect for faculty, as shown in part by punctuality and attendance, is considered an important component of student conduct and professional commitment. Additional details regarding attendance, including college-specific requirements, are available in the *NEOMED Student Handbook*.

Class Standing

The Colleges do not calculate an official class standing. For the purpose of Alpha Omega Alpha honor society, the Medical Student Performance Evaluation (MSPE) and pharmacy residency recommendation letters only, the top 25% of medical and pharmacy students are identified based on their academic performance through the end of the third year. Students in the top 10% of the class receive a numerical class standing, e.g., 4th out of 120. Students who are not in the top quartile will have no mention of class standing in their MSPE or recommendation letters. The following conditions apply to the calculations:

(1) Only grades from courses taken at the Colleges are used in the calculations,

(2) If a student remediates any course or clerkship/rotation, the original grade is used, not the remediated grade, and

(3) If a student repeats some segment of the curriculum (year, clerkship/rotation, etc.), both the original and repeated grades are used in the calculations.

Commencement Ceremony and Graduation (Degree Conferral)

"Commencement" refers to the annual celebratory event, officiated by the President of the University, where students who have completed their degree requirements share in the excitement and importance of their academic accomplishments with peers, family, friends and members of the campus community. "Graduation" is synonymous with degree conferral and involves a multi-step process that consists of students applying for graduation, University personnel reviewing and confirming that all degree requirements have been satisfied, securing graduation approval through internal governance structures (e.g., endorsement of faculty, college dean, and Board of Trustees), and the posting of a degree conferral date to the student's official record. In most instances, the date of the commencement ceremony will be the same as the students' graduation/degree conferral date, but not always.

The granting of degrees by the Board of Trustees is contingent upon the recommendation of the College deans and the Board of Trustees.

All students are expected to participate in the commencement ceremony for conferral of their degree.

Participation Eligibility

Participation in the commencement ceremony is mandatory for all students who have successfully completed their degree requirements. Students may petition his/her college dean for an exception to this practice for extenuating circumstances only. Students who have not satisfactorily completed all degree requirements by the annual commencement date may participate in the ceremony only if they are expected to complete their requirements in the immediate subsequent summer semester (e.g., before August 31) and their participation is approved by the respective College dean. Students who complete their degree requirements after August 31 will participate in the next available commencement ceremony.

Professional Programs

All professional degree students intending to graduate in a given academic year must complete an application for graduation by December 31 of the academic year in which they expect to graduate.

Students completing degree requirements after December 31, and prior to the commencement ceremony, will be conferred the degree during commencement in May.

Professional degree students expecting to complete all requirements of the degree <u>after</u> commencement, but by August 31 of a given calendar year, will participate in commencement activities in the same calendar year. The date of degree conferral will be the date the degree requirements were actually completed. The diploma will be issued to the student at the time that all degree requirements have been met and certified.

Students completing the degree requirements after August 31 will be conferred the degree at the next commencement ceremony.

Under special circumstances, students completing degree requirements between September 1 and December 31 may petition to graduate (e.g., have their degree awarded) earlier if an early award of the degree is needed. The petition must indicate the reason(s) for the early award. The diploma will be issued to the student no earlier than the time of certification that all degree requirements have been met. The degree completion date will be listed on the diploma and all licensure and verification applications as the actual date of completion, rather than the date of the commencement ceremony.

Graduate Programs

The administrative process of degree conferral determines a graduate student's official graduation date and each graduation date coincides with one of NEOMED's three primary academic semesters (summer, fall and spring).

Summer Graduation/Degree Conferral Date			
Fall Graduation/Degree Conferral Date			
Spring Graduation/Degree Conferral Date			

- August 31

- December 31
- Coincides with annual Commencement (Typically 3rd Saturday in May)

All graduate level students intending to graduate in a given semester must complete an application for graduation by the established deadline in the semester <u>before</u> they expect to graduate. Students who apply to graduate but are unsuccessful in fulfilling their requirements will be required to submit a new graduation application for the next available graduation date.

Course Drop and Withdraws (College of Graduate Studies)

Students, who wish to drop/withdraw from a single or multiple courses, but not withdrawal completely from the University or College, must adhere to the following procedures:

Course Drop

Students may add/drop NEOMED courses prior to or within the first ten business days of the start of the term for which it is associated. A student who wishes to drop a course must do so by utilizing the add/drop feature within the registration functionality offered through <u>Banner Self-Service</u>. A student who drops a course within the prescribed time sequence has effectively cancelled their registration and no record of the course will appear on his/her transcript. Tuition refunds, if applicable, will be awarded in accordance with University policy as outlined in the Finance section of this Catalog. Students enrolled in cross-registered courses must adhere to the add/drop procedures of their home institution.

Course Withdrawal

Students who wish to stop participating in a course after the ten-business day course add/drop date may withdraw up until the last day of instruction or before the final exam, whichever is earlier. A student who wishes to withdraw from a course must complete and submit a signed course withdrawal form to Enrollment Services for processing. Forms are available in Enrollment Services and may be accessed electronically from the Enrollment Services website. Students who officially withdraw from courses will receive a withdrawal notation (W grade) on their transcript. Non-attendance does not constitute an official withdrawal from a course. A grade of "F" may be assigned when a student fails to complete a course or withdraw. Tuition refunds, if applicable will be awarded in accordance with University policy as outlined in the Finance section of this Catalog.

Dropping or withdrawing from courses may affect student financial aid. Students are strongly encouraged to consult their program director and/or the Financial Aid Office prior to withdrawing from classes.

Dismissal

The University reserves the right, at its sole discretion, to dismiss any student at any time prior to graduation, in the event of a breach of professional conduct, a breach of any policy or directive set forth in the *University Catalog* or *NEOMED Student Handbook*, or failure to satisfy any requirement for graduation or achieve academic minimums for continued enrollment, provided adherence to all procedures for review or action.

Students may not withdraw from the University as a way to avoid dismissal or suspension once their academic performance and/or behaviors warrant such action by the Committee on Academic and Professional Progress (CAPP) or similar body, unless explicitly allowed by their respective college.

Exceptions to Academic Policy

The University Catalog and NEOMED Student Handbook serve as the primary authority for academic requirements and associated policies. All students are expected to follow the requirements outlined in these documents in the pursuit of their degrees. On occasion, however, extraordinary circumstances may warrant departures from the catalog and/or handbook requirements. Students who believe their situation warrants a deviation from academic policy may petition for an exception to policy by filing an appeal with the Dean of the College for which the requirement belongs. The form, and more information, is available through Enrollment Services. There are, however, several academic requirements and procedures for which exceptions are never made (e.g., successful completion of course/section requirements, passing USMLE Step 1 and 2, or minimum GPA to graduate, etc.).

Electronic Capture of Learning Activities

Electronic capture of learning activities is the responsibility of Academic Technology, which follows University guidelines for obtaining appropriate permissions from those involved. Learning activities at NEOMED involve all scheduled curricular activities and include lectures, labs, small groups, presentations, reviews, demonstrations and any activity in which faculty members, patients or off-campus visitors are participating. Capturing any of these events using video recorders, cameras or camera devices, digital recorders in any form, including cell phones and PDAs, is not allowed without the express written consent of all persons involved and the administration. Posting of any material for "personal use" to any website also requires written consent in advance. A request form is available from the Departments of Academic Services or Information Technology and should be completed with signatures prior to any activity. The form should be returned signed to the Department of Academic Services. Students who initiate electronic capture of faculty, staff, visitors or a curriculum activity without permission will be asked to discontinue the activity immediately. Additional action may involve referral to the Committee on Academic and Professional Progress (CAPP) for unprofessional conduct.

Examinations/Academic Assessment

Examinations are regularly scheduled and required. Students are assessed based on their performance of assignments as well as achievements using, but not limited to, the following assessment methods: written, oral and practical examinations, laboratory assessments; quizzes; and medical students' NBME subject examinations. CAPP considers the results of examinations and reports concerning attendance, conduct and potential professional attributes in the process of determining eligibility for promotion and graduation. Examination schedules are published in the day-by-day course schedules, which are available on AIMS course management system. They

are also available in the course syllabi. For additional details regarding examination guidelines and procedures, please refer to the *NEOMED Student Handbook*.

Final (Permanent) Grade - Definition

A final grade is the cumulative assessment of a single course that is provided by the faculty, course director, etc., at the conclusion of the course offering. Final grades are posted to the student record/official transcript by academic year and term.

Grade Symbol	Grade Name	Descriptor	College of Medicine	College of Pharmacy	College of Graduate Studies
А	Superior	Superior competency	No	No	Yes
AU	Audit	Non-credit; taking course for experience only	No	No	Yes
В	Satisfactory	Complete competency	No	No	Yes
С	Fair	Minimal competency	No	No	Yes
F	Failure	Failure	Yes	Yes	Yes
Н	Honors	Mastery of the cognitive, behavioral and attitudinal objectives of a given course, clerkship or rotation; Superior competency	Yes	Yes	Yes
I	Incomplete	Temporary grade signifying student was unable to complete the course requirements in standard timeframe for approved reasons	Yes	Yes	Yes
IP	In-Progress	Temporary grade used only in instances when students are not afforded the opportunity to complete the course in the scheduled timeframe due to institutional circumstances.	Yes	Yes	Yes
Р	Pass	Satisfactory achievement of course objectives; Complete competency	Yes	Yes	Yes
S	Satisfactory	Satisfactory achievement of course objectives; Complete competency	No	No	Yes
F/P or F/S	Pass	Satisfactory achievement of course objectives after remediation ; Minimal or Complete competency	Yes	Yes	No

Grades (Symbols, Descriptors, and Policies)

Grade Symbol	Grade Name	Descriptor	College of Medicine	College of Pharmacy	College of Graduate Studies
U	Unsatisfactory (Failure)	Failure of a course graded under the Satisfactory/Unsatisfactory option	No	No	Y
Т	Transfer Credit	Credit awarded for course work earned at another accredited institution	Yes	Yes	Yes
W	Withdrawal	Withdrawal; student stopped attending course or program and officially notified the University	Yes	Yes	Yes
NG	No Grade	Non-credit grade type used in instances when a course spans more than one semester, has multiple semester registrations, final grade is cumulative, but total credit value is awarded in final semester only. All semester registrations preceding final grade entry utilize the NG grade	No longer active	No longer active	No longer active

Audit (AU)

Students in the College of Graduate Studies may take a course in an audit capacity if granted permission by the course director and dean. Students must be officially registered for a course in order to participate, even in an audit capacity, and tuition is charged at the same rate as a credit bearing experience. Audit is a permanent grade type that is recorded on the students' academic transcript that earns no credit and has no bearing on the students GPA.

Incomplete (I)

Faculty have the option of assigning an interim grade of incomplete (I) when a student is unable to complete a course or clerkship/elective in the normal time period due to extenuating circumstances beyond the student's control that were not initiated by the University. At the time an "I" is assigned, the course instructor/clerkship preceptor shall inform the students in writing of the requirements and the deadline for complete Grade Form and submit it to Enrollment Services for processing no later than the first business day following the last scheduled day of the course. Processing details and the maximum time allowed for the completion of a course beyond the original course completion date differs by program and is outlined below. Students who fail to complete the course in the scheduled time period will receive a failing grade. The temporary use of an "I" grade for the purpose of course module remediation is allowable, but has its own process

that is separate and unique, and does not require the completion of a Request for Incomplete Grade Form, but instead a General Course Remediation Contract.

Professional Programs

The maximum time allowed for the completion of a course is one semester beyond the original course completion date; however, faculty are encouraged to assign a shorter completion deadline. After the agreed upon work is completed, the instructor must complete a "change of grade" form and submit it to Enrollment Services for processing. If a grade change form is not received within the prescribed timeframe, the incomplete will be changed to a failing grade.

Graduate Programs

The grade of incomplete must be requested no later than the first business day following the final scheduled course meeting time. (In the event of a course without regularly scheduled meeting times, this should be submitted no later than the first business day following the final day of the course/semester). Both faculty and the student must sign the "request for incomplete grade" form, the faculty and student should keep signed copies, and a copy submitted to Enrollment Services for processing (which will serve as the official copy). Previous work in the class must have been satisfactory; the assignment of an incomplete grade may never be used to allow extra time to avoid a failing grade. The maximum time allowed for the completion of a course is one full year beyond the original course completion date, however, faculty are encouraged to assign a shorter completion deadline. After the agreed upon work is completed, the instructor must complete a "change of grade" form and submit it to Enrollment Services for processing. If no formal grade change is received within one calendar year, the incomplete grade will be changed to a failing grade.

In-Progress (IP)

Faculty should assign an interim/temporary grade of in-progress (IP) when a student is unable to complete a course in the normal time period of a single semester due to extenuating circumstances within the scope of institutional responsibility (e.g., absence of faculty due to illness, death or discharge, class cancellations, etc.) The maximum time allowed for the completion of an in-progress course is one semester beyond the original course completion date for professional programs and one-year beyond the original course completion date for graduate programs; however, faculty are encouraged to assign a shorter completion deadline. After the agreed upon work is completed, the instructor must complete a "change of grade" form and submit it to Enrollment Services for processing. If a grade change form is not received within the prescribed timeframe, the incomplete will be changed to a failing grade.

No-Grade (NG)

This grade type is no longer valid. It was utilized in instances when a course spanned more than one semester, had multiple semester registrations and the final grade was cumulative, but the total credit value was awarded in the final semester only. All semester registrations preceding the final grade entry would utilize the NG grade.

Transfer Credit (T)

Credit awarded by NEOMED for course work earned at another accredited university is recorded on the transcript with a "T" grade, which has no impact on the student's grade point average. The determination of course equivalencies or summative credit, and applicability toward NEOMED degree requirements differs among colleges/programs as identified below.

Professional Programs

Students offered admission to the College of Medicine or College of Pharmacy as a transfer (advanced standing) student will have their educational records from previously attended, accredited schools of medicine/pharmacy evaluated by the appropriate college Admissions Committee for professional competencies, appropriate placement in the NEOMED curriculum and applicability toward degree requirements at NEOMED. Transfer credit may only be applied to year one and two of the medicine curriculum and years one through three of the pharmacy curriculum. Generally, summative transfer credit amounts and/or an advanced standing class level notation is posted to the transcript rather than individual course equivalencies.

For the medical degree, a minimum of two years of consecutive full-time study must be completed at NEOMED and must include the junior (M3) year. For the pharmacy degree, a minimum of one year must be completed at NEOMED and must include the senior (P4) year. Students interested in advanced standing/transfer admission should be especially aware of these requirements.

Graduate Programs

If graduate credit earned at another accredited institution constitutes a logical part of the student's program, transfer of credit may be allowed when recommended by the student's advisor and program director, and when approved by the Dean of the College of Graduate Studies. Such transfer of credit cannot exceed six semester hours for programs requiring fewer than 40 semester credits. A maximum of 9 semester credits may be accepted in transfer for programs requiring 40 or more semester credits, pending approval. No grade below B may be transferred. Credit awarded by NEOMED for course work earned at another accredited university is recorded on the transcript with a "T" grade, which has no impact on the student's grade point average. All requests for transfer credit, with accompanying official transcripts, must be submitted to the program director no later than a full semester prior to the student's expected graduation date. Additionally, transfer credit may not be utilized toward fulfillment of certificate program requirements.

Dual-Degree Institutional Transfer Credit

Referred to Shared Credit Limit policy outlined later in this Catalog. Program specific limitations for shared institutional credit is incorporated under each program offering by college association, when applicable.

Grade Assignment

The assignment of a specific course or clerkship/rotation final grade is the responsibility of the course director, clerkship director, clinical curriculum director, experiential education director, preceptor or instructor in accordance with the guidelines of the respective College.

Grade Disputes

Grade disputes should only be made when a student contends that a final grade assigned by the faculty member is arbitrary or capricious. "Arbitrary or capricious" implies that:

- The student has been assigned a final grade based on something other than his or her performance in the course; or
- Standards utilized in the determination of the student's final grade are more exacting or demanding than those applied to other students in the course/clerkship; or
- The final grade is based upon standards that are significant, unannounced and unreasonable departures from those articulated in the course description/syllabus distributed at the beginning of the course.

A grade dispute must be for legitimate disagreement and is not appropriate for use simply because a student disagrees with the faculty member's judgment about the quality of the student's work. Examples of legitimate disagreement could include, but are not limited to, the following:

- Students are not informed of the basis for grade calculation in the syllabus, on AIMS or prior to the assignment.
- The student's final grade was not calculated in accordance with the stated policy in the syllabus, on AIMS or as provided prior to an assignment.
- There is significant and unwarranted deviation from grading procedures and course syllabi set at the beginning of the course, or a final grade was assigned arbitrarily and capriciously based on whim or impulse.
- There is an error in the computation of the final grade that was not corrected.

Grade Dispute Procedure

For details, please refer to the NEOMED Student Handbook.

Course Remediation (Professional Programs only)

Students in professional degree programs who achieve less-than-passing grades are required to perform remediation to assure that their level of mastery of the skills or knowledge covered by a given course meets a standard set by the course director. Students are allowed only one attempt to remediate a less-than-passing performance for any course, unless granted an exception by CAPP. Remediation occurs within the same academic year the original grade was assigned. The timing and requirements of remediation are established by the course director and Office of Academic Services, and documented on a remediation contract. The remediation contract is submitted to Enrollment Services for inclusion in the student's record.

The highest grade that can be earned via remediation is passing. If the remediation is successful, a passing grade is placed next to the failing grade on the transcript (e.g., F/P or F/S).

Students with aggregate academic performance concerns may be referred to the Committee on Academic and Professional Progress (CAPP) for review before determinations about eligibility to remediate an individual course can be made.

Repeat Year, Semester Course or Clerkship (Professional Programs only)

All professional degree students who are repeating any curricular year or semester are considered full-time students. They are required to be enrolled in and participate in all courses for that curricular year and adhere to all the requirements of the course(s) unless granted an official, documented exception through the Committee on Academic and Professional Progress. In instances where an exception is granted, the percentage of contact hours enrolled in comparison to their peer group for that same year/semester will determine their enrollment status for financial aid eligibility. All professional degree students who are repeating a clerkship or elective rotation are considered full-time students during the duration of that experience. Any student who repeats a course(s) will have grades for both the original and repeated courses appear on their academic transcript with repeat courses being noted as such.

Repeat Course (Graduate Programs only)

Students receiving a grade of less than "C" in a core course must repeat the course and receive at least a "B". Core courses may only be repeated once. Grades for both the original and repeated courses will appear on the transcript with repeat courses being noted as such. Both the original and repeated grades are utilized in the calculation of the GPA. See College of Graduate Studies Good Standing policy for academic good standing requirements.

Guest/Non-Degree Student

Professional Programs

The College of Pharmacy will consider guest/non-degree student participation in courses on a case-by-case basis; inquiries should be directed to the College Dean. At this time, the College of Medicine does not allow guest/non-degree students to participate in their courses due the nature of their curriculum and course content.

Graduate Programs

The NEOMED College of Graduate Studies permits Guest/non-NEOMED degree seeking individuals to take graduate-level coursework on a limited basis. This allows the opportunity for those who already hold a baccalaureate (or higher) degree to enroll in coursework for professional or personal development without completing the full admission process required for degree-seeking students.

Guest/Non-NEOMED degree seeking students who are not active graduate students from one of our consortium partners for cross-registration purposes (Cleveland State University, Kent State

University, Ohio University, University of Akron or Youngstown State University) must complete an online application and be approved for participation in courses. These individuals will be issued accounts and access to support their course enrollments, but are not otherwise eligible for NEOMED student benefits.

Guest/Non-NEOMED degree seeking students (excluding those eligible for cross-registration) will be charged the current College of Graduate Studies per-credit-hour rate. A maximum of 12 credit hours may be taken in a non-degree seeking status; note that further limitations may be placed on coursework typically associated with certificate programs. Applicability of coursework taken in a non-degree status toward a later degree or certificate will vary by program, should a student choose to apply for degree or certificate-seeking status.

Leave of Absence

Professional Programs

A leave of absence (LOA) may be requested by students for academic, medical, enrichment or personal hardship reasons, and may be mandated by CAPP. The granting of a leave is at the discretion of the University and decided by CAPP Phase 2. Any student considering a leave of absence should meet with the Chief Student Affairs Officer to discuss reasons, objectives, activities, timing, and conditions of the leave and return to the curriculum. Students must complete the Leave of Absence Request Form and provide appropriate documentation. Within five working days, the Executive Director of Enrollment Services or designee shall prepare a written statement of the CAPP decision and send to the student via mail or electronic mail. For all enrichment leave of absence requests or if the co-chair of CAPP Phase 2 requests the student's attendance to discuss a personal leave of absence, the student will be invited to the next CAPP meeting. Students should continue to engage in curricular activities while their request for leave is undergoing review. Refer to the NEOMED Student Handbook for additional details. LOAs are program specific, so it is particularly important that dual-degree seeking students clarify their intent when seeking an LOA. For example, in the IPM program, double degree students (M.D./Ph.D.) take a leave of absence from COM in order to complete the Ph.D. in COGS and then they request reinstatement back into COM upon completion.

Graduate Programs

Due to the variable nature of graduate studies, the needs of a professional student and the variety of different student populations that make up the College of Graduate Studies, Leaves of Absence may not be a needed as long as the student is adhering to the enrollment policy and staying within the specified program length of study requirements. Discussing your options with your advisor is highly encouraged.

- (1) Leaves of Absence
 - Students may request a leave of absence for academic, medical, enrichment, parenting, or personal hardship reasons and may be mandated by The College of Graduate Studies (COGS) Committee on Academic and Professional Progress (CAPP). Students requesting a leave of absence should meet with the Program Director, the Chief Student Affairs Officer and their advisor to discuss the reasons,

objectives, activities, and conditions of the Leave and anticipated return to the program. Students should also discuss the financial implications of taking a Leave of Absence with the Financial Aid director in Enrollment Services. Taking a Leave of Absence or withdrawing from a course beyond a certain point in the academic calendar does not eliminate the financial obligation of the student.

- (b) Students wishing to take a leave of absence from a program or position paying a stipend should discuss the impacts of the leave of absence on the stipend with the Program Director.
- (c) A <u>Leave of Absence Request</u> Form is required and is available either online or by securing a hardcopy from Student Affairs or Enrollment Services. Forms should be returned to the Office of Student Affairs for use in scheduling a review by the Dean.
- (d) Leaves of absence are granted at the discretion of the University and decided upon by the Dean of the College of Graduate Studies, in collaboration with the Program Director.
- (e) To be eligible for a leave of absence, a student must be:
 - i. Seeking a Graduate Degree or Certificate
 - ii. In good academic standing
 - iii. Making satisfactory progress toward the degree. Leaves of absence will not be granted to students who are not in good academic standing.
- (f) The overall length of the program is not extended should a leave of absence be approved. Students are expected to meet the Academic Program Length Restrictions specified by the College of Graduate Studies, inclusive any leave of absence from the program.
- (g) Students on a leave of absence that are not enrolled in another University program are not considered active students and therefore forfeit access to university amenities including but not limited to: Academic resources, library resources, research resources, and pre-registration. Students will have privileges returned once they have re-enrolled in their graduate programs.
- (h) A student wishing to return from an approved leave of absence will need to <u>petition to return</u> to the program. Petitions should be routed through the Program Director to the CAPP.
- If a student does not petition to return to the program within the agreed time frame of the leave, the student will be considered as withdrawn from the program and will need to re-apply to the COGS.

Medical Student Performance Evaluation

Specific to the College of Medicine, the Medical Student Performance Evaluation (MSPE) is an institutional assessment composed on behalf of the medical school faculty and is a key part of a

student's residency application. The MSPE describes, in sequential manner, a student's performance, as compared to that of his/her peers, through three full years of medical school. The MSPE includes an assessment of both the student's academic performance and professional attributes. The MSPE is compiled upon successful completion of all core clinical clerkships in the M3 year. Data utilized in the creation of the MSPE include academic progress, notable accomplishments, assessment of professionalism, and clerkship/rotation assessments. Both Enrollment Services and Student Affairs personnel assist in the creation, distribution and maintenance of this document according to guidelines set forth by the Association of American Medical Colleges (AAMC). The release date for the MSPE is October 1 of the M4 year. Due to the nature of this document, requests for copies are only honored after the internship/residency selection process for which the MSPE was intended has concluded, and are stamped "issued to student." It is important to note that the transmission of the MSPE to residency programs (even after graduation) must be directly from the institution to the residency program through ERAS. If a student is applying to residency positions outside of ERAS, the MSPE must still be transmitted directly from the institution to the program.

Registration (Annual)

Professional programs are predominantly cohort based and NEOMED requires students within these programs to confirm their intent to continue with their studies by engaging in a required annual registration process that is separate and unique from course registration. Annual registration and onboarding occurs during the summer prior to the start of each fall semester, and involves the completion of a series of documents and acknowledgements to include, but is not limited to: the student conduct code, medical insurance enrollment or waiver, enrollment in mandatory life and disability insurance, immunization process and submission of required health records, etc. Both new and continuing students engage in this process annually, and with various degrees of responsibility.

Registration (Course)

NEOMED uses a combination of mass registration and student self-service registration.

Professional Programs

Professional degree students do not engage in traditional course registration during the didactic portion of their curriculum (M1, M2, P1, P2, P3), but instead are automatically registered in their required courses by Enrollment Services personnel twice a year, once in August and once in December. Students entering curriculum years with electives (P2, P3) or with courses that are primarily clinical in content (M3, P4, M4) engage in scheduling processes that permit them to submit preferences, rather than a simple first-come/first-served assignment process.

Graduate Programs

Students are responsible for completing all Student onboarding tasks within AIMS (the NEOMED learning management system), and registering themselves for all relevant coursework via the

online registration system in Banner Self Service. To exceptions to this are: students in the Health-System Pharmacy Administration program may be mass registered for standard coursework by Enrollment Services personnel, and students taking cross-registered courses at a partner University are required to complete a special cross-registration form available at <u>http://www.neomed.edu/wp-content/uploads/REG_CrossRegForm_2017.pdf</u>, and submitted to the applicable program coordinator. Upon receipt of that form, Enrollment Services personnel will administratively register students for their courses.

Registration periods typically open about two months before the semester begins, with established add/drop periods that allow students to experience courses before making a final commitment. Specific dates and deadlines for each semester are published on the Enrollment Services website and distributed to active students via email. Students are encouraged to register no later than two weeks before the start of the semester to ensure accurate and complete billing. Please also see the section on "Course Drop and Withdraw" for further information.

Additional details regarding the registration/enrollment process for all students are posted to the Enrollment Services website at http://www.neomed.edu/registrar/annual-registration/

Course Types

Definitions for the various course types that NEOMED offers are identified below:

Lecture, Seminar and Small Group Discussions

Formalized instruction, conducted on-or off-campus, in which the instructor(s) present an educational experience to students, applying any combination of instructional methods. Faculty/instructor(s) bear the primary responsibility for instructional activity and are directly involved with all the students in the class.

Laboratory

An educational activity with students conducting experiments, perfecting skills or practicing procedures under the direction of faculty/instructor(s).

Field Experience

A form of experiential learning obtained by going on an educational field trip or series of field trips, typically organized and supervised by NEOMED faculty, to meet the needs of the curriculum and to develop practical skills in an environment beyond the classroom and/or campus.

Internship and Practicum

Credit bearing, non-paid work experiences that are integrated with academic instruction and relate to an individual students occupational goal. Students concurrently apply learned concepts to practical situations within an occupational field. The experience is coordinated by NEOMED faculty, who assist the students in planning the experience and assigns the course grade in consultation with the supervisor/employer. Students complete pre-determined assignments that

may include weekly journals, quizzes, tests, final paper or an experience report. The use of Internship verses practicum in the course title may be used interchangeably to accommodate differences in accreditation nomenclature.

Independent Study and Research

These are student-initiated experiences to pursue an area of interest not otherwise covered by a regular course offering, with the guidance of a NEOMED faculty member. Faculty have primary responsibility for deciding the subject content, course objectives and the amount of effort to be expended by the student, and provides guidance/instruction whenever required. Students complete pre-determined assignments, which may include a final research paper and/or presentation of findings. Faculty periodically assess the student's progress, determine evaluation methods and assigns the final grade. Course/research details and expectations must be documented on a NEOMED Independent Study and/or Research contract form and submitted to Enrollment Services for inclusion in the student record and registration purposes.

Advance Pharmacy Practice Experience, Clerkships and Rotations

These educational experiences expose fourth year pharmacy and third and fourth year medical students to all facets of medicine and/or pharmacy practice in a variety of clinical and/or practical settings. Students participate in clinical sciences, patient care and/or pharmacy practice experiences and learn diagnostic and therapeutic skills, gain experience in patient management and examine the ethical dilemmas of contemporary medicine. Faculty regularly provide special teaching sessions appropriate to the learning level of the students.

Distance Learning

Distance learning opportunities are educational experiences that take place when the student and faculty are separated by location and/or time, but can engage in teaching/learning activities through use of technology such as videoconference and the internet. Teaching/learning activities may be synchronous or asynchronous and may be offered in a hybrid delivery format where specific in-class activities may be required.

Cross-Listed

A cross-listed course is a single course offered jointly by two or more colleges/department that is identical in every aspect other than the course identifier (course subject code is always different; course number may or may not be the same).

Dual-Listed

A dual-listed course is a single course offered independently or jointly with another department/college that can be transcripted at multiple levels. While course content and credit value is identical for all enrolled students, there are variations in expectations regarding course rigor, competencies, and/or assessment measures that are applied to different student population.

Co-Scheduled (Meets with)

A co-scheduled course is two or more independent courses that have limited shared content and wish to meet together to capitalize on the delivery of common content only. Co-Scheduled courses are distinguished from cross-listed and dual-listed courses by the fact that only some portion of the academic experience is common between the classes, and credit hours and course identifiers do not have to be aligned.

Interprofessional

Interprofessional courses are designed for students from two or more health professions that include content and objectives that promote students learning with, from and about each other, within the occupational context, to improve collaboration, practice and the quality of health care from a health professions team perspective.

Interdisciplinary

Interdisciplinary courses are designed for students from two or more health professions that do not have specific learning expectations regarding collaboration and sharing of discipline specific content expertise and perspective.

Semester Credit Definition

NEOMED awards semester credit based on an amount of work that reasonably approximates to no less than 750 minutes (12.5 clock hours) of formalized instruction plus 1,500 minutes (25 clock hours) of out-of-class assignments for each semester credit awarded. One instructional contact/academic hour equals 50 clock minutes.

NEOMED recognizes that formalized instruction may take place in a variety of delivery methods and variable lengths of time within the semester calendar definition. As such, NEOMED utilizes the following semester credit calculations based on delivery method and the expectation that the minimum amount of formalized instruction, independent learning, and intended outcomes are being accomplished:

Lecture, Seminar and Small Group Discussions

15 contact/academic hours (12.5 clock hours) of formalized instruction (anticipates an additional 25 clock hours of student out-of-class independent learning) = 1 semester credit.

Laboratory

30 contact/academic hours (25 clock hours) of formalized instruction (anticipates an additional 12.5 clock hours of student out-of-class independent learning) = 1 semester credit.

Directed Study, Non-Clinical Independent Study, Field Experience and Non-Clinical Research

45 contact/academic hours (37.5 clock hours) of formalized instruction and/or student out-ofclassroom independent learning in any combination = 1 semester credit.

Advance Pharmacy Practice Experience, Clerkship, Practicum, Clinical Independent Study or Research, and Rotations

1 week or 40-45 clock hours of formalized instruction and/or student out-of-classroom independent learning in any combination = 1 semester credit.

Shared Credit Limits (Graduate College)

A minimum of 60% of required credit hours must be unique to each degree and cannot be used for dual credit. Departments and programs may impose more stringent shared credit limits, but may not exceed the University limit.

Student Record Confidentiality and Disclosure

NEOMED takes student record confidentiality very seriously and fully complies with the Family Educational Rights and Privacy Act (FERPA), as amended. FERPA is the federal law that governs release of, and access to, student education records. FERPA, or the Buckley Amendment, affords students certain rights regarding their education records. These rights include:

- 1. The right for students to inspect and review their education records within 45 days of the day the University receives a request for access. (NEOMED typically responds to requests for information within 3-5 working days and often within the same day the request is received.)
- 2. The right for students to request an amendment to their education records believed to be inaccurate, misleading, or otherwise in violation of their privacy rights under FERPA.

A student who wishes to ask the University to amend a record should write the University official responsible for the record, clearly identify the part of the record the student wants changed and specify why it should be changed. If the University decides not to amend the record as requested, the University will notify the student in writing of the decision and his/her right for an appeal/hearing.

3. The right for students to provide written consent before the University discloses personally identifiable information from their education records, except to the extent that FERPA authorizes disclosure without consent.

The University discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted as its agent to provide a service instead of using University employees or officials (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his

or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the University. For the College of Medicine, community-based faculty and educators who are involved in the teaching and/or oversight of student clinical experiences are school officials and, consequently, may be provided with or have access to student clinical performance data.

FERPA also allows for the release of "Directory Information" to external constituencies and thirdparty individuals without the prior consent of the student. NEOMED has identified Directory Information as: student name, addresses, telephone listing, email addresses, photograph, dates of attendance, class, enrollment status, electronic personal ID (user name), major field of study, previous institutions attended, awards, honors and degrees received, participation in recognized activities, residency match results, date and place of birth, hometown, and names of parents, spouse and children.

However, as a general operating practice, NEOMED does not release lists of student directory information to external constituents (or "third-parties") unless it is perceived as a potential benefit to the student (e.g., national and/or state AAMC associations). Students can choose to restrict access of their Directory Information without written consent if desired.

All students are provided the opportunity to initiate a FERPA non-disclosure restriction on their account at the beginning of each academic year. New students are provided with an in-person introduction to FERPA as part of their Orientation to the University, followed by the all-student communication that is emailed to students each semester by the Office of Enrollment Services. The deadline for submitting an annual FERPA nondisclosure request is September 1 of each year.

Initiating a FERPA non-disclosure restriction prevents University personnel from releasing Directory Information to any entities not specifically excluded from this release as identified in the federal legislation. Students should carefully consider whether they want to initiate a FERPA nondisclosure restriction on their record as it may have unintended consequences.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA.

Additional information about NEOMED's student records privacy policy can be found in Appendix VII of the *NEOMED Student Handbook*.

Questions or concerns about this policy should be directed to the University Registrar, a member of Enrollment Services.

FERPA legislation can also be found at the U.S. Department of Education website at <u>http://www.ed.gov/policy/gen/reg/ferpa/index.html</u>.

Transcripts

An academic transcript is an official and complete copy of a student's academic work in chronological order by enrollment date. In addition to course enrollment, academic unit and earned final grade data, transcripts typically include official academic actions or changes, such as academic program, transfer and/or proficiency credit, special academic status, withdrawals, dismissals and degrees earned. In instances when a student is non-voluntarily separated from the University, a transcript notation indicating the reason for the separation, the authorizing party or committee that levied such action and the effective date are visible on the transcript. If the separation is temporary in nature (e.g., CAPP mandated LOA or suspension) the date when the student is eligible for reinstatement is also included as part of the transcript notation. The University Registrar in Enrollment Services maintains all permanent academic records including transcripts. Students interested in securing a copy of their transcript should refer to the <u>Academic Record Requests</u> sub- header identified earlier in this catalog. Transcripts are provided to students free of charge.

University and/or College Withdrawal

When voluntarily withdrawing from the University and/or a College, the student must complete and submit a Withdrawal Form to the Registrar in Enrollment Services and their Program Director (in the case of the College of Graduate Studies), and is considered withdrawn as of the date the form is received. A withdrawal is distinctly different from a Leave of Absence as it suggests the student has no intention to return to a college or the University, or anticipates more than twoyears (6-consecutive semesters, inclusive of summer) of non-enrollment. Tuition refunds are made to any student officially withdrawing from all classes, in conformity with the University Refund Policy as stated in the Financial Aid section of the NEOMED Student Handbook. Students withdrawing from NEOMED are required to follow the steps/checklist as outlined on the Withdrawal Form. A student who withdraws and who later seeks re-entry must reapply via standard admission procedures through Enrollment Services. Re-admission is not guaranteed, and information from the student file in the Registrar's Office may be considered in the admissions process; individual colleges or programs may prohibit readmission. Students may not withdraw from the university as a way to avoid dismissal or suspension once their academic performance and/or behaviors warrants such action by the Committee on Academic and Professional Progress or similar body, unless explicitly allowed by their respective college.

USMLE Requirement (College of Medicine)

The National Board of Medical Examiners has established a three-step examination process for medical licensure in the United States. The *United States Medical Licensing Examination (USMLE)* provides a common assessment system for applicants for medical licensure. NEOMED medical students are required to obtain passing scores on USMLE Step 1, Step 2 CK (Clinical Knowledge) and Step 2 CS (Clinical Skills) to be eligible for graduation. Individuals must have passed Step 1, and both parts of Step 2 (CS and CK) to be eligible to take Step 3. Step 3 is usually taken after one year of residency training. All three steps must be taken within a seven-year period for licensure eligibility. General guidelines and processes for USMLE registrations are available at

<u>www.usmle.org</u>. NEOMED specific policies and expectations regarding both the scheduling and passing of the USMLE are outlined in the *NEOMED Student Handbook*.

Tuition, Fees and Related Policies

Cost of Attendance - Student Budget

The University is required by federal regulation to develop standard budgets that include typical student expenses to detail the cost of attendance. These include the direct educational expenses for tuition, fees, books and supplies and average living expenses. The items included under living expenses are those allowable by federal regulation — rent, food, transportation, utilities, laundry, child care, personal hygiene items, costs related to a handicap, clothing, health insurance, disability insurance, medical/dental expenses, recreation and photocopying. It is also important to note that the maximum amount of aid a student may receive each year from all sources is the total amount of the student budget for direct educational expenses plus the University's averages for living expenses.

Student budgets serve three major purposes:

- to support students in financial planning and budgeting,
- to assist with the equitable distribution of student financial aid dollars, and
- to assure educational access and choice.

The budget is determined annually based on student surveys, the inflation rate and information from the U.S. Bureau of Labor Statistics. Although students may differ on how much they spend for books and supplies, room and board, personal expenses and transportation, the student budget contains the figures used when determining financial aid awards. Budgets by college are presented in the following pages.

All tuition and fees, including insurance costs, are subject to change without notice.

TUITION AND FEES	M1	M2	M3	M4
Tuition*	\$36,710	\$36,710	\$48,940	\$36,710
General Fee	\$1,135	\$1,135	\$1,135	\$1,135
Life and Disability Insurance	\$55	\$66	\$66	\$66
Student Health & Fitness	\$817	\$828	\$838	\$538
Student Activities	\$190	\$190	\$190	\$190
Matriculation Fee	\$300	\$0	\$0	\$0
Graduation Fee	\$0	\$0	\$0	\$264
Academic Software/Hardware	\$202	\$145	\$958	\$213~
Credentialing	\$149	\$85	\$304	\$85
Testing	\$480	\$916	\$1,188	\$500
Course Fees	\$243	\$81	\$50	\$0
Total Tuition and Fees: Ohio Resident	\$40,281	\$40,156	\$53 <i>,</i> 669	\$40,106
Total Tuition and Fees: Non-Ohio				
Resident	\$76,991	\$76,866	\$102,609	\$76,816
NON-BILLABLE CHARGES				
Books/Supplies (estimate)	\$1,200	\$1,190	\$1,040	\$600
Technology	\$700	\$0	\$0	\$0
USMLE (student cost)***	\$0	\$605	\$1 <i>,</i> 885	\$400
Criminal Background Check (estimate)	\$0	\$45	\$0	\$0
Total Non-Billable Charges	\$1,900	\$1,840	\$2,925	\$1,000
INDIRECT COSTS				
Housing**	\$9 <i>,</i> 450	\$9,450	\$12,600	\$9 <i>,</i> 450
Miscellaneous	\$5,170	\$5,170	\$6 <i>,</i> 890	\$5,575~
Transportation	\$3,210	\$3,210	\$4,280	\$3,210
Medical Insurance	\$2,052	\$2,488	\$2,488	\$2,448
Total Indirect Costs	\$19,882	\$20,278	\$26,218	\$20,278
Total Cost of Attendance: Ohio				
Resident	\$62,063	\$62,274	\$82,812	\$61,384
Total Cost Of Attendance: Non-Ohio				
Resident	\$98,773	\$98,984	\$131,752	\$98,094
Total Cost of Attendance: Ohio Res Living w/				
Parent	\$60,873	\$61,084	\$80,212	\$60,194

2017-18 College of Medicine Student Budget

* Non-Ohio Resident Surcharge is \$36,710 (M1, M2, M4) or \$48,940 (M3)

**Housing for students living with parents: \$8,260 (M1,M2,M4) or \$10,000 (M3) ~Denotes a correction to an earlier publication which erroneoursly stated charges for M4 Academic Hardware/Software as \$618 and Miscellaneous as \$5,170.

Notes regarding this document:

1. For personal budgeting tips, students are able to use funds allocated for non-billable charges and indirect education expenses for reasonable education related expenses. Students are not billed by the University for these expenses. Students relying on financial aid to assist will need to factor these expenses into their financial aid refunds.

2. Students who are experiencing extraordinary financial hardships are encouraged to review the Budget Adjustment Policy to see if their expenses qualify to be added into their overall financial aid budget.

All tuition and fees are subject to change without notice.

TUITION AND FEES	P1	P2	P3	P4
Instructional Tuition (Ohio Resident)*	\$21,040	\$21,040	\$21,040	\$26,295
General Fee	\$1,135	\$1,135	\$1,135	\$1,135
Life and Disability Insurance	\$63	\$75	\$75	\$75
Student Health and Fitness	\$817	\$828	\$828	\$538
Student Activities	\$190	\$190	\$190	\$190
Matriculation	\$300	\$0	\$0	\$0
Credentialing	\$48	\$13	\$77	\$13
Testing	\$335	\$130	\$420	\$120
Course Fees	\$180	\$283	\$0	\$0
Academic Hardware/Software	\$694	\$352	\$352	\$352
Graduation	\$0	\$0	\$0	\$264
Total Tuition and Fees: Ohio Resident	\$24,802	\$24,046	\$24,117	\$28,982
Total Tuition and Fees: Non-Ohio Resident	\$35,322	\$34,566	\$34,637	\$42,130
NON-BILLABLE CHARGES				
Books/Supplies (estimate)	\$1,000	\$870	\$800	\$250
Technology	\$700	\$0	\$0	\$0
Intern License	\$75	\$23	\$23	\$23
Criminal Background Check (estimate)	\$0	\$0	\$45	\$0
Total Non-Billable Expenses	\$1,775	\$893	\$868	\$273
INDIRECT COSTS				
Housing**	\$9,450	\$9 <i>,</i> 450	\$9 <i>,</i> 450	\$11,550
Miscellaneous	\$5,170	\$5,170	\$5,170	\$6,320
Transportation	\$3,210	\$3,210	\$3,210	\$3,920
Medical Insurance	\$2,052	\$2,448	\$2,448	\$2,448
Total Indirect Costs	\$19,882	\$20,278	\$20,278	\$24,238
Total Cost of Attendance: Ohio Res. Living Off				
Campus	\$46,459	\$45,217	\$45,263	\$53,493
Total Cost of Attendance: Non-Ohio Resident	\$56,979	\$55,737	\$55,783	\$66,641
Total Cost of Attendance: Ohio Res. Living with				
Parent	\$45,269	\$44,027	\$44,073	\$51,943

2017-18 College of Pharmacy Student Budget

* Non-Ohio Resident Surcharge is \$10,520 for P1,P2 ,P3 or \$13,148 for P4

**Housing for students living with parents is \$8,260 (P1,P2,P3) or 10,000 (P4)

Notes regarding this document:

1. For personal budgeting tips, students are able to use funds allocated for non-billable charges and indirect education expenses for reasonable education related expenses. Students are not billed by the University for these expenses. Students relying on financial aid to assist will need to factor these expenses into their financial aid refunds.

2. Students who are experiencing extraordinary financial hardships are encouraged to review the Budget Adjustment Policy to see if their expenses qualify to be added into their overall financial aid budget.

All tuition and fees are subject to change without notice.

			MS	
	Masters in	Integrated	Pharmacy	Masters in
TUITION AND FEES (Based on 12 credit	Public	Pharm.		Medical
hours)	Health	Med	Admin.	Ethics
Instructional Tuition	\$6,912	\$6,504	\$6,504	\$6,504
General Fee	\$0	\$444	\$444	\$444
Student Health & Fitness	\$0	\$72	\$0	\$42
Student Activities	\$0	\$50	\$0	\$0
Academic Program Hardware/Software Fee	\$0	\$60	\$60	\$0
Technology Fee	\$204	\$0	\$0	\$0
TOTAL TUITION AND FEES - OHIO				
RESIDENT*	\$7,116	\$7,130	\$7,008	\$6,990
TOTAL TUITION AND FEES - NON-				
RESIDENT*	\$7,248	\$7,262	\$7,140	\$7,122
NON-BILLABLE CHARGES				
Books/Supplies (estimate)	\$530	\$0	\$400	\$0
TOTAL NON-BILLABLE EXPENSES	\$530	\$0	\$400	\$0
INDIRECT COSTS				
Housing**	\$8,400	\$8,400	\$8,400	\$8,400
Miscellaneous	\$4,600	\$4,600	\$4,600	\$4,600
Transportation	\$2,850	\$2 <i>,</i> 850	\$2,850	\$2 <i>,</i> 850
TOTAL INDIRECT COSTS	\$15,850	\$15,850	\$15,850	\$15,850
TOTAL COST OF ATTENDANCE - Ohio				
Resident :	\$23,496	\$22,980	\$23,258	\$22,840
TOTAL COST OF ATTENDANCE - NON Ohio				
Resident:	\$23,628	\$23,112	\$23,390	\$22,972
TOTAL COST OF ATTENDANCE - Living w/				
Parent:	\$22,436	\$21,920	\$22,198	\$21,780

2017-18 College of Graduate Studies Student Budget

*The student budget is **based on enrollment for six credit hours in each of the fall and spring semesters**. Your tuition and financial aid will be adjusted to your actual enrollment each semester. Courses taken in the summer are not reflected in this budget; but if you maintain half-time enrollment status (4.5 credit hours or greater) each semester, you will be eligible for fin aid and increased living expenses.

**Room and Board for students living with parents: \$7,340

A Non-Resident surcharge of \$11 per credit hour is added to the cost of attendance to those who are non-Ohio residents for tuition purposes.

The following items are not factored into the budget, but are eligible to be added:

- Non Dual Degree students will be assessed a \$50 matriculation fee upon admittance into the program.
- Graduating COGS students will be assessed a \$264 graduation fee
- Students attending the Bioethics Certificate program are not eligible for federal financial aid funds.

All tuition and fees are subject to change without notice.

Calculating Financial Need for the Student with Unusual Circumstances

Some students incur expenses not experienced by a majority of students that therefore, are not included in the standard student expense budgets. With required documentation, however, these expenses may be added to the standard budget on an individual basis and be considered in an analysis of the student's need. These expenses include, but are not limited to, dependent care, child support, alimony payments, extenuating legal expenses, certain insurances, costs incurred for securing a residency position (M4 and P4 students only) and extraordinary medical expenses not covered by insurance.

It should be noted, however, that it is the policy of the University not to adjust individual student budgets except for extremely mitigating circumstances. All requests for budget adjustments should be submitted in writing to Enrollment Services.

Payment of Fees

The University is on a semester schedule; therefore, students are billed at the beginning of the fall and spring semesters (third-year medical students are also billed at the beginning of the summer semester). Students may pay by cash, check or other normally accepted means including MasterCard or Discover. No arrangements will be considered for any student who cannot pay the balance of the fees due before the end of the semester.

Tuition bills are found online via Banner Self-Service. Fees are to be paid by the start date of the semester. If payment is not made by that date, class attendance or participation in clerkships or electives will not be allowed. If payment has not been made 10 days after the due date, the student will be assessed a non-refundable late fee of \$50.00 and a hold will be placed on the student's account.

Registration and Financial Aid

In order for a student to qualify for financial aid, they must be registered at least half time status or greater. The below chart reflects the credits needed to be qualified as half time status for financial aid eligibility:

	Less than Half Time	Half Time	Three-Quarter Time	Full Time	
COM	< 5 credits	6 Credits	9 Credits	12 Credits or	
				greater	
COP	< 5 credits	6 Credits	9 Credits	12 Credits or	
				greater	
COGS	< 4.5 Credits	4.5 – 6 Credits	6.5 – 8.5 Credits	9 Credits or greater	

Disbursement of Aid

Prior to the actual disbursement of loan funds, students will be required to complete promissory notes and loan entrance counseling. Students receiving institutional loans will also need to

complete a Truth-in-Lending Statement, Statement of Rights and Responsibilities, Self-Certification Form and an Information Sheet. In addition, students awarded a scholarship may be required to write a thank you note to the donor for their generous donation that made their scholarship possible.

No financial aid funds can be disbursed to the student earlier than 10 days prior to the first day of a semester where a student is registered for a credit-valued course. If there is a balance due the school, this amount will be deducted and any remaining balance will be issued to the student within five to seven working days. Loans are disbursed in equal installments commensurate with the semester start dates during the academic year (unless the student begins the semester in a non-credit valued course, such as career preparation). Available refunds can be mailed to the student's local address or directly deposited into a checking or savings account within one week of their disbursement to the student's account.

Financial Aid Distribution Policy and Practice

To qualify for aid at the start of the term (as well as during the academic year), a student must be engaged in credit valued coursework that establishes them as at least half-time status enrolled or greater. Students who are enrolled for less than half time status are not eligible to receive financial aid funds.

In addition, any student who elects to begin an academic term with a non-credit valued course (such as career prep) will not be eligible to receive a distribution of financial aid until at least 10 days prior to the start of their first credit valued course/experience. Likewise, students who elect to end a term in a non-credit valued course will not qualify for aid during this period. Students who elect to break their non-credit experience throughout the term will not be eligible for financial aid during the period they are not engaged in credit-valued coursework.

University Refund Policy

Regulations:

Registration does not automatically carry with it the right of a refund or reduction of indebtedness in cases of failure or inability to attend class or in cases of withdrawal. The student assumes the risk of all changes in business or personal affairs. NOTE: The term "refund" used in this section refers to the amount of tuition credited to the student account, not the portion of a payment that will be returned to the student.

Fees Subject to Refund:

Instructional and nonresident surcharge.

Amount of Refund:

Amount of refund is to be determined in accordance with the following regulations and subject to requirements contained in the College's withdrawal policy:

In Full:

If the University cancels the course;

If the University does not permit the student to enroll or continue except for disciplinary reasons; If the student drops the course(s) during the add/drop period (College of Graduate Studies only); If the student becomes deceased before or during the term

If the person is drafted into military services by the United States and called to active duty.

A student who enlists voluntarily for active duty is subject to the refund policy below.

Administrative Withdrawal Resulting from CAPP Decisions

If a student begins a semester and is then required by the Committee on Academic and Professional Progress (CAPP) to withdraw from the curriculum (via a leave of absence or dismissal) based on performance in the prior semester, the student will be administratively withdrawn from the current semester and issued a 100 percent refund of instructional fees, regardless of the date of action. All other tuition related fees will be refunded at a percentage based on the number of days attended during the period of enrollment in the semester. No refund will be granted to a student dismissed or suspended for disciplinary reasons. Student's financial aid will be recalculated under the Return of Title IV policy to determine the amount of aid that the student is eligible to maintain versus what must be returned.

Partial Refunds – Professional Degree Programs

Fees shall be refunded to a student who withdraws or otherwise does not complete the course or curriculum in which the student is registered based on the percentage of attendance by the student, calculated on a term basis. Refunds will be calculated as follows:

Withdrawal within 60 percent of the enrollment period:

Refund is based on percentage of attendance in a semester calculated by dividing the total number of days included in the period of enrollment into the number of days remaining in the period as of the official notice of leave or withdrawal, or if no official notice is given, the last recorded day of attendance. The period of enrollment includes weekends, holidays, and excludes scheduled breaks of five or more days.

Withdrawal beyond 60 percent of the enrollment period:

No refunds will be issued to students who withdraw after completing 60 percent of the enrollment period.

Partial Refunds – Graduate Degree Programs (revised 3/17/16)

Instructional fees shall be refunded to a student who withdraws or takes a leave of absence based on the percentage of attendance by the student beyond the add/drop period. The percentage of enrollment period is calculated by dividing the total number of days left in the enrollment period by the total number of days in the period of enrollment (includes add/drop period). Refunds will be calculated as follows:

Withdrawal within 60 percent of the enrollment period

Refund is based on the number of days left in the enrollment period *as of the date of withdrawal* divided by the total number of days in the period of enrollment (excludes add/drop period).

Withdrawal beyond 60 percent of the enrollment period

No refunds will be issued to students who withdraw after completing 60 percent of the enrollment period.

Financial Aid Refunds:

If a student is a recipient of Federal Title IV aid, refunds to those programs are required by federal law to be the first priority and must be returned in the following order:

- 1. Federal Direct Unsubsidized Loan
- 2. Federal Direct GradPLUS Loan
- 3. Campus-Based Aid (e.g., grants, scholarships, institutional loans)

The Accounting and Financial Aid Offices will determine whether a student is due a postwithdrawal disbursement or if a student is responsible for returning a portion of the Title IV aid received.

Refunds will not be issued to individual students until Federal Title IV programs or other scholarships are reimbursed as required and all outstanding balances with the University have been cleared.

Refund Schedule

The Accounting Office will process the refund within 45 days of the date of withdrawal. All balances due to the University because of other obligations will be deducted from the amount refunded.

If fees were paid in part by financial aid, the applicable portion of the refund must be returned to the appropriate financial aid program. Federal regulations require a proportionate refund to Title IV federal student aid funds (programs sponsored by the U.S. Department of Education). The federal calculation formula used in determining the portion of the fee refund applied to federal student aid funds is (A x B = C):

- A. Total amount of the percentage of Title IV aid earned by the student (timeframe the student spent in the curriculum based on the length of the semester)
 x
- B. The total amount of aid that could have been disbursed for the semester
- C. The amount of Title IV aid earned by the student for the timeline enrolled.

Example:

Student A attended 53.8% of the period of enrollment for fall semester. \$29,850 of Title IV aid was disbursed to the students account. Using the above formula, 53.8% x \$29,850 means that the student was eligible to utilize \$16,059.30 of the total award given and that the remaining \$13,970.70 would need to be returned as unearned financial.

When refunding monies to the various financial aid programs, the following priority listing is used (subject to change without notice):

- 1. Federal Direct Unsubsidized Loan
- 2. Federal Direct Grad PLUS Loan Program
- 3. Primary Care Loan
- 4. Loans for Disadvantaged Students
- 5. Campus-based Aid Loan Program
- 6. Campus-based Aid Grants/Scholarships
- 7. Student

Loan servicers will be notified of the date of a student's withdrawal.

Financial Aid and Related Policies

Financial Aid Overview

Financial aid programs were developed by the federal and state governments as well as by institutions of postsecondary education to assist students from families with limited resources to meet educational expenses. The primary purpose of financial aid is to ensure that no one is denied the opportunity of a college education, because of financial need. Northeast Ohio Medical University offers comprehensive programs of financial assistance that include scholarships, loans, grants, service programs and college work-study employment. Each university offers federally funded and state-funded financial aid programs to help defray education costs.

A number of sources of aid are available to meet the needs of financial aid applicants. Students are encouraged to explore the possibilities for financial aid from all appropriate sources.

It is not unusual for a student to have multiple forms of aid. This is called a "financial aid package." If a student receives a proper financial aid package, it is assumed that the family will not be expected to contribute more than is reasonable for the student's education. The University is not obligated to meet a student's total need. Each student's individualized financial aid package is based on need, availability of funds and the University's own award policies.

Students may also review the scholarship opportunities listed on the Enrollment Services Website. Students are urged to investigate opportunities in their hometowns and counties by contacting clubs, organizations, foundations, labor unions, companies, churches and synagogues, county medical societies, sororities, fraternities etc., to determine if scholarships or loans are offered to students.

Students who are veterans of the U.S. Armed Forces must contact their local Department of Veterans Affairs for assistance in determining eligibility and in applying for veterans' benefits. Students who are interested in the Health Professions Scholarship Program (HPSP) should contact Military recruiter. Recruiter contact information is available in Enrollment Services.

Institutional Sources of Aid

Because of limited aid, the University believes the primary responsibility for financial support rests with the student, spouse and parents. The University must obtain information about all potential resources available to applicants for financial aid so these limited funds are distributed to the neediest of students.

Financial Aid Eligibility

While the student is attending one of the partner universities, financial aid eligibility and package are determined by that undergraduate university. In addition, each university has established its own policies, forms, timelines and procedures for applying for, determining eligibility and receiving aid.

Once a student matriculates to NEOMED, the University awards financial aid. All M.D. students are considered graduate students pursuing a professional degree. Therefore, federal and state regulations, programs, application procedures and forms differ from financial aid procedures followed in Phase 1 and any other undergraduate program. Pharm. D. students with at least 72 semester credit hours earned are also considered graduate students. All Graduate Studies students are considered graduate students pursuing a professional degree.

The basis for awarding most financial aid is financial need. Financial need is the difference between educational costs and the expected family contribution toward these costs. It is this "unmet need" that financial aid offices attempt to cover through various financial aid programs to assist students in meeting educational costs.

The expected family contribution is derived from a federally approved financial analysis statement and formula that analyzes the family income, size, number of family members in college, assets, tax payments, medical and unusual costs, other benefits, savings and student earnings. All of these items, which vary from family to family, are used to assess financial need, not just income. Therefore, a determination of eligibility can be made only when the application process has been completed.

Financial aid eligibility is:

Based on the concept of financial "need." Need is determined by the cost of attendance (student budget) less student's contribution (amount a student and spouse are expected to contribute to the student's education), and less parents' contribution (the amount a student's parents are expected to contribute to the student's education, if applicable). Factors considered are:

- Adjusted Grose Income
- number of children in college
- savings
- assets
- other debts, expenses or special circumstances
- family size

All of these variables are considered in the determination of financial need. The Free Application for Federal Student Aid (FAFSA) is required to determine the resources of applicants and families.

Independent Student Definition

All M.D. students are considered graduate students pursuing a professional degree and are, therefore, considered independent of their parents when determining eligibility for the Federal Stafford Loan program.

All Pharm. D. students with at least 72 credit hours earned are considered graduate students and are, therefore considered independent of their parents when determining eligibility for the

Federal Stafford Loan program. Pharm. D. students with fewer than 72 credit hours earned will be considered dependent students of their parents, unless meeting other criteria for independence.

All Graduate Studies students are considered graduate students pursuing a professional degree and are, therefore, considered independent of their parents when determining eligibility for the Federal Stafford Loan program.

Independent students are not required to include parent income and asset values when completing the FAFSA application. A calculation of the EFC for independent students is based solely on the student's (and spouse when applicable) income, asset and household size. It is strongly encouraged, however, to include parental data as an independent student to ensure you qualify for all need-based opportunities, specifically those need-based sources available through the Department of Health and Human Resources. There are forms of federal aid offered to health professions students, which makes it necessary for us to consider parental contributions for independent students as a means to qualify for the opportunities.

There are cases where a student can qualify for NEOMED need-based aid without providing parental data. Qualifications a student must meet include:

- 1. Be the age of 26 or older as of June 1 of the year their academic program begins;
- 2. Have received 150% or more of their Pell Lifetime Eligibility Usage; or,
- 3. Are or were a member of the Army, Air Force or Navy.

Students meeting these qualifications are eligible to apply for a waiver, allowing them to be considered for only NEOMED need-based aid opportunities. Opportunities through the Health and Resource Administration would not be eligible to a student who applies for a waiver.

In the event a student feels their circumstances should warrant consideration for the exclusion of parental information to qualify for need-based aid, the student can contact Financial Aid to request a Professional Judgment Appeals Form.

Financial Aid Application Procedures

Each aid applicant is encouraged to schedule an appointment with a member of Enrollment Services to review financial aid programs, procedures and his or her individual aid package.

Need-Based Aid Programs

Students must demonstrate financial need from a FAFSA analysis and through the formula described in "Financial Aid Eligibility" section to apply for need-based aid. Need-based aid programs include:

- Institutional Loan
- Institutional Grant
- Primary Care Loan
- Federal Perkins Loan

• Loans for Disadvantaged Students

Students who wish to have eligibility determined for the programs must provide parental data on the FAFSA form (per federal and institutional policy). All students are encouraged to provide parental data to take advantage of all financial aid opportunities. Those students who qualify for a waiver can be considered for all aid sources with the exception of the Loan for Disadvantaged Students.

To apply for any need-based aid, the following forms must be submitted each academic year that the student wishes to receive aid:

- FAFSA (Free Application for Federal Student Aid)
 This need analysis form can be obtained via the Web at <u>www.FAFSA.ed.gov</u>. The central processor then transmits to the University the data and a family contribution (FC) figure.
- Federal Income Tax Transcript Forms
 To validate the FAFSA form, the University requires that copies of the federal income tax
 transcripts of the student, spouse and parents be submitted to Enrollment Services. If a
 student and their family uses the IRS Data Retrieval Tool, Enrollment Services will waive
 the need for physical copies of the tax return transcripts.
- 3. Campus-Based Aid

This form requests somewhat different information than that requested on the FAFSA. It may be obtained in Enrollment Services and should be returned to the office upon completion.

The deadline for receipt of all of the above forms is March 15 prior to the beginning of the academic year of matriculation. The financial aid staff evaluates students throughout the year to consider requests for financial aid. Award notices are available on the intranet, Banner Self-Service by early July.

4. Verification Process

During the application and analysis process, some students may be selected to complete a process called "verification."

Verification is the process an institution uses to check the accuracy of the information a student has given when applying for financial aid. If students do not provide accurate information, they may receive more or less money than they should. The federal government requires verification.

Verification covers all need-based financial aid programs. Students completing a FAFSA are selected for verification randomly or if it appears likely, an error was made in the application.

Students selected for verification will be forwarded a Verification Worksheet and a letter explaining the process from Enrollment Services. Any delays in completing the worksheet or in submitting required information will result in delays in the awarding of financial aid.

The verification process and the awarding of aid are determined on an individual basis. Although the same policies and procedures are used uniformly, so many factors are considered in the awarding of a student's financial aid that no two students' applications result in the same aid package.

Selective Service Draft Registration Compliance

Federal law mandates that any student required to register with the Selective Service who fails to do so is ineligible for student financial aid under Title IV of the Higher Education Act of 1965. Title IV programs include the Pell Grant, Supplemental Educational Opportunity Grant, Federal Work-Study, Federal Perkins Loan, PLUS, Federal Unsubsidized Loan and State Student Incentive Grant.

The state of Ohio has a similar requirement for all male students. Those male students who are required to register with the Selective Service, but fail to do so will be denied any form of financial aid from the state of Ohio and will be charged a non-Ohio tuition surcharge.

Satisfactory Academic Progress to Maintain Financial Aid Eligibility - Amended June, 2017

- (A) Section 484 of the Higher Education Act (HEA) requires a student makes satisfactory progress in his/her course of study in order to receive financial aid. This policy will be amended whenever applicable federal and state laws or regulations are changed.
- (B) Determination of Satisfactory Academic Progress

(1) Upon completion of each payment period, the determination of whether or not a student is considered to be making satisfactory progress will be identified by financial aid based on criteria found below. Only Enrollment Services determines a student's eligibility for financial aid as directed by the Department of Education.

(2) The satisfactory academic progress definitions are as follows:

 (a) Financial Aid Probation- A status that is assigned to a student who is failing to make satisfactory academic progress as defined in any of the below circumstances. A student that is on financial aid probation is not eligible for any types of financial aid.

(i) For two consecutive payment periods, a graduate studies, medical, or pharmacy student does not meet standard one.

(ii) A graduate studies, medical, or pharmacy student does not meet standard two.

(iii) A medical does not meet standard three.

(b) Financial Aid Warning – A status that is assigned to a student who is failing to make satisfactory academic progress in the below circumstances. A student that is on financial aid warning is eligible for financial aid.

(i) For one payment period, a graduate studies, medical, or pharmacy student does not meet standard one.

(c) Making Satisfactory Academic Progress – A status that is assigned to a student who is meeting all satisfactory academic progress standards.

(3) Satisfactory Academic Progress will be checked 6 weeks after the end of the payment period.

(a) If a student as an "I" or "IP" grade for a course 6 weeks after the end of the payment period, then the student will automatically be placed on Financial Aid Probation due to not being able to determine the students status with meeting standards. All aid that had disbursed for the subsequent payment period will be returned. If the students "I" or "IP" grade is then changed to a letter grade, then satisfactory academic progress will be checked and an updated status will be given. If the student's status is making satisfactory academic progress or financial aid warning, then the student will regain eligibility for financial aid funds. If the student's status remains in financial aid probation, the student will remain ineligible for financial aid.

(C) These standards pertain to financial aid only and should not be confused with academic standards.

(D) Standards for Graduate Studies Students:

(1) Standard One:

A graduate studies student must achieve and maintain a 3.0 cumulative grade-point average. The cumulative GPA is based on course work in the College of Graduate Studies at the Northeast Ohio Medical University.

(2) Standard Two:

A graduate studies student is not eligible for further financial aid when the cumulative number of credit hours attempted is equal to or greater than 150% of the minimum

credits required for graduation. For example, your program requires 42 credit hours for completion, your eligibility for financial aid ends after you attempt 63 total hours.

(E) Standards for Medical Students

(1) Standard One:

The pace at which a medical student must progress is to pass 67% of attempted courses. This is based on course work in the College of Medicine at the Northeast Ohio Medical University.

(2) Standard Two:

A medical student is not eligible for further financial aid when the cumulative number of academic years enrolled is greater than six (150% of the normal timeframe for completion of required M.D. coursework; a student may be granted a leave of absence for a variety of reasons. The period of time for which the student has been granted approved leave shall be excluded).

(3) Standard Three:

Prior to matriculating to their third year of medical school, medical students are required to pass USMLE Step 1. If a student is permitted to participate in the preclinical course offered prior to the M3 clerkships without receipt of a passing USMLE Step 1 score, they will not be eligible for federal financial aid until a passing USMLE Step 1 score is received and the student begins their first clerkship.

To continue in the M4 curriculum, students are required to pass USMLE Step 2 CK.

(F) Standards for Pharmacy Students

(1) Standard One:

The pace at which a pharmacy student must progress is to pass 67% of attempted courses. This is based on course work in the College of Pharmacy at the Northeast Ohio Medical University.

(2) Standard Two:

A pharmacy student is not eligible for further financial aid when the cumulative number of academic years enrolled is greater than six (150% of the normal timeframe for completion of required Pharm.D. coursework; a student may be granted a leave of absence for a variety of reasons. The period of time for which the student has been granted approved leave shall be excluded).

(G) Course grades

(1) A grade of 'I' (incomplete) accompanied by a letter grade will be considered when evaluating your completion ratio, and will influence the pace of course completion. All attempted and earned credits are considered in maximum eligibility determination.

(2) A grade of 'W' (withdrawal) does not earn credits or affect your GPA, but will be considered when evaluating your maximum eligibility. Students may retake courses

from which you withdraw and those credits will count toward determining your enrollment status and completion ratio, provided you have not earned credit for the same course.

(H) Repeat Coursework

(1) The credits earned from repeated courses will count toward Maximum Timeframe.

(2) Students are permitted to receive federal aid for repeating a previously passed course one time only. The course must appear on a transcript as a repeated course.

(3) Students are not permitted to receive federal aid on the second repeat of a previously passed course. For purposes of determining financial aid enrollment status, the credits of the second repeat of a previously passed course are not counted.

(4) The repeat of a failed course (that has never been passed) may receive federal aid for the course.

(5) The repeat coursework rules for federal aid apply regardless of previous payment source.

(I) Transfer Students

(1) Students who are accepted for transfer from other schools will be assumed to be making satisfactory academic progress at the time of enrollment and a determination will be made as to remaining years of financial aid eligibility.

(J) Appeal Process

(1) A student who is placed on Financial Aid Probation may submit a Satisfactory Academic Progress Appeal to Enrollment Services and should cite any special or mitigating circumstances he/she believes should be considered.

(2) The Satisfactory Academic Progress Appeal will be reviewed by the Director of Financial Aid.

(3) If the Satisfactory Academic Progress Appeal is successful, then the student regains eligibility for financial aid. A successful Satisfactory Academic Progress Appeal will include academic requirements that must be met to receive aid beyond the probation semester. A student who is denied aid for failure to meet these satisfactory academic progress requirements may re-establish eligibility once he/she meets the requirements. *You cannot receive financial aid retroactively for the academic period in which you were re-establishing satisfactory academic progress.*

(4) If the Satisfactory Academic Progress Appeal is denied, then the student will not be eligible for financial aid. A student who has been denied can request an in-person hearing to petition for reinstatement.

(K) Financial Aid Eligibility when Enrollment Status Changes

(1) At Time of Exit from the University – If a student leaves or is asked to leave the Northeast Ohio Medical University for any reason and the student is on financial aid probation, the student still will be on financial probation when he/she returns.

(2) Financial aid eligibility and awards will be reviewed and adjusted if enrollment in courses changes.

Drug Law Violations

Students convicted of possession or sale of drugs

As indicated in HEA Section 484(r), 34 CFR 668.40, a federal or state drug conviction can disqualify a student for Federal Student Aid funds. Convictions only count if they were for an offense that occurred during a period of enrollment for which the student was receiving Title IV aid—they do not count if the offense was not during such a period. Also, a conviction that was reversed, set aside, or removed from the student's record does not count, nor does one received when they were a juvenile, unless the student was tried as an adult.

Depending on whether the conviction was for sale or possession and whether the student had previous offenses, the bullets below indicate the period of ineligibility. (A conviction for sale of drugs includes convictions for conspiring to sell drugs.)

	Possession of illegal drugs	Sale of illegal drugs
1st offense	1 year from date of conviction	2 years from date of conviction
2nd offense	2 years from date of conviction	Indefinite period
3+ offenses	Indefinite period	

If the student was convicted of both possessing and selling illegal drugs, and the periods of ineligibility are different, the student will be ineligible for the longer period.

Schools must provide each student who becomes ineligible for Title IV aid due to a drug conviction a clear and conspicuous written notice of his loss of eligibility and the methods whereby he can become eligible again.

A student regains eligibility the day after the period of ineligibility ends or when he successfully completes a qualified drug rehabilitation program or, effective beginning with the 2010–2011 award year, passes two unannounced drug tests given by such a program. Further drug convictions will make him ineligible again.

Students denied eligibility for an indefinite period can regain it after successfully completing a rehabilitation program (as described below), passing two unannounced drug tests from such a program, or if a conviction is reversed, set aside, or removed from the student's record so that fewer than two convictions for sale or three convictions for possession remain on the record. In such cases, the nature and dates of the remaining convictions will determine when the student regains eligibility. It is the student's responsibility to certify to you that he/she has successfully completed the rehabilitation program. As with the conviction question on the FAFSA, you are not required to confirm the reported information unless you have conflicting information.

When a student regains eligibility during the award year, you may award Direct loans for the period of enrollment.

Financial Aid Inquiries

Northeast Ohio Medical University wants to help students achieve their educational and career goals. The financial aid office is available to help explore the many financial aid options available and select the financial aid package that best satisfies each student's particular needs.

The financial aid specialists are helpful, knowledgeable professionals who can competently and confidentially answer questions and guide students through the process of seeking financial aid.

While attending an undergraduate partner university, students are encouraged to reach out to their university's financial aid office for questions or concerns regarding funding their education at that university.

Student Rights and Responsibilities Regarding Financial Aid *Student Rights*

(Adapted from the Federal Student Aid Fact Sheet) Students have the right to inquire about:

- The names of its accrediting organizations and about its programs, facilities and faculty.
- The cost of attending and its policies on refunds to students who leave the University.
- What financial assistance is available, including information on all federal, state, local, private and institutional financial aid programs.
- The procedures and deadlines for submitting applications for each available financial aid program.
- Criteria used to select financial aid recipients.
- How financial need is determined. This includes how costs for tuition and fees, room and board, transportation, books and supplies, personal and miscellaneous expenses are considered in the student budget. It also includes what resources (such as parental contribution, other financial aid, your assets, etc.) are considered in the calculation of need.
- How much of financial need, as determined by the university, has been met.
- How and when they will be paid.

- To explain each type and amount of assistance in your financial aid package.
- The interest rate (for loans), the total amount that must be repaid, the length of time to repay loans, when paying it back must start and any cancellation and deferment provisions that apply.
- To reconsider your aid package if they believe a mistake has been made.
- How the school determines whether satisfactory progress is being made and what happens if it is not.
- What special facilities and services are available to persons with handicapped conditions.

Student Responsibilities

Students are expected to:

- Review and consider all information about a school's program before enrolling.
- Complete all application forms accurately and submit them on time to the right place. Errors can delay or prevent receipt of financial aid.
- Provide correct information. In most instances, misreporting information on financial aid application forms is a violation of the law and may be considered a criminal offense, which could result in indictment under the U.S. Criminal Code.
- Provide all additional documentation, verification, corrections, and/or new information requested by either the financial aid office or the agency to which an application was submitted.
- Read and understand all forms that must be signed and keep copies of them.
- Accept responsibility for the promissory note and all other signed agreements.
- Notify the lender of changes in name, address or school status.
- Perform in a satisfactory manner the work that is agreed upon in accepting a work-study job.
- Know and comply with the deadlines for application or reapplication for aid.
- Know and comply with refund procedures.

Statement of Ethical Principles and Code of Conduct

As a member of the National Association of Student Financial Aid Administrators (NASFAA), we adhere to their **Statement of Ethical Principles and Code of Conduct**. Northeast Ohio Medical University:

- Does not require students to use a particular lender or in any way limit the choice of lenders for students.
- Does not recommend external lenders to students or their parents, and does not maintain a list of lenders that are preferred over other lenders (we do provide a list of lenders as possible suggestions – which in no way should be recognized as preferring one over another).
- Processes loan applications through any lender a student or parent chooses.

- Does not solicit or accept anything of value from any lender in exchange for any advantage sought by the lender to make educational loans to students enrolled at, or admitted to, the University.
- Prohibits employees of the financial aid office, or any employee who otherwise has responsibilities with respect to educational loans, from taking from any lender any gift worth more than nominal value.
- Prohibits employees of the financial aid office, or any employee who otherwise has responsibilities with respect to educational loans, from entering into any type of consulting arrangement or other contract to provide to a lender services relating to educational loans.
- Prohibits employees of the financial aid office, or any employee who otherwise has
 responsibilities with respect to educational loans, who serve on an advisory board (or
 commission or group) relating to educational loans established by a lender or group of
 lenders from receiving anything of value from the lender or group of lenders in connection
 with serving on such advisory board (or commission or group).
- Prohibits external lenders' employees, representatives, or agents from providing staffing services to the financial aid office.
- Prohibits external lenders' employees, representatives, or agents from identifying themselves to students of the University or their parents as employees, representatives or agents of the financial aid office.
- Does not assign for any borrower, through award packaging or other methods, a loan to a particular lender, and does not refuse to certify or delay certification of any loan based on the borrower's selection of a particular lender or guaranty agency.

College of Graduate Studies

Accreditation – College of Graduate Studies

The Integrated Pharmaceutical Medicine M.S. and Ph.D. and the offering of the Master of Public Health are accredited regionally by The Higher Learning Commission (HLC). The HLC evaluates the University's mission and standards by assessing the educational aspect, governance, administration, financial stability, admissions, student services, institutional resources, student learning, and institutional effectiveness.

In addition, the Master of Public Health is fully accredited by the Council on Education for Public Health.

On March 26, 2012, the Master of Science Degree Program in Health-System Pharmacy Administration was approved by the Ohio Department of Higher Education. On April 16, 2012, The Higher Learning Commission granted official approval to NEOMED to offer the M.S Program.

A comprehensive evaluation by HLC of the University to offer graduate programs beyond the initial degree offerings took place in April 2013.

Mission Statement – College of Graduate Studies

The mission of the College of Graduate Studies is to instill critical thinking, inspire curiosity, and promote innovation in order to graduate future generations of scientists, researchers, teachers, and community leaders who will use the power of education, research and scholarship to positively transform the world.

History - College of Graduate Studies

The College of Graduate Studies was founded in 2009 and offers graduate programs in integrated pharmaceutical medicine, public health, health-system pharmacy administration, medical ethics and the humanities, and certificates in bioethics and global health. The College of Graduate Studies provides support to students who are pursuing graduate-level degrees at Northeast Ohio Medical University (NEOMED) and in partnership with other Ohio universities.

Overview of Degree Programs – College of Graduate Studies

Integrated Pharmaceutical Medicine (M.S. or Ph.D.)

Integrated pharmaceutical medicine is a biomedical science discipline that advances healthcare through innovation in the therapeutic treatment of illness, including collaboration and dynamic research in mechanisms of disease, identification of disease targets, drug discovery and development, drug delivery, pharmacology, and toxicology for the benefit of the public health.

The Northeast Ohio Medical University (NEOMED) Integrated Pharmaceutical Medicine degree program's main objective is to educate and develop first-rate scholars and independent

investigators. Graduates of this program will have a unique perspective on the connection between pharmaceutical sciences and medical disciplines, especially with regard to disease mechanisms and targets for therapeutic interventions.

This program will provide students with an excellent integrated pharmaceutical medicine graduate education at the master's degree and doctoral degree levels, imbuing them with advanced skills and the necessary qualifications to succeed as a researcher in academia, biotechnology, or industry, while benefiting from NEOMED's excellent research environment and infrastructure.

Master of Public Health (M.P.H.)

The Master of Public Health (M.P.H.) degree program is a consortium program with the University of Akron, Cleveland State University, NEOMED, and Youngstown State University. This nontraditional program is geared toward the working professional who would like to broaden his or her role in improving community health, enhance current job skills or seek career advancement. The mission of the Consortium of Eastern Ohio Master of Public Health program is to provide accredited public health education designed for the working professional. It does this through a collaborative learning community, drawing on the collective resources of its five member institutions and partnering community agencies. The program strives to produce respected and competent professionals able to improve public health practices, especially in eastern Ohio.

Bioethics Graduate Certificate

As medical science and technology continue to advance, there is an increasing concern over professional and ethical responsibilities in providing optimal care to patients and their families, and addressing issues among colleagues and institutions including, but not limited to: effective utilization of scarce or limited resources, disclosure of conflicts of interest, balancing healthcare delivery with clinical research, and developing therapeutic relationships in light of controversial public health policies and laws.

The Bioethics Graduate Certificate program is designed for healthcare professionals and students who have the desire to explore these pragmatic issues through the lenses of ethical theory and narrative-driven humanities. This coursework can be taken in addition to their medicine or pharmacy coursework. The certificate program is also open to others not active in the Colleges of Medicine or Pharmacy.

Health-System Pharmacy Administration (M.S.)

The Master of Science in Health-System Pharmacy Administration Program is designed for postgraduate pharmacy residents in pharmacy administration as well as experienced pharmacist practitioners who wish to develop additional administrative, financial and leadership skills related to health-system pharmacy administration. The program will enable graduates to manage complex health-system pharmacy departments at the institutional and department levels. All students (residency track and mid-career track) take coursework together. NEOMED professors, in

conjunction with Cleveland Clinic and Akron General Medical Center faculty, teach the majority of classes, drawing on the expertise of faculty from several institutions.

Global Health Certificate

The Global Health Certificate provides an opportunity for students to understand core concepts and issues of health and disease, public health literacy, health care delivery, patient and community advocacy, and global bioethics. Students who enroll in the Global Health Certificate will be exposed to new perspectives in a foreign country, comparing and contrasting their local and national knowledge, culture, and experiences, while earning a graduate level certificate. The Global Health Certificate Program requires the completion of 10 semester hours. The Florence Health Institute is an opportunity for students who are pursuing a career in Public Health, Nursing, Medicine, Pharmacy or any related field to study the impacts of their field through an international lens. In this creative and interprofessional study abroad experience, students from Kent State University and NEOMED will study together in a total of seven (7) credits in Florence for one month during the summer.

Medical Ethics and the Humanities (M.A.)

The Master of Art in Medical Ethics and Humanities is designed for healthcare professionals and students who wish to explore the value and meaning of medicine from a multi-disciplinary perspective, deepen their medical knowledge and skills in trained health professions, become social science and humanities researchers and enhance patient, family and community care through advanced graduate education and narrative-based approaches to health care delivery.

Admission – College of Graduate Studies

Integrated Pharmaceutical Medicine Admission

Application information including application deadlines and the link to the online application may be found by visiting <u>http://www.neomed.edu/admissions</u>.

The Integrated Pharmaceutical Medicine M.S. and Ph.D. graduate program is open to qualified students from a variety of backgrounds. Students with the following qualifications are encouraged to apply:

 Bachelor's degree (or higher) in the majors of chemistry, biochemistry or any of the biological sciences or a combination of majors such as for a pre-pharmacy or pre-medicine baccalaureate. Students are recommended, though not necessarily required, to have taken a full series of biology, chemistry and physics with lab, college writing, genetics, cell biology, biochemistry, statistics, calculus, analytical chemistry, pharmacology, microbiology or biotechnology. • Minimum 3.0 on a 4.0 GPA scale in previous undergraduate coursework and/or a 3.3 on a 4.0 GPA scale in prior graduate coursework. Students with 3.4 GPA or above will be given preferential consideration for admission.

In addition to these criteria, the following credentials are required to submit a completed application: online application, including a personal statement describing how this program would further one's goals, a current curriculum vitae, three letters of recommendation and acceptable GRE scores.

Application Deadline: February 1, for notice of acceptance by April 15

Public Health Admission

Application information including application deadlines and the link to the online application may be found by visiting <u>http://www.neomed.edu/admissions</u>.

The following credentials are required to submit a completed application. Please see the application instructions for the most current information.

- 1. Official transcripts from each institution of higher education that you have attended. If the official record is not in English, an official translation must accompany the original language document.
- 2. Three letters of recommendation from individuals familiar with your academic or professional background. Individuals who have not been involved in an academic institution for two years or more may submit letters of recommendation by supervisors from his/her place of employment. The letters should include an assessment of your current work quality and ability to successfully complete graduate training. Please address letters to the CEOMPH Admissions Committee.
- 3. A cover letter (no more than two pages) explaining your educational and professional history; area of interest in public health, interest and motivation for seeking a MPH degree; and professional or academic career plans upon completion of the program. If appropriate, also indicate whether you are applying to or are currently enrolled in another degree program (and indicate which university).
- 4. GRE scores taken within the last five years (student may be exempt if he/she has a professional or academic master's or doctoral degree). Official results from other equivalent standardized tests used for graduate admissions, also taken within the last five years, may be substituted. These accepted tests are the following: DAT, GMAT, MCAT and PCAT. Use code #1903 to indicate the institution that should receive your scores. If you have already sent your GRE scores to one of the other universities, please indicate which university on the application form next to your GRE information.
- TOEFL scores taken within the last two years from graduates of foreign universities who are non-native English speakers. The minimum score must be 550 (paper-based) or 213 (computer-based) or 79-80 with read/speak/listen=17, write=14 (Internet-based). Use code #1903 to indicate the institution that should receive your scores. If you have already sent

your scores to one of the other universities, please indicate which university on the application form next to your TOEFL information.

- 6. This completed application form with both signatures on the second page. It must be typewritten or legibly printed in ink.
- 7. A nonrefundable \$45 application fee. Students with international credentials must pay a total of \$90.

Criteria used by the Admissions Committee include a bachelor's degree from an accredited college or university, minimum undergraduate GPA of 2.75, minimum graduate GPA of 3.00 out of a 4.00 scale, successful completion of a college level mathematics or statistics course and college level social or natural science course, and acceptable GRE score or another acceptable standardized test score (if appropriate). Two years of work experience in a relevant field is highly recommended, but not required.

Application Deadlines - (Dates are for entering the program in the following fall semester)

January 15 - First application deadline

March 15 - Acceptance status notices to be sent

June 30 - Second application deadline (acceptance status notices sent on a rolling basis)

Bioethics Certificate Admission

Application information including application deadlines and the link to the online application may be found by visiting <u>http://www.neomed.edu/admissions</u>.

Students who meet the following criteria are encouraged to apply:

• Students who have successfully completed a BS/BA degree with a minimum of a 3.0 GPA and a strong desire to enroll in ethics and humanities coursework are eligible to apply to the Bioethics Certificate Program.

The following credentials are required to submit a completed application:

- Updated CV containing contact information, education, employment, scholarly activities and licensure (if applicable).
- Personal Statement.
- Letter of good academic standing (applicable to students and residents). A letter must be sent by the academic institution/residency director.
- Three letters of recommendation.

Health-System Pharmacy Administration Admission

Application information including application deadlines and the link to the online application may be found by visiting <u>http://www.neomed.edu/admissions</u>.

Prerequisites for acceptance into the master's program include the following:

• Must have a Doctor of Pharmacy (Pharm.D.) degree or bachelors of pharmacy degree with a minimum of three years of practice experience.

- Must be licensed pharmacist or eligible for licensure.
- Must have achieved an overall grade point average of 3.0 in a college/school of pharmacy. Candidates with a GPA below 3.0 must successfully take the Graduate Management. Admission Test (GMAT) for admission to the program.

The following credentials are required to submit a completed application:

- Complete admissions application.
- Submit three letters of recommendation.
- Submit transcripts and test scores.
- Submit current curriculum vitae.
- Submit personal statement (i.e., why you want to take this program).

Application Deadline:

May 1, for notice of acceptance by June 15.

NOTE: Students admitted to the M.S./Residency track must first be accepted into the pharmacy administration residency program at the Cleveland Clinic or Akron General Medical Center.

Medical Ethics and Humanities Admission

Application information including application deadlines and the link to the online application may be found by visiting <u>http://www.neomed.edu/admissions</u>.

Students who meet the following criteria are strongly encouraged to apply:

- Students who have successfully completed a BS/BA degree with a minimum of a 3.0 GPA and a strong desire to enroll in ethics and humanities coursework.
- Students who have already completed the NEOMED Bioethics Certificate Program.

The following credentials are required to submit a completed application:

- Completed application for admission
- One of the following: GRE, LSAT, MCAT, PCAT or DAT Test Scores
- Letter of good academic standing (students and residents). A letter must be sent by the academic institution or residency director (as applicable)
- Official transcripts from all previous colleges attended
- Three letters of recommendation

Guest/Non-Degree Student Admission

The College of Graduate Studies permits non-degree seeking individuals to take graduate-level coursework on a limited basis. The registrar's unit within Enrollment Services coordinates the application and admission process.

Non-degree seeking students must complete an online application and be approved for participation in courses. Individuals accepted as non-degree seeking students are issued NEOMED

email, Banner Self-Service and AIMS accounts to support their course enrollments, but are not otherwise eligible for NEOMED student benefits.

Non-degree students are charged the current College of Graduate Studies per-credit-hour rate. A maximum of 12 credit hours may be earned in a non-degree seeking status. Applicability of coursework taken in a non-degree status toward a later degree or certificate will vary by program, should a student choose to apply for degree or certificate-seeking status later.

Prerequisites for admission:

• Must have an earned baccalaureate (or higher) degree.

Candidates must:

- Complete the NEOMED admissions application a minimum of 4 weeks before the start of the semester.
- Submit transcript from institution where baccalaureate degree was conferred (potentially others for course pre-requisite checking).
- Submit personal statement (i.e., why you want to enroll as a guest/non-degree student).

Curriculum and Degree Requirements – College of Graduate Studies

Degree Requirements: Integrated Pharmaceutical Medicine (M.S.)

The M.S. degree in integrated pharmaceutical medicine requires 45 credit hours: at least 25 credit hours from the core curriculum offered to the Ph.D. students, 10 hours of pharmaceutical medicine research, and 10 hours of thesis work, culminating in a written thesis and thesis defense.

Requirements	Minimum Credits		
Minimum of 25 credits selected from the following			
courses:			
IPM 75001 Transitions to Pharmaceutical Medicine	5		
IPM 75201 KSU ST: Bioanthropologial Data Analysis	5 (KSU cross-reg)		
IPM 75002 Pharmaceutical Medicine Seminar	4		
MEH 79102 Responsible Conduct of Research	1		
Elective Courses	10		
Other Courses			
IPM 75004 Pharmaceutical Medicine Research	10		
IPM 75401 Thesis Research	10		
Total Credits Needed	45		

Students must perform at a level above 80 percent on course assessments.

Across the curriculum, students will learn principles of drug action, pharmaceutical medicine research methods, statistics with an emphasis on biostatistics, medicinal pharmacology, biopharmaceutics and biotechnology, and several elective courses tailored to the student's major interest.

Degree Requirements: Integrated Pharmaceutical Medicine (Ph.D.)

The basic graduation requirement for the Ph.D. degree in integrated pharmaceutical medicine will be 90 total semester credit hours. All doctoral students in the program will be required to complete 45 hours didactic study, 30 hours of research and 15 hours of dissertation work, culminating in a written dissertation and dissertation defense.

Requirements	Minimum Credits	
Minimum of 45 credits selected from the following		
courses:		
IPM 75001 Transitions to Pharmaceutical Medicine	5	
IPM 5095X KSU ST: Bioanthropologial Data Analysis	5 (KSU cross-reg)	
IPM 75002 Pharmaceutical Medicine Seminar (1-2)	4	
MEH 79102 Responsible Conduct of Research	1	
Elective Courses	30	

Other Courses		
Candidacy Exam	Non-credit required	
IPM 75401 Pharmaceutical Medicine Research (1-	30	
10)		
IPM 75501 Dissertation Research (1-15)	15	
Dissertation Defense	Non-credit required	
Total Credits Needed	90	

All doctoral students will be administered a qualifying/candidacy exam upon completion of the didactic course work (including the core curriculum requirements). This examination will be taken within one year of completion of the core requirements and usually no later than the summer after the student's second year. Doctoral students "advance to candidacy" after successful completion of the candidacy exam and begin preparation of the Prospectus or dissertation plan. The Prospectus is a written dissertation plan that is orally defended in front of the student's committee. The work resulting from the Prospectus becomes the dissertation that is also a written document orally defended in front of the student's committee.

Examples of what students will learn include principles of drug action, cellular signaling, drug metabolism, pharmaceutical medicine research methods, statistics with an emphasis on biostatistics, medical pharmacology, biopharmaceutics and biotechnology, and several elective courses tailored to the student's major interest; for example, cellular and molecular neuroscience.

Dual Degree Offerings: M.D.-Ph.D. and Pharm.D.-Ph.D. in Integrated Pharmaceutical Medicine

Dual degree offerings include the M.D.-Ph.D. and Pharm.D.-Ph.D. degrees. NEOMED students wanting to enter the dual degree programs will take the Transitions to Pharmaceutical Medicine course in lieu of the curriculum required for direct entry Ph.D. or M.S. students (see above). The Transitions to Pharmaceutical Medicine course transitions the professional student from primarily a didactic learning environment to one that is problem solving with instruction by members of the graduate faculty. The course will emphasize topics that include research methods, hypothesis testing, analytical evaluation, and written/oral presentation.

Shared Credit Limits for IPM Program

A student who has completed a NEOMED Master's degree in the IPM program may use course credit earned in the pursuit of the Master's degree toward the Ph.D. However, a minimum of 70 percent of the credits counted toward the credit hour requirement for the PhD degree must be unique to that degree and not utilized for degree completion within any other program.

Student enrolled in a NEOMED professional program (medicine or pharmacy) who elect to enroll in the College of Graduate Studies in order to attain a Ph.D. degree in the Integrated Pharmaceutical Medicine (IPM) program are permitted to utilize credits earned in the following basic science courses toward both programs. This is allowable in recognition that these courses form a strong foundation for a research degree to which will be added required courses for the IPM curriculum as well as electives that will reflect the student's area of specialization.

- MST2-20102/IPM-75007 Infection & Immunity
- MST2-20214 Molecules to Cells
- IST2-20100/P1-61113 Physiological Basis of Medicine
- P1-61114 Foundational Neuroscience ~or~ MST2-20101 Medical Neuroscience
- MST1-10101 Human Development & Structure ~or~ IPM-61101 Human Anatomy and Physiology

Exceptions to this policy include any coursework earned in a professional program that has been used in the pursuit of a baccalaureate degree. Any student who has obtained a baccalaureate degree through the transfer of MD or PharmD coursework would be ineligible to use those same MD or PharmD coursework credits toward the PhD. This includes students who entered the MD or PharmD program from a partner university and later obtained a baccalaureate degree through an articulation agreement between NEOMED and the partner university. For example, the Articulation Agreement between NEOMED and Kent State University transfers credit for the Physiological Basis of Medicine; Medical Neuroscience; and Infection & Immunity courses toward a KSU Bachelors of Science degree in Chemistry with a Biochemistry concentration. An MD or PharmD student with such a BS would only be able to utilize Molecules to Cells and Human Development & Structure or Human Structure for Pharmacy course credits to the PhD.

Courses: Integrated Pharmaceutical Medicine

IPM 75001 - Transitions to Pharmaceutical Medicine (5 credits)

This course is designed for NEOMED professional students who are admitted into the dual M.D./Ph.D. or Pharm.D./Ph.D. program to help transition them from primarily a didactic learning environment to one that is problem solving with instruction by member of the graduate faculty. This course provides a grounding in research methods and experimental design that students will be able to apply directly to research undertaken as part of the course in an advisor's lab. The concepts dealt with in class will be directly put into practice in the laboratory environment such that by the end of the course, the student has written up his/her research experience into a research paper and will present findings to the group. An additional component to the course will be an overview of pharmaceutical medicine from the perspective of the pharmaceutical industry.

IPM 75002 – Pharmaceutical Medicine Seminar (1 credit)

This seminar course has been structured as a "journal club" to provide students with a forum in which they read and discuss primary research that is broadly applicable to pharmaceutical medicine. Students are exposed to foundational concepts in research science, become comfortable discussing research science with their colleagues, and practice presenting scientific information to audiences. Students' present primary research literature that all students are

required to read and discuss. The course also includes attendance at the weekly seminar series for the department in which the student's advisor resides.

IPM 75003 - Molecules to Cells (9.5 credits)

(Cross-listed with the College of Medicine, MST2-20214)

This course presents basic principles and fundamental concepts of biochemistry and genetics. Subjects include major metabolic pathways, properties of enzymes, cell biology, molecular pathology, and flow of genetic information and the control of gene expression. Clinical implications of alterations in these processes are integrated into the lecture material.

IPM 75004 – Pharmaceutical Research (1-10 credits)

This course provides Master's degree and PhD candidates the opportunity to earn research credit while building the skills and learning the techniques that will allow them to embark upon their thesis or dissertation research. This course is designed to be taken concurrently with didactic coursework and continuing beyond the completion of didactic coursework, but prior to Thesis Research or Dissertation Research. The Research course is taken with the student's major advisor as the primary instructor. Master's students in the Integrated Pharmaceutical Medicine program must have 15 credit hours of Research while PhD students must have 30 credit hours of Research in order to fulfill the requirements of the program.

IPM 75005 – Human Development and Structure (10 credits)

(Co-scheduled with the College of Medicine, MST1-10101)

The course encompasses an integrated exploration of the human body from the level of gross anatomy to microscopic and submicroscopic anatomy. The normal and pathological development of the body from conception to birth is included in this survey. Contemporary medical imaging is used to explore the body from a clinical perspective. Throughout the course, the functional anatomy of body systems is emphasized, and appropriate examples of pathological processes are outlined.

IPM 75006 – Pharmaceutics with Lab (9.5 credits)

(Offered in conjunction with the College of Pharmacy, P1-61102)

This course introduces the pharmacy student to basic theory and principles applicable to functioning in a community pharmacy. There are two modules: 1) pharmaceutics and drug delivery systems and 2) pharmaceutics laboratory experience. In the first module, students will learn to formulate, design, compound and evaluate dosage forms and drug delivery systems needed for patient care. This module emphasizes the physiologic and drug formulation factors that influence extent and rate of drug release/absorption from various formulations. In the second module, students will learn the art of medication compounding in a laboratory setting. Dosage forms are prepared using patient profiles and appropriate auxiliary labels. Students will also learn important patient counseling points. The student is also introduced to the process of drug development and approval, including clinical trial descriptions.

IPM 75007 – Infection and Immunity for Pharmacists (8 credits)

(Co-scheduled with the College of Medicine, MST2-20102)

This interprofessional course is designed to provide the fundamental knowledge necessary for the proper management of diseases that are either totally microbiological/immunological in nature or that have a significant microbiological/immunological component. Infections and the host immune responses to them affect every body system and are important to every medical discipline. The structure and features of the microbe determine the nature of the infectious diseases that they cause. The innate and immune responses are the best defense against infection, but will often contribute or cause the tissue damage and symptoms of the disease. Sometimes the innate and immune responses are the sole cause of disease. Understanding the pathogen and the response to the pathogen is the basis for successful diagnosis and treatment of patients. It is necessary to both understand the general principles as well as know specific details in microbiology/ immunology. The basic principles of this course supply the foundation for understanding the microbial disease process. The details about each microbe provide the specifics regarding the nature of the disease, means of identification, immune response, course of disease, treatment and prevention. Integrating the detail with the concepts will help the student learn the material better than just rote memorization of the factual details.

IPM 75008 - Principles of Drug-Body Interaction (5 credits)

(Offered in conjunction with College of Pharmacy, P2-62105)

This course introduces students to the relationship between drug design and the pharmacogenetics, metabolism and action of drugs; the influence of physical and chemical properties on structure-activity relationships; and the molecular, cellular, and physiologic basis of drug action. In addition, this course explores how the fate of drugs in the body is influenced by physiological and biochemical processes. Students learn methods to quantify parameters that affect absorption, distribution, metabolism, and excretion of drugs, and how to use those to formulate appropriate drug dosage regimens.

IPM 75010 – Human Anatomy & Physiology (3 credits)

This course has been developed to provide pharmacy students with a general understanding of the structure and function of the human body. Students will develop a basic vocabulary of anatomic terminology used by healthcare professionals internationally. The human body will be explored using a systems approach, allowing the student to develop a core knowledge base of all the major body systems. Students will gain an understanding of the relevance of anatomical and physiological systems to the profession of Pharmacy. At the conclusion of the course, it is expected that each student will be armed with terminology, core concepts, and an ability to integrate knowledge from multiple anatomical systems as it relates to their career in health care.

IPM 75011 – Physiological Basis of Medicine (4 credits)

(Offered in conjunction with the College of Medicine, IST2-20100) The Physiological Basis of Medicine (PBM) course is designed to help students achieve an understanding of how the healthy cardiovascular, renal, respiratory, endocrine and gastrointestinal systems function. Your subsequent training will build on this foundation knowledge of normal organ function (physiology) to permit you to diagnose the causes of abnormal physiology (pathophysiology) and to pharmacologically (or surgically) return organ function toward normal. The purpose of PBM is to help you master normal physiology. Examples of disease (and pharmaceuticals used to treat them) will be used to demonstrate how various pathologies alter that organ function. Organ related case studies will further illustrate how pathologies alter normal function. Those case studies will also consider pharmacologic modification capable of returning that function to normal.

IPM 75019 – Medical Neuroscience (8 credits)

(Offered in conjunction with the College of Medicine, IST2-20101) Medical Neuroscience is an 8-week course that introduces students to the central nervous system. We discuss structures and the circuits they form, how they develop, how they function normally and, to some extent, how they malfunction with disease, disorders or damage. Our audience includes first-year students in the College of Medicine as well as graduate students in Integrated Pharmaceutical Medicine (College of Graduate Studies, NEOMED) and Biomedical Sciences (Kent State University). A relatively small proportion of our students will go on to specialize in neuroscience-related areas, such as neurosurgery, neurology, psychiatry or behavioral sciences. Some of our students will likely pursue research, including clinical research in neuroscience areas or basic neuroscience research. However, the majority of our students will not be specializing in neuroscience, but will care for patients who may turn to their health care provider for help in understanding what the "neuro" specialists are talking about. Medical Neuroscience provides the foundation for more specialized courses important for all our students. For those few who will specialize in neuroscience, Medical Neuroscience provides a first step toward deeper exploration of the relationships between the brain and its interactions with the world.

IPM 75020 – Foundational Neuroscience (4 credits)

(Offered in conjunction with the College of Pharmacy, P1-61114)

This course has been developed to provide pharmacy students with a foundational understanding of the structure and function of the nervous system as it pertains to their career as health care professionals. The human brain, spinal cord, and peripheral nervous system will be explored using a systems approach, allowing the student to develop a core knowledge base of the structural and functional components of the nervous system. Students will also be instructed in the pharmacological mechanisms of major neurotransmitter systems used by the brain and periphery. Students will gain an understanding of the relevance of neuroanatomical structure, function, and neuropharmacology to the profession of Pharmacy, but they will also join first year Medical students who are enrolled in Medical Neuroscience in interprofessional lectures that communicate content to the entire group as a cohesive healthcare team.

IPM 75082 – Systems Biology: Omics Tech (1 credit)

Systems Biology is a one semester faculty-mentored, integrated course that introduces the highthroughput technologies-based research in the fields of genomics, proteomics, metabolomics and fluxomics. The objectives of this course are to actively engage students in group discussions and training on applications of "omics" technologies to personalized medicine and drug discovery. The course heavily relies on out-of-class readings and learning through hands-on training on sample preparation, data analysis and outcome evaluation. In this inter-disciplinary course, we will focus on DNA/RNA sequencing, mass spectrometry-based proteomics and metabolomics. In addition, this course will introduce the fundamentals of mass spectrometry-assisted stable isotope-based metabolic studies with the main focus on metabolic fluxes that will be expanded to global fluxomics and pathways analyses. This course will be concluded with the introduction of multi-"omics" study design and data analysis. Students will be assigned three research papers for writing reports and presentations in teams. At the end of the course, students will be expected to give final oral presentation on an article related to multi-"omics" topics.

The overall goal of this introductory course is to provide the fundamental knowledge and training on different aspects of "omics" sciences- from data collection, data integration, to research applications, in addition to introducing basic bioinformatics tools for data analysis.

IPM 75101 – *Independent Research Elective (1 credit)*

(Intended for the PharmD-PhD student to earn IPM credit for Pharmacy research) Professional electives in the College of Pharmacy at NEOMED offer students an array of opportunities to experience environments that allow immersion in unique and interesting segments of the profession of pharmacy (including research) and to develop a more specialized understanding of these chosen fields. In choosing their electives, students will draw upon skills acquired in didactic and experiential on-campus courses preceding the elective experience. Elective courses offer students enriched experiences and opportunities to enhance their depth of knowledge in a focused area that may direct their future career choice and will serve them throughout their professional lives.

IPM 75107 – Research Writing (2 credits)

Writing abstracts for conferences and research papers for publication is the cornerstone of disseminating experimental findings. This graduate level course provides the venue to develop and hone research-writing skills in order to communicate scientific information in a clear, accurate and persuasive manner. Scientific writing is unique in its point of view and voice (third person and passive); therefore, it requires practice to achieve. Given the investment, it would require of faculty to help students build this skill on an individual basis, the training this course will provide is of use to both faculty and students. This course is not designed to replace mentor-directed advice/teaching/guidance/training in writing, but to provide a foundation that will make this effort less painful and time consuming. In addition, it will organize students to be better prepared to consider positions in the private sector; e.g. in medical communications, clinical research or medical affairs, as well as in the academic arena. Good writing habits are a learned skill that require generating drafts/revisions and this basic principle is used throughout the course. There are no prerequisites.

IPM 5xx95, 6xx95, 7xx95 or 8xx95 – Special Topics in IPM (2-5 credits)

Special Topics courses are the designation given to courses either offered sporadically by faculty teaching a cohort of IPM students interested in the topic (*IPM 5xx95 or 6xx95*) or taken at our partner universities through a consortium cross-registration agreement to fulfill requirements of the Integrated Pharmaceutical Medicine program (*IPM 5x95X or IPMx59X*). Different section identifiers are used when more than one special topics course is being offered in the same semester that has the same content, but different credit values or when offered by multiple partner institutions. Course titles are manually edited to describe section content to extent possible.

NEOMED-KSU Special Topics Cross-Registered Courses

IPM 5095X – KSU ST: Bioanthropology Data Analysis I (5 credits)

This course examines methods of univariate and bivariate experimental design. Emphasizes tests of hypothesis and estimation techniques with both classical and nonparametric procedures. (Course offered through KSU, Department of Anthropology, BMS 78687).

IPM 5195X – Cellular & Molecular Neuroscience (5 credits)

This course covers in depth the basic tenets of neuroscience and neural signaling in preparation for understanding neural function at a systems level. Topics include neurons and glia, molecular biology of channels and receptors, cellular neurophysiology, membrane potential and action potentials, synaptic transmission and integration, synaptic plasticity, nervous system development and patterning, synaptic connectivity, repair and regeneration, sexual differentiation, and neural aging. (Course offered through KSU, Department of Anatomy and Neurobiology, BMS 70729).

IPM 5295X – Molecular Cloning and Genetic Engineering (2 credits)

The goal of this course is to give students exposure to important, updated molecular techniques, and position them well for research experience and conceptual thoughts on experimental design. Covers the principals of basic recombinant DNA/Molecular cloning techniques and advanced techniques including cell reprogramming, RNA-seq, transgenic and knockout animal models (CRISPR) and Mass Spectrophometer. (Course offered through KSU, BMS 70251).

IPM 75301/75302/75303/75304 - Patient Care for the MD/PhD Part 1, 2, 3 & 4 (1-2 credits)

(Offered in conjunction with the College of Medicine)

These courses allow dual-degree students to remain informed and engaged in clinical care while they pursue the PhD portion of their program.

IPM 75401 – Thesis Research (1-10 credits)

This course has been developed to provide Master's degree candidates an opportunity to earn research credit toward performing research experiments, documenting their results, and

performing data analyses that will form the basis of their thesis work. This course is meant to be taken once the Master's degree candidate has successfully completed his didactic coursework. This course will be taken by the Master's degree candidate every semester after coursework completion and before the thesis defense. The credit hours assigned to this course can vary; however, Master's students must have 10 credit hours of Thesis Research in order to fulfill the requirements for a Master's of Science in the Integrated Pharmaceutical Medicine program. The maximum number of thesis research credits a student can earn is 15.

IPM 75501 – Dissertation Research (1-15 credits)

This course has been developed to provide doctoral candidates an opportunity to earn research credit toward performing research experiments, documenting their results, and performing data analyses that will form the basis of their dissertation work. This course is meant to be taken once the doctoral candidate has successfully defended his Prospectus, the dissertation plan. This course will be taken by the doctoral candidate every semester after the Prospectus defense and until the completion of the Dissertation defense. The credit hours assigned to this course can vary; however, doctoral students must have 15 credit hours of Dissertation Research in order to fulfill the requirements for a Doctorate of Philosophy (PhD) in the Integrated Pharmaceutical Medicine program. The maximum number of Dissertation Research credits a student can earn is 20.

Degree Requirements: Master of Public Health (M.P.H.)

Students are required to complete 42 semester credits with a minimum cumulative grade point average of 3.00. The course of study is the following:

Requirements	Minimum Credits
Core Courses	18
MPH 76001: Public Health Concepts	3
MPH 76002: Social and Behavioral Sciences in	3
Public Health	
MPH 76003: Epidemiology in Public Health	3
MPH 76004: Biostatistics in Public Health	3
MPH 76005: Health Services Administration in	3
Public Health	
MPH 76006: Environmental Health Sciences in	3
Public Health	
Generalist Track Courses	9
MPH 76009: Public Health Research & Evaluation	3
MPH 76008: Public Health Practice and Issues	3
MPH 76007: Grant Writing for Public Health	3
Practice	
Culminating Experience	6
MPH 76098: Capstone Project 1	3
MPH 76099: Capstone Project 2	3

Requirements - continued	Minimum Credits
Electives	9
Total Credits Needed	42

Courses: Master of Public Health

MPH 76001 - Public Health Concepts (3 credits)

This course serves as an introduction to definitions, history, organization, law, ethics, essential services, global aspects and future aspects of public health.

MPH 76002 - Social and Behavioral Sciences in Public Health (3 credits)

This course covers social and behavioral science concepts, theories, and their application to public health issues.

MPH 76003 - Epidemiology in Public Health (3 credits)

This course will facilitate student understanding of fundamental epidemiological concepts (such as principles of causality), methods (such as study designs and measurements of health/disease status and risk factors), and their practical applications (such as evaluation of risk factors for various health problems and effectiveness of interventions targeting them, screening programs and disease surveillance).

MPH 76004 - Biostatistics in Public Health (3 credits)

This course will cover principles of biostatistics in the context of public health applications. It will include the basic and advanced statistical techniques for analyzing and investigating public health issues including disparities. Statistical package SPSS will be used.

MPH 76005 - Health Services Administration in Public Health (3 credits)

Management principles, including personnel administration, budgeting, financing and continuous quality improvement as they pertain to public health, planning and evaluation principles, public health economics, public health policy and data sources.

MPH 76006 - Environmental Health Sciences in Public Health (3 credits)

This course includes the characterization of components of our environment that can adversely affect human health and, briefly, the policies and regulations designed to protect us. This includes such topics as air/water quality, food hygiene, sanitation, municipal/infectious/hazardous waste, vector-borne disease, occupational health, legal/risk issues, and global issues.

MPH 76007 - Grant Writing for Public Health Practice (3 credits)

Methods and techniques for writing and managing grant proposals to support public health programs. Emphasis on development of grant proposals, including narrative, program plan, evaluation design, timeline, budget and budget justification; identification of grant funding sources; managing funded projects, and appropriate response to requests for proposals.

MPH 76008 - Public Health Practice and Issues (3 credits)

In an organizational setting, the following topics will be explored: informatics and communication, diversity and cultural proficiency, ethics, and biology. These topics are emerging public health issues, which will be applied in a practice setting. This is a "limited practicum" course in the Master of Public Health program. *Prerequisites: MPH 76001 - Public Health Concepts*.

MPH 76009 – Public Health Research & Evaluation (3 credits)

Public Health Research and Evaluation is a theoretical and applied course on research methods. Students will critically review journal articles, create research questions, conduct comprehensive literature reviews, employ quantitative and qualitative research methods that fall within institutional review board parameters, develop and execute a data analysis plan. Culmination of coursework will be an individual oral presentation and mock journal article. *Prerequisite: MPH 76004 - Biostatistics in Public Health. Prerequisite/co-requisite: MPH 76003 - Epidemiology in Public Health.*

MPH 76011 - Introduction to Health Policy (3 credits)

An overview of the development of health policy using several dyads (case studies, readings, qualitative and quantitative research, group exercises, and problem based learning).

MPH 76013 – Field Epidemiology (3 credits)

This course presents an overview of the methods used in epidemiologic field investigations. It provides students with a comprehensive review of the basic components of an outbreak investigation, an introduction to public health surveillance, and an overview of specific types of investigations in which a field epidemiologist might become involved, including trace back studies, environmental health assessments, noninfectious health event investigations, contact tracing, and forensic epidemiology. In addition, resources that often come into play in outbreak investigations are presented, such as public health laboratories, the incident command system, and geographic information systems. *Prerequisite/co-requisite: MPH 76003 - Epidemiology in Public Health*.

MPH 76014 – Infectious Disease Epidemiology (3 credits)

This course presents an overview of infectious disease epidemiology and its application to public health practice. Students will be introduced to infectious disease agents, transmission characteristics, surveillance, epidemiologic investigation and prevention measures to control the spread of disease. Emerging diseases, response to and their impact on public health will be discussed, in addition to public health laws in regards to infectious disease and the Infectious Disease Control Manual, which outlines public health action for diseases classified as reportable in the State of Ohio.

MPH 76094 - Independent Study (1-3 credits)

Research or other individual project designed jointly by student and instructor. Intended to cover topics not available in electives list. May only be taken for a maximum of 3 credits. *Prerequisite:*

Permission of academic advisor and faculty preceptor, and creation of IS contract form. Taken for a grade.

MPH 76095 - Special Topics (1-3 credits)

Sections will focus on specific topics of current interest to public health workers. Also used for courses that students take at other universities. Student must complete an Approval for Acceptance of Graduate Coursework at East Ohio Universities (cross-registration) form when applicable. Different section identifiers are used when more than one special topics course is being offered in the same semester that either has the same content, but different credit values, or with different content. Course titles will be manually edited to describe section content to extent possible.

MPH 76096 - Practicum (1-3 credits)

Student is teamed with a faculty advisor and community preceptor(s) to work on a meaningful public health issue. For students who desire additional field experience. *Prerequisite:* Permission of Academic Advisor and faculty preceptor.

MPH 76098 - Capstone Project I (3 credits)

Students are evaluated on targeted public health competencies. Students will be asked to develop a capstone project to include the competencies that need to be strengthened. By the end of the course, students will have produced a capstone proposal. This is a prerequisite for Capstone Project II. *Prerequisites*: Public Health Concepts, Biostatistics in Public Health, Social and Behavioral Sciences in Public Health, Epidemiology in Public Health.

MPH 76099 - Capstone Project II (3 credits)

Students apply the public health competencies acquired in the core courses to a public health project. It is the culminating experience in the Consortium of Eastern Ohio Master of Public Health CEOMPH) program. Students may register for this course only after all core courses and Capstone Project I have been successfully completed. The student will select a faculty and community preceptor that will provide guidance and evaluate the work on a project. An approved written product (grant, paper, etc.) must be produced. *Prerequisites: MPH 76098 - Capstone Project I and all core courses*.

Degree Requirements: Medical Ethics and Humanities (M.A.)

Students are required to complete 32 semester credits. The course of study is the following:

Requirements	Minimum Credits
Core Foundational Courses	12
MEH 79101 Foundations in Medical	6
Humanities and Ethics	
MEH 79102 Responsible Conduct of	1
Research	
MEH 79103 Research Ethics	1

Requirements – continued	Minimum Credits		
MEH 79096 Human Values Practicum	1		
MPH 76009 Public Health Research &	3		
Evaluation			
Track Courses – Clinical Ethics Option	6		
MEH 79104 Clinical Ethics: Research, Policy	3		
and Practice			
MEH 79105 Organizational Ethics	3		
Track Courses – Medical Humanities	6		
Option			
(choose 6 credits from following)			
MEH 79106 How We Die	3		
MEH 79107 Medical Rhetoric	3		
MEH TBD	3		
MEH TBD	3		
Elective Courses	8		
(choose 8 credits from following)			
ETH 77004 Health Care Justice	1		
ETH 77010 Psychiatric Ethics	1		
ETH 77011 Medicine's Abnormals	1		
ETH 77012 Primary Care Ethics	1		
MEH 79094 Independent Studies	1-3		
MEH 79095 Special Topics	1-3		
MEH 79108 Health Care Law	1		
MEH 79109 Social Determinants of Health	3		
KSU Electives TBD	TBD		
U of A electives TBD	TBD		
Master Thesis	6		
MEH 79901 MA Thesis I	3		
MEH 79902 MA Thesis II	3		
Total Credits Needed	32		

Certificate Requirements: Bioethics Graduate Certificate

This 9-credit program, which can be acquired in less than 9 months, is ideal for the busy healthcare professional or student who wishes to combine clinical practice with ethics consultation, education and research.

Requirements	Minimum Credits
Core Courses:	6
ETH 77001: Foundations of Bioethics	2
ETH 77003: Clinical Ethics	1
ETH 77005: Bioethics Research &	3
Presentation	

Requirements – continued	Minimum Credits
Minimum of 3 credits chosen from two or	3
more of the following courses:	
ETH 77002: Responsible Conduct in	1
Research	
ETH 77004: Healthcare Justice	1
ETH 77009: Pharmacy Ethics	1
ETH 77010: Psychiatric Ethics	1
ETH 77011 Medicine's Abnormals	
ETH 77012 Primary Care Ethics	1
TH 77008: Bioethics Healthcare Law	3
MEH 79106 How We Die	1
MPH 76009: Public Health Research &	3
Evaluation	
RES 58001 Clinical Research	1
Total Credits Needed:	9

Courses: Medical Ethics & Humanities, and Bioethics Graduate Certificate

ETH 77001 - Foundations in Bioethics (2 credits)

This introductory course in bioethics draws upon theoretical and practical concepts and issues in the field of bioethics, including, but not limited to, reproductive technologies, genetics, psychiatric ethics, privacy and confidentiality, therapeutic relationships and informed consent. Students enrolled in medical and pharmacy programs at NEOMED have foundations built into their curricula and receive credit for the Certificate Program following year two. *Healthcare professionals and traditional graduate students must register for the NEOMED online version of this course.

ETH 77002 - Responsible Conduct in Research (1 credit)

Course is designed to expose students to concepts and issues to navigate best practices in animal and human subjects research, as well as professional conduct in research settings.

ETH 77003 - Clinical Ethics (1 credit)

This one-credit hour didactic and experiential course encourages students to participate on ethics committees and ethics rounds in clinical settings. Students are expected to keep a journal of their clinical ethics experiences, which may include attendance at ethics committee meetings, ethics consultations, ethics grand rounds, or conferences with ethics content. Some students may opt to assist in teaching ethics to medical students and others. All students are required to take this course in order to complete the Bioethics Certificate Program. Students are expected to travel to clinical institutions in order to complete the requirements of this course.

ETH 77004 - Healthcare Justice (1 credit)

Healthcare Justice is a one-credit hour, intensive weekend course offered in March. This course focuses on issues in healthcare justice such as the allocation and accessibility of healthcare resources, rural healthcare ethics and social determinants of ill health. This discussion-based course, which is required for all Certificate students, gives students the opportunity to collaborate and discuss interesting and difficult dilemmas in their own healthcare systems. Rigorous reading and writing assignments are given to students at the start of the spring semester in preparation for this course.

ETH 77005 - Bioethics Research and Presentation (3 credits)

All students must complete a research paper on any bioethics topic. This 3- credit hour course involves faculty-mentored research that can be done at NEOMED or at another academic or clinical institution. The final paper must be of publishable and presentable quality. Students must present their research at the annual Bioethics and Humanities Conference held on campus in late April in order to complete the program. Sometimes taken concurrently with RES 58001 – Bioethics Research Elective (1 credit).

ETH 77008 – Special Topics in Bioethics (1-3 credits)

Represents formal courses given infrequently to explore, in depth, a comparatively narrow subject within bioethics that represents emerging issues or specialized content not otherwise represented in the main curriculum, or to document cross-registration coursework approved through a consortium agreement with a partner institution. Examples of previously offered special topics courses in Bioethics and/or Medical Ethics and Humanities include:

Special Topics in Bioethics: Healthcare Law (3 credit)

This course provides a foundation of the legal issues related to areas of healthcare. This course will introduce students to legal concepts and the leading approaches to analyzing the legal issues involved. The overall goal of this course is to provide students with basic legal understanding that can be applied to real world experiences and situations and that will aid them as they progress in their careers in medicine.

ETH 77009 - Pharmacy Ethics (1 credit)

This eight-week elective focuses on the intersections of pharmaceutical sciences, pharmacy practice and ethics. Students will utilize core ethical principles and theories in pharmacy ethics, identify ethical frameworks for guiding ethically and socially responsible decisions and develop critical thinking skills for current and future issues, such as conscientious objection, moral complicity with laws and regulations, public health issues in pharmacy practice, responsible conduct of pharmaceutical research, pharmacogenomics, among other topics and issues. This course begins in January and runs through the end of February.

ETH 77010 - Psychiatric Ethics (1 credit)

This elective course is offered every other year in November (two Saturday sessions), and involves an exploration into the philosophical and clinical dimensions of mental health and the practice of psychiatry. Students will be exposed to historical and contemporary issues and texts, and discuss topics ranging from the conceptualization of mental illness to boundary violations in the clinical setting. Students who wish to take this elective must read "Protest Psychosis" as a pre-required assignment/pre-requisite.

ETH 77011 – Biomedicine's Abnormals (1 credit)

This course will examine the concept of the abnormal as it is used in biomedicine. To that end, we will spend a good deal of time interrogating the formulations and functions of the Normal. To make our interrogation of this enormous and pervasive topic manageable we will focus our attention on a familiar – and seemingly stable – object: the body. Despite all that our bodies share in common, differences in shape, size, and color or gender, behavior and desire can elicit wildly opposing reactions ranging from sympathy and disgust to affection and violence. The body's ability to engender such disparate responses stems in large part from the various and contradictory ways science and medicine have invested it with meaning. Each of the literary, filmic, and historic narratives selected for this seminar tackles biomedicine's role in determining what is and is not abnormal.

ETH 77012 – Primary Care Ethics (1 credit)

This is an elective course in bioethics where students will be exposed to a variety of ethical issues and dilemmas specific to primary care. In building upon clinical ethics content and theoretical foundational material, students will gain knowledge about the therapeutic relationship between primary care providers, patients, and their families, the role of virtue in caregiving, and ethical issues throughout the lifespan (from prenatal care to geriatrics). There are characteristics of the pediatric, adolescent and adult populations that present unique concerns and challenges that require careful ethical consideration. Throughout this course, we will explore these distinctive issues and identify the ethical tools necessary to deliberate on and assist in making decisions.

MEH 79096 – Human Values Practicum Experience (1 credit)

Provides an opportunity for experiential learning and gives students a chance to connect academic learning to the work or missions of various cultural, business, and healthcare organizations. Introduces students to experienced professionals who can offer mentorship and help students network with professionals in their respective fields. The selection of practicum sites is limited only by students' imagination and logistics. Students consult with NEOMED faculty for assistance in identifying each of the three-practicum sites. At each site, students work with appropriate supervisors to shape a work plan that will provide both an educational experience for the student and a useful project for the organization. Possible sites include, but are not limited to, the following: hospice organizations; museums, or other art institutions; public theaters; VA outreach programs; advocacy agencies for the disadvantaged. When possible, students are encouraged to tie their practicum experiences to their final paper for the Foundations in Medical

Ethics and Humanities.

MEH 79101 Foundations in Medical Humanities and Ethics

This course introduces students to the disciplines of medical ethics and medical humanities. Taking a topical approach, students will examine how various disciplines analyze the relationships among health, medicine, and society, and consider in particular what the medical humanities can teach us about medical ethics, biomedical theory, and healthcare training and practice. Students will also develop historical, literary, philosophical, and rhetorical understandings of health and wellbeing while exploring how different individuals and cultures represent illness, suffering, disability, and death. By critically reflecting on these topics and issues, students will develop a greater understanding of their own values, beliefs, and attitudes regarding health and wellbeing.

MEH 79102 Responsible Conduct of Research

Students will gain an understanding of the changing and growing need for educational and pragmatic program in professionalism and ethical conduct in research, graduate students, focusing their studies and careers in the medical, research, and technological sciences, are strongly encouraged to enroll in this course. Students will gain further knowledge about the history, structure, and organization of research. This program will guide students and fellows, as they progress through their graduate coursework/fellowships toward careers in medicine, science, and technology, toward a better understanding of core theories and values in professionalism and ethics as they apply to real-life experiences and situations.

MEH 79103 Research Ethics: A Supplement to RCR (1 credit)

The purpose of this complementary 1-credit course in research ethics is to have students delve deeper into their Responsible Conduct of Research coursework, and lessons and issues discovered through their online CITI training. This course is for graduate students who aim to develop their critical thinking skills, refine their abilities to ethically analyze cases and issues, and utilize basic research and writing skills, including literature reviews, prospectus, thesis development, and logical analysis.

MEH 79901 Master's Thesis I

Students will identify a topic to be explored and work with a faculty advisor to refine the topic, create a prospectus, do a comprehensive literature review, and create an outline for the Master's Thesis. Some students may begin the introduction chapter of the Master's Thesis during this time. Students will be evaluated on each of the identified components. Students at this stage may also be submitting applications for the IRB review (human subject's research), particularly if qualitative and quantitative design methods may be employed. Master's Thesis I is Pass or Fail; a letter grade is not assigned.

MEH 79902 Master's Thesis II

Students will complete the major chapters and/or finalize data collection and analysis (if engaged in qualitative and/or quantitative research). The final compiled Thesis (traditional or project

format) is due at the end of this course. It is strongly encouraged that all MA students present in the Annual Bioethics and Humanities Conference at NEOMED, or comparable venues on a national level. The final thesis must be of high quality, i.e., complete and publishable. Master's Thesis II is Pass or Fail; a letter grade is not assigned.

MEH 5xx96 or 6xx96 Independent Study (1-3 credits)

These are student-initiated experiences to pursue an area of interest not otherwise covered by a regular course offering in the area of medical ethics and the humanities, with the guidance of a NEOMED faculty member. Specific course identifiers are determined each semester as part of the course offering schedule build.

RES 58001 - Clinical Research (1 credit)

Students may take clinical research as a bioethics elective, in addition to their required Bioethics Research course, in their third or fourth year of medical or pharmacy school. This elective gives students an opportunity to learn how to synthesize theoretical research in bioethics, conduct qualitative or quantitative studies, and understand the process of institutional review of research. One credit is designated for the Certificate Program for students who opt for this elective.

Certificate Requirements: Global Health Graduate Certificate

The Certificate in Global Health program provides an opportunity for students to understand core concepts and issues of health and disease, public health literacy, health care delivery, patient and community advocacy, and global bioethics. Students who enroll in the Global Health Certificate will be exposed to new perspectives in a foreign country, comparing and contrasting their local and national knowledge, culture, and experiences, while earning a graduate level certificate. The Florence Health Institute is an opportunity for students who are pursuing a career in Public Health, Nursing, Medicine, Pharmacy or any related field to study the impacts of their field through an international lens. In this creative and interprofessional study abroad experience, students from Kent State University and NEOMED will study together in a total of seven (7) credits in Florence for one month during the summer.

Requirements	Minimum Credits
Core Courses:	7
GLBH 5095X KSU ST: Italian for Medical	1 (KSU cross-reg)
Purposes	
GLBH 5395X KSU ST: Plagues that Shaped the	1 (KSU cross-reg)
World	
GLBH 77095 The Impact of Social	3
Determinants of Health (NEOMED) - or-	
GLBH 5295X Social Determinants of Health	
(KSU)	

Required for Medical and Pharmacy Students:	3	
GLBH 5195X KSU ST: Comparisons of Health Delivery between Italy and USA	3 (KSU cross-reg)	
Required for Graduate Students:	3	
Requirements – Cont.	Minimum Credits	
GLBH xxxx		
Total Credits Needed:	9	

Courses: Global Health Graduate Certificate

GLBH 77095 – Impact of Social Determinants of Health on Communities and Persons (3 credits) This course challenges students to explore global and local communities within Italy to evaluate social determinants of health (SDH) and their impact on persons and society, and their relationship to concepts of health and disease. The course begins with classroom discussions and self-directed activities that explore SDH and relevant concepts from global and local Italian perspectives. Students will explore the local community and work with advisory experts to investigate those social determinants of health that have affected population health.

GLBH 5xx95 or 6xx95 – Special Topics in Global Health (1-3 credits)

Represents formal courses given infrequently to explore, in depth, a comparatively narrow subject within global health that represents emerging issues or specialized content not otherwise represented in the main curriculum, or to document cross-registration coursework approved through a consortium agreement with a partner institution.

NEOMED-KSU Special Topic Cross-Registered Courses

GLBH 5095X - KSU ST: Italian for Medical Purposes (1 credit)

Offered as part of the KSU-NEOMED Study Abroad Health Institute in Florence Italy. Delivered in a modular, integrated approach, it is designed to provide students with a foundation of elementary-level Italian, and gradually builds knowledge of vocabulary and grammatical elements. Students will develop speaking, writing, listening and reading skills as well as a familiarity with Italian regions and culture through a series of contextualized communication activities. It focuses on language and culture specific to healthcare professions and will include written and oral communication will occur between patient and doctor; medical phrases and terminology; lexicon of the medical field and comparisons between the Italian and US health systems. Summer offering; 1 semester credit. (KSU Course Id TBD).

GLBH 5195X - KSU ST: Comparisons of Health Care Delivery Between Italy & USA (1 credit)

The United States is undergoing tremendous change to decrease costs and improve quality and access to care in the healthcare system. Opinions about how best to reach this goal are divided and contentiously debated. During these debates, comparisons to countries with universal or government run healthcare systems are made. Speculation about the long-term effects of the US changes vary but experts agree that the public should expect an arduous process that will take years of refinement and change. Students from every health profession must understand health care delivery as leaders in their respective fields. Italy has operated under a national health system for nearly 40 years and provides an excellent opportunity to study the pros and cons of this type of health delivery system. This course will guide students from multiple disciplines through direct comparisons of Italian and US health systems to evaluate each in the context of political, social and cultural values. Engagement in a multidisciplinary classroom with students from other health-related disciplines provides opportunities to consider health-related problems from a team-based perspective, while understanding the roles and skills of interdisciplinary team members. (KSU Course Id TBD)

GLBH 5295X - KSU ST: Social Determinants of Health on Communities & Persons (3 credits) Offered as part of the KSU-NEOMED Study Abroad Health Institute in Florence Italy. This four-week course challenges students to explore global and local communities within Italy to evaluate social determinants of health (SDH) and their impact on persons and society, and their relationship to concepts of health and disease. Summer offering; 3 semester credits. (KSU Course Id TBD)

GLBH 5395X - KSU ST: Plagues that Shaped the World (3 credits)

Offered as part of the KSU-NEOMED Study Abroad Health Institute in Florence Italy. This course introduces students to the fundamentals of public health microbiology; establish the epidemiological principles that explain how plagues erupt and propagate, decimating populations and their cultures. Social determinant that fuel plague outbreaks and the often-ill-informed policy-making that slowed recovery will be discussed, as will modern examples such as Ebola and Zika. City excursions and a field trip are included to assess cultural changes resulting from historical plagues. Summer offering; 3 semester credits. (KSU Course Id TBD)

GLBH 5xx96 or 6xx96 – Independent/Individualized Study in Global Health (1-3 credits)

These are student-initiated experiences to pursue an area of interest not otherwise covered by a regular course offering in the area of global health, with the guidance of a NEOMED faculty member. Specific course identifiers are determined each semester as part of the course offering schedule build.

Degree Requirements: Health-System Pharmacy Administration (M.S.)

Students are required to complete 40 semester credit hours.

Requirements	Minimum Credits	
PHR 78104 The Healthcare System	3	
PHS 5095X KSU ST: Financial Accounting	2	(KSU cross-reg)
for Decision Making		
PHR 78204 Medication Use Systems &	3	
Operations Management		
PHR 78204 Seminar, Contemporary Issues	4	
(4 experiences worth 1 credit each)		
PHS 5195X KSU ST: Leadership &	2	(KSU cross-reg)
Managerial Assessment		
PHR 78102: Research Methods in	3	
Pharmacy Practice		
PHR 78203: Financial Management in	3	
Health-System Pharmacy		
PHR 5295X KSU ST Health Informatics	3	(KSU cross-reg)
Management		
PHR 78302: Personnel Management	3	
PHR 78304: Effective Communications	2	
PHR 78305 Integrated Business Strategy	4	
PHR 78201: Innovation Project I	3	
PHR 78303: Innovation Project II	3	
Total Credits Needed	38	

Students enrolled in a concurrent post-graduate residency in pharmacy administration are expected to complete the program in two years. The American Society of Health-System Pharmacists (ASHP) accredited postgraduate residencies, completed concurrently with the two-year M.S. program, allow students to immediately apply hands-on experience gained through clinical and administrative rotations and knowledge gained in the classroom to real-life professional, clinical and management situations. The concurrent two-year specialized residencies in pharmacy administration are conducted at the Cleveland Clinic or Akron General Medical Center.

Mid-career practitioners enrolled in the M.S. degree only, may finish the program in two to four years. All NEOMED courses are offered in the evenings while all courses offered through cross-registration with Kent State University (KSU) are online. Scheduled course time is limited to two days per week.

Courses: Health-System Pharmacy Administration

PHR 78101 - Pharmacy Seminar, Contemporary Issues (1 credit @ x 4)

This course is taken in four experiences, one per semester in the two-year curriculum. This course analyzes, discusses and debates contemporary issues in health-system pharmacy practice and administration, as well as the healthcare delivery system at a higher level. Each student will present one seminar topic during the semester to develop skills in making presentations and leading small group discussions. In addition to current issues in health-system pharmacy, each semester will also feature a different topic theme, such as leadership, communications, or strategic planning. Up to three (3) times per semester, thought leaders in pharmacy and/or healthcare are invited as guest speakers and stimulate discussion on current issues. Repeatable up to a maximum of 4 credits.

PHR 78102 - Research Methods in Pharmacy Practice (3 credits)

This course is designed to develop knowledge and skill in practice related research. Course content will primarily be discussion of design, strengths, weaknesses, and application of various types of clinical trials. Additional content will include an overview of key biostatistical concepts relevant to practice related research, ethical considerations in clinical research, issues in supporting industry sponsored research and strategies for disseminating the results of clinical research. Learning strategies will include traditional classroom lectures, as well as an emphasis on class discussion of key concepts. Students will prepare for class in advance via assigned reading material and completion of assignments. Real world examples of clinical research will be provided by course instructors to facilitate discussion. The application of concepts learned will also be applied through completion of a longitudinal project beginning with a clinical observation and culminating in the development and presentation of a study protocol.

PHR 78104 - The Healthcare System (3 credits)

This class provides an overview of the current forces and trends impacting the organization, financing, delivery and evaluation of healthcare services in the United States. Specific topics include the historical development of healthcare delivery in the US and the impact of societal and disease patterns on the organization of services; the general structure of facility and community based care providers and systems; the intersection between public and private health sectors, the development of health policy; the assessment of healthcare delivery systems; and the roles of information technology in the transformation of healthcare. This course was formerly known as HCA 515 - The Medical Care Organization, and was offered through Cleveland State University.

PHR 78201 - Innovation Project I (3 credits)

An innovation project is required in lieu of a thesis. The project must follow a research methodology and be of publishable quality in a peer-reviewed professional journal. The topic should be of current interest and importance to the student and his/her employer or the advancement of the practice of pharmacy and have application for direct improvement of patient care, systems improvement and/or direct cost savings/revenue generation to the employer. If the topic is appropriate, it must follow a research methodology.

PHR 78203 - Financial Management in Health-System Pharmacy (3 credits)

This course provides the practical application of principles of financial and managerial accounting to the financial management of hospital and health-system pharmacies. The processes of making managerial decisions based on financial analyses are demonstrated. Financial management skills are developed to optimize managerial decisions. The development of departmental budgets is demonstrated, including analysis of past performance, trends and forecasting for the future. This course explores financial concepts and tools to analyze and evaluate financial performance, including variance analysis.

Pharmaceutical contracts and supply chain management are studied along with revenue budgets and other forms of pharmaceutical reimbursement. Throughout the course, the student learns about planning, from strategic financial planning, building a financial plan for a new service to planning for education and research programs. Each student will participate in a pharmacy and therapeutics committee financial analysis simulation. Each student will also be responsible for the completion of an individual project preparing an evaluation of a new program or service with an emphasis on the financial analysis of the evaluation process.

PHR 78204 - Medication Use Systems & Operations Management (3 credits)

This course explores, analyzes, and presents all key areas that comprise the medication use processes in contemporary health-system pharmacy practice and administration, as well as the healthcare delivery system at a higher level. Each student will participate in an individual project justifying a new service, product, position or request of similar nature, by developing a formal proposal for the justification and implementation of the requested service, position or product. The proposal will be presented to the rest of the class, course directors and/or guest evaluators. By the conclusion of the course, students will have obtained a deeper and broader understanding of the entire medication use process in a healthcare system. They will also understand the advantages and disadvantages of various methods to provide key services.

PHR 78302 - Personnel Management (3 credits)

This course provides instruction, discussion and debate to develop the knowledge and skills required of pharmacy managers to supervise and lead others. Students will focus on managing oneself for greater effectiveness, writing position descriptions, recruiting and interviewing candidates, avoiding discriminatory hiring practices, delegating responsibility, developing others to enhance performance, conducting performance appraisals, handling disruptive employees, managing conflict, managing change, building teams and managing stress. Students will also participate in a number of simulations to immediately apply the information and skills gained in class in order to enhance their ability to supervise and lead others.

PHR 78303 - Innovation Project II (3 credits)

An innovation project is required in lieu of a thesis. The project must follow a research methodology and be of publishable quality in a peer-reviewed professional journal. The topic should be of current interest and importance to the student and his/her employer or the advancement of the practice of pharmacy and have application for direct improvement of patient

care, systems improvement and/or direct cost savings/revenue generation to the employer. If the topic is appropriate, it must follow a research methodology.

PHR 78304 - Effective Communications (2 credits)

This course discusses communication at the individual, department and organizational level. Review of communication frameworks (e.g. SBAR) and tools to facilitate optimal employee engagement will be utilized. Students will examine the impact of content, delivery, technology and generational differences on communication efficacy. Class interactivity and situational examples will be implemented to assist students in the essential skills of communication and active listening with particular focus on crucial conversations. Students will also have the opportunity to refine their writing skills with formal and informal documents including but not limited to email, text, performance evaluations, policies, and procedures.

PHR 78305 - Integrated Business Strategy (4 credits)

Explores the integrative and cross-functional nature of strategy and decision making in a healthcare setting. Applies principles, concepts, and theories from business and marketing strategy, finance, human resources management, managerial accounting, and operations management-to-management decisions and the formulation of strategic plans.

PHR 5xx95 and 6xx95 – Special Topics in Health-System Pharmacy Administration (1-4 credits)

Represents formal courses given infrequently to explore, in depth, a comparatively narrow subject within public health that represents emerging issues or specialized content not otherwise represented in the main curriculum, or to document cross-registration coursework approved through a consortium agreement with a partner institution.

NEOMED-KSU Special Topic Cross-Registered Courses

PHR 5095X - KSU ST: Financial Accounting for Decision Making (2 credits)

This on-line course provides an in-depth study of financial accounting concepts and basic financial statements. It includes an examination of the significant accounting issues affecting financial reporting and their impact on analysis and interpretation of financial information for decision-making. Two online webinars through MBAmath, one on Accounting and another on Spreadsheets, must be passed at the 75% rate or higher before the start of this course. (Offered through KSU, College of Business Administration, ACCT 63037)

PHR 5195X - KSU ST: Leadership and Managerial Assessment (2 credits)

This on-line course helps students develop an understanding of the leadership process. Through critical thinking, class discussions and class activities, they build skills in leading others, leading themselves, and teamwork. (Offered through KSU, College of Business Administration, ACCT 64158)

PHR 5295X - KSU ST: Health Informatics Management (3 credits)

This on-line course covers the areas encompassing health informatics management including the planning, selection, deployment, and management of electronic medical records (EMR), management decision-support and tracking systems (DDS), and other health information technologies (HIT). (Offered through KSU, College of Communications, HI 64158)

College of Medicine

Accreditation – College of Medicine

The Liaison Committee on Medical Education (LCME) is solely responsible for accrediting programs that lead to the M.D. degree. Accreditation by the LCME is required to receive federal grants and to participate in federal loan programs. State boards of licensure require physicians to be graduates of LCME-accredited medical schools.

The College of Medicine is fully accredited by the LCME. The last comprehensive site visit took place in March 2011. The LCME continued the accreditation of NEOMED's education program leading to the M.D. degree for an eight-year term. The next LCME comprehensive site visit will take place during the 2018-2019 academic year.

Mission Statement – College of Medicine

The mission of the Northeast Ohio Medical University College of Medicine is to graduate exemplary physicians oriented to primary care practice and other needed specialties. We strive to improve the quality of healthcare in Northeast Ohio through:

- education of medical students
- support for residency programs in our affiliated hospitals
- continuing professional development of our staff, faculty and regional health professionals
- scholarship, including original research
- community service programs
- stewardship for the health of Northeast Ohio

Educational Goals – College of Medicine

The goal of the educational program at the College of Medicine is to graduate qualified physicians oriented to the practice of medicine at the community level, with an emphasis on primary care. Graduates must demonstrate the biomedical, psychosocial, and cultural knowledge, skills and values needed to practice successfully and to fulfill their responsibilities to their patients and their communities. These overall objectives of the educational programs cover the broad outcomes we expect of all students before their graduation. Our educational program goals, and goals and objectives at the level of courses, clerkships and preceptors give full meaning to these overall expectations. Based on the general physician competencies specified by the Association of American Medical Colleges, the NEOMED College of Medicine program goals expect that all graduates can:

- 1. **Patient Care:** Provide patient-centered care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
- 2. **Knowledge for Practice:** Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care.

- 3. **Practice-based Learning and Improvement:** Demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to improve patient care continuously based on constant self-evaluation and lifelong learning.
- 4. Interpersonal and Communication Skills: Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families and health professionals.
- 5. **Professionalism**: Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.
- 6. **Systems-based Practice:** Demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.
- 7. **Interpersonal Collaboration:** Demonstrate the ability to engage in an interprofessional team in a manner that optimizes safe, effective patient and population-centered care.
- 8. **Personal and Professional Development:** Demonstrate the qualities required to sustain lifelong personal and professional growth.

History – College of Medicine

In August 1973, the Ohio General Assembly passed legislation establishing a College of Medicine made up of a unique affiliation of three state-supported universities in Northeastern Ohio — the University of Akron, Kent State University and Youngstown State University.

In 1974, Rootstown was chosen the site for the basic medical sciences campus. In 1975, 42 students were selected for the charter class and began undergraduate studies at the three partner universities. In September 1977, charter class members began the medical phase of their studies at the newly completed Rootstown campus, with the class size increased to 48 by the addition of students who had already completed a traditional premedical curriculum. Commencement for the College's charter class occurred May 26, 1981. Since that time, the College's class size has increased to 160 students.

The overall goal of the College of Medicine is to graduate well-qualified doctors of medicine who will be able to excel in any field of specialization, but who have had significant orientation to the principles and practices of primary care in the community setting.

Student Matriculation Requirements – College of Medicine

The primary mission of the College of Medicine is to provide all students with the training to become qualified physicians particularly those who are oriented to the practice of medicine at the community level. As such, faculty are responsible to develop and implement standards of the practice of medicine.

Preparation and training to become a physician requires each student to understand and meet the essential functions required for admission, continuation and graduation identified below. The faculty has developed the course requirements and activities to provide critical elements of physician training. It is expected that students will participate in all course activities (including but not limited to lectures, seminars, laboratories, clinics, physical examinations and patient procedures) and adhere to individual hospital rules and regulations as well as College of Medicine policies regarding these activities. Learning is based on active student participation rather than simple observation and/or note taking.

A candidate for the M.D. degree must be able to demonstrate intellectual-conceptual, integrative and quantitative abilities; skills in observation, communication and motor functions; and mature behavioral and social attributes. Technological compensation and/or reasonable accommodation can be made for some handicaps in certain of these areas, but a candidate should be able to perform in a reasonably independent manner without a trained intermediary. The use of a trained intermediary means that a candidate's judgment must be mediated by someone else's power of selection and observation.

Essential Functions

Intellectual-Conceptual, Integrative and Quantitative Abilities: These abilities include measurement, calculation, reasoning, analysis and synthesis. Problem solving, the critical skill demanded of physicians, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

Observation: The candidate must be able to observe demonstrations and experiments in the basic sciences, including but not limited to physiologic and pharmacologic demonstrations in animals, microbiologic cultures, and microscopic studies of microorganisms and tissues in normal and pathologic states. A candidate must be able to observe a patient accurately at a distance and close at hand. Observations necessitate the functional use of the sense of vision and somatic sensation. It is enhanced by the functional use of the sense of smell.

Communication: A candidate should be able to speak; to hear and to observe patients in order to elicit information; to describe changes in mood, activity and posture; and to perceive nonverbal communications. A candidate must be able to communicate effectively and sensitively with patients. Communication includes speech as well as reading and writing. The candidate must be able to communicate effectively in oral and written form with all members of the healthcare team.

Motor: Candidates should have sufficient motor function to elicit information from and about patients by palpation, auscultation, percussion and other diagnostic maneuvers. A candidate should be able to execute motor activities reasonably required to provide general care, to perform diagnostic procedures and to provide emergency treatment to patients. Examples of emergency treatment reasonably required of physicians are cardiopulmonary resuscitation (CPR), the administration of intravenous medication and the application of pressure to stop bleeding.

Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

Behavioral and Social Attributes: A candidate must possess the emotional health required for full utilization of intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients, and the development of mature, sensitive and effective relationships with patients. Candidates must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Commitment to excellence, service orientation, goal setting skills, academic ability, self-awareness, integrity and interpersonal skills are all personal qualities that are assessed during admission and the educational process. Because the nature of medical education is based on a mentoring process, candidates are expected to be able to accept criticism and respond by appropriate modification of behavior.

Handicapped individuals are encouraged to apply.

Admission and Overview of Degree Programs – College of Medicine

The M.D. curriculum extends over four years and includes basic medical sciences, clinical sciences, community health sciences and psychosocial/behavioral sciences. Students are eligible to enroll in this degree program after completing a bachelor's degree or higher from any regionally accredited institution of higher education in the United States. Eligible candidates may apply for admission under one of four pathway programs. These include:

- Traditional (Direct Entry) Admission (Both Early Decision and Regular Decision cycles)
- Advanced Standing Admission (transfer admission as an M2/M3 from another medical school)
- Baccalaureate/M.D. Provisional Admission (2+1+4 or 2+2+4 Bacc./M.D.)
- Post-Baccalaureate/M.D. Provisional Admission (4+2+4 Post-Bacc./M.D.)

Doctor of Medicine (M.D.)

Individuals who wish to pursue a Doctor of Medicine degree (M.D.) have the opportunity to apply to NEOMED from a variety of pathways that best match their backgrounds. These pathways and their admission processes are detailed in the following section. All potential candidates who have an interest in the College of Medicine are encouraged to open a personal admission portal at <u>Discover.neomed.edu</u>.

Regardless of pathway, application to medical school involves a rigorous process of evaluation of each applicants focused academic preparation and a candidates alignment with the mission of the Medical College. Admission to medical school is a competitive process with the number of qualified applicants far exceeding the number of M.D. seats available. Candidates are solely responsible for meeting all deadlines and submitting all completed credentials according to

application instructions and maintaining contact information for notices and updates in the official data sources. In general, application to medical school occurs over the course of several months. Interested candidates are encouraged to begin the application process at least one year prior to the application deadline.

Pathways candidates granted provisional admission via a reserved seat are subject to completion of pre-matriculation requirements including, but not limited to, academic performance, successful completion of pre-requisite coursework, achievement of specified standardized testing requirements, and professional conduct reflective of medical school. All candidates will have completed a baccalaureate degree before matriculation into the M.D. program in the College of Medicine.

NEOMED reserves the right to add, alter, or eliminate admission pathways through approved policy channels prior to the start of an annual admission cycle, and without prior public notice.

Direct-Entry Pathway (Traditional Admission):

Candidates who have or will have successfully completed a baccalaureate (often referred to as "four-year") program of study prior to matriculation to medical school may be eligible to apply through the Direct Entry/Traditional admission pathway. Considerations for admission to the M.D. program may include demonstrated proficiency in appropriate coursework (cumulative grade point average, Biology, Chemistry, Physics, and Mathematics (BCPM) grade point average, individual course grades and success in any prerequisite coursework), scores from the Medical College Admission Test (MCAT), and a commitment to the field of medicine, and co-curricular and work experiences and activities. Candidates who possess the academic preparation, which demonstrates likely success in medical school, with goals and application credentials that suggest a strong affinity with the mission of the NEOMED College of Medicine, will be reviewed most favorably. Personal interviews, by invitation only, are also a part of the applicant screening process. Application procedures are outlined below. See the appropriate applications instructions link from www.neomed.edu for complete admission procedures and applicable and binding deadlines.

(1) Direct Entry applicants must first apply online through the American Medical College Application Service (AMCAS), located at <u>www.aamc.org</u>. Deadline for receipt of the AMCAS application is November 1 of the year preceding anticipated enrollment for Regular Decision, and August 1 of the year preceding anticipated enrollment for Early Decision. The Direct Entry application process is further outlined below:

(2) Applicants must take the MCAT no later than the fall prior to the year of anticipated enrollment. Additionally, the MCAT must have been taken within three years from the month of anticipated matriculation. Information on testing dates and registration may be obtained from MCAT, American College Testing Program, P.O. Box 4056, Iowa City, Iowa 52243, 319.337.1357, www.aamc.org/students/mcat/.

(3) Applicants who successfully meet initial admission criteria are invited to complete the NEOMED Supplemental Application. Only those who complete and submit the NEOMED Supplementary Application by the deadline continue in the admission process. Failure to complete the supplemental application process after invitation may constitute passive withdrawal of candidacy. The deadline for receipt of the supplementary materials is September 1 of the year prior to anticipated enrollment for Early Decision consideration, and December 1 of the year prior to anticipated enrollment for Regular Decision.

Direct Entry (Traditional Admission) - Early Decision Admission:

Those Direct Entry (Traditional) pathway applicants to the M.D. program who consider NEOMED their first choice and are strongly aligned with its mission are encouraged to apply through the Early Decision Program (EDP). All EDP applicants must have MCAT scores, apply through AMCAS by August 1, and have the supplemental application complete and verified to the Office of Admissions by September 1 of the year prior to anticipated enrollment. Notification to the applicant regarding admission is given by October 1. If selected, an EDP applicant receives the benefit of early notification of acceptance and is, therefore, obligated to attend the NEOMED College of Medicine under American Association of Medical Colleges admission policy. If not selected for admission through the EDP program, applicants may then apply to other medical schools. For more information in your consideration of whether the early decision program is right for you, visit www.students-residents.aamc.org.

Direct Entry (Traditional Admission) - Regular Decision Admission:

All Direct Entry Regular Decision applicants must have MCAT scores, apply through AMCAS by November 1, and have the supplemental application complete and verified to the Office of Admissions by December 1 of the year prior to anticipated enrollment. Notification to the applicant regarding admission is shared on a rolling basis. Direct Entry Regular Decision Admission seats vary depending upon the promotion of pre-matriculating students from NEOMED partner pathway programs. Offers of admission may occur between November and August.

Advanced Standing (Transfer) Admission:

Students enrolled at other medical schools who desire to transfer to the College of Medicine may do so through application to the Advanced Standing Admission Program. Applicants shall possess baccalaureate degrees or higher from regionally accredited post-secondary institutions in the United States, and have successfully completed two years of coursework at their current medical school. Candidates must be in good academic standing at their current medical school and have passed the United States Medical Licensure Exam (USMLE) Step 1 examination to be considered for advanced standing admission. Applicants are considered for admission into NEOMED as second- (M2) or third-year (M3) medical school students. M2 admits will repeat the second year of their medical education if accepted into that cohort. The number of seats available for students applying for advanced standing varies from year to year based on attrition of previously admitted students and is, therefore, limited. NEOMED does not guarantee that space will be available for advance standing candidates.

Applications for advanced standing are typically available through <u>www.neomed.edu</u> beginning in December prior to the year of anticipated enrollment. The application deadline is typically May 1 prior to the fall matriculation date.

The Admissions Committee considers criteria such as official transcripts, letters of good standing, and official scores from the United States Medical Licensure Exam (USMLE) Step 1 as part of the candidate selection process. Applicants selected for interview complete an on-campus clinical skills assessment (CSA) to help determine their preparedness to start the M3 curriculum at NEOMED. The CSA has an associated fee that is assessed to each advance-standing applicant who accepts an invitation to interview. The results of the CSA are used in combination with other assessments to guide the decisions of the Admission Committee. The determination of the number of available seats, if any, for advanced standing candidates is usually made in May prior to invitation for the clinical skills assessment.

Advanced standing (transfer) student who are offered admission have been determined by the College Admissions Committee as having fulfilled equivalent professional competencies as our native M1 and/or M2 students. Once equivalencies and/or competencies are determined, the Admissions Committee provides that information to Enrollment Services. Upon matriculation, transfer credit equivalency is post to the student's NEOMED transcript as either summative transfer credit amounts and/or an advanced standing class level notation rather than individual course equivalencies. For additional information about transfer credit practices, please refer to the Academic Policies section of this catalog.

Partner School Pathway Provisional Admission – College of Medicine

Baccalaureate/M.D. (2+1+4 or 2+2+4) Provisional Pathway

The combined Baccalaureate/M.D. degree pathway allows undergraduates to complete two years of study ("2") in college, gain provisional admission to NEOMED, and complete either the remaining one year (+1) or two years of study ("+2") of their undergraduate institution while having a reserved seat in medical school. Upon graduation, students that fulfilled all provisional admission requirement then matriculate to NEOMED to complete a four-year Doctor of Medicine degree ("+4").

Students currently enrolled at a designated NEOMED undergraduate partner institution may be eligible to apply for admission to NEOMED through the Baccalaureate/M.D. (Bacc./M.D.) pathway available at their college or university. In order to be eligible for provisional admission consideration, students must have completed at least one calendar year in academic residence at a partnering institution. Candidates may only apply for provisional admission through the pathway associated with their college or university of residence. Candidates must also possess sophomore class standing in order to apply for admission. Candidates bringing significant college credit earned while enrolled in high school that elevates their class standing above that of sophomore

standing may be considered on an individual basis. Such candidates may be considered with the provision they will not matriculate into medical school without additional full-time coursework at their current partner institution, along with their cohort class.

Provisional admission to the NEOMED College of Medicine requires students enrolled at partner colleges and universities to meet specified minimum academic and professionalism requirements. All students enrolling in Bacc./M.D. pathways should do so with the clear understanding that they must complete all of the requirements of the baccalaureate degree prior to matriculation into the Doctor of Medicine degree program. Provisional admission requirements may differ by pathway program and cohort. Provisionally admitted students are subject to the specific provisional admission requirements in effect during the initial term the provisionally admitted student begins the fall semester subsequent to accepting an offer of provisional admission in the preceding spring.

Upon matriculation at NEOMED to begin the M.D. program of study (Phase II), degree requirements are the same for all M.D. students. Provisional admission pathway applications are available in the early fall. Students should view additional application for admission information, including application eligibility, application deadlines and required credentials by visiting <u>www.neomed.edu.</u> Candidates are solely responsible for understanding and adhering to all procedures and deadlines. Applicants must complete the entire application and submit all required credentials by the deadline for verification (including official transcripts from <u>all</u> previously attended colleges.) The application process will include an in-person interview on the NEOMED Rootstown Campus. Interviews for the Bacc./M.D. program are by invitation only.

Post Baccalaureate/Doctor of Medicine (Post Bacc/M.D. 4+2+4)

The NEOMED-Cleveland State University Urban Health Partnership post-baccalaureate pathway has a primary care focus for those candidates who intend to practice in urban health environments. Students who have already earned a four-year bachelor's degree (the first "4" in 4+2+4) from a regionally accredited four-year college or university in the United States may be eligible to apply. Successful candidates are admitted into a two-year, Post-Baccalaureate/M.D. program ("+2") at Cleveland State University. Once provisionally admitted into the program, students have reserved seats in the NEOMED College of Medicine to complete a four-year M.D. program ("+4") without reapplying. Students are required to meet specific academic and professionalism requirements in order to matriculate to NEOMED, but this pathway allows entrance into medical school for a population of students who may need additional academic background before they enter medical school. This admission pathway remains a competitive process where there are many more admissible candidates than there are seats for admission.

As all provisionally admitted students have a bachelor's degree, the majority of the postbaccalaureate portion of the curriculum includes traditional pre-medical and life sciences courses, along with a compliment of courses and seminars in urban health. Should additional related but non-science coursework be needed, students will be informed upon acceptance and required to complete those courses before beginning medical school.

After successfully completing the post-baccalaureate portion of the curriculum (two years), students are considered for promotion to the medical portion (M.D. degree) of the curriculum (four years). Total expected program length for the Post Bacc./M.D. degree is six years after admissions to the program.

Admission to the combined Post-Baccalaureate/M.D. program is based upon candidate assessments conducted by Cleveland State University and the NEOMED College of Medicine. The application is available in the fall prior to the year that the student would enter the program. Students may obtain the combined application and discover specific deadlines and required credentials at <u>www.neomed.edu</u>. The admission process will require interviews at both Cleveland State University and the NEOMED Rootstown campus, and the admission committees will collaborate to select the final candidates offered a seat in the program. Interviews for the program are by invitation only.

Provisionally admitted post-bacc./M.D. students are subject to the specific provisional admission requirements documented in the NEOMED Phase I CAPP Requirements in effect during the initial term the provisionally admitted student begins the fall semester subsequent to accepting an offer of provision admission in the preceding spring.

Interested prospective students should open a personal admission portal at Discover.NEOMED.edu. for detailed information regarding provisional admission opportunities and to receive related communications.

Pre-Requisite Coursework:

Direct Entry (Traditional Admission) candidates are expected to have successfully completed the following prerequisite courses prior to matriculation:

- · Two semesters in Organic Chemistry and Physics, or the equivalent
- \cdot One semester of Biology, or the equivalent.

Direct Entry (Traditional Admission) candidates are encouraged to have successfully completed the following recommended courses prior to matriculation:

- · Biochemistry
- · Calculus
- \cdot Cell Biology
- · Community Health
- · General Chemistry
- · Humanities

- · Human Anatomy
- · Microbiology
- · Molecular Biology
- · Physiology
- · Sociology
- · Statistics
- Embryology

Provisional Admission (Bacc./M.D. and Post-Bacc./M.D.) candidates should refer to their CAPP Phase I Requirements in effect for their cohort for pre-requisite requirements and recommendations.

Advanced Standing from Sophie Davis School of Biomedical Education at the City College of New York:

Students from Sophie Davis previously granted provisional admission to NEOMED must pass the USMLE Step 1 **before** they can matriculate to NEOMED as third-year medical students (applicable only to students approved for deferred admission through fall 2018).

Readmission:

Former NEOMED students who left the College of Medicine voluntarily and in good standing may apply for readmission. Completion of the NEOMED Supplemental Application, final transcripts reflecting any college level coursework completed during the time of absence from NEOMED, and an interview are the minimum requirements. Readmission candidates may be subject to other requirements that may be related to the circumstance of the length of absence. Depending on the length of absence and the point of departure in the curriculum, applicants seeking readmission also may be required to retake the MCAT, USMLE Step 1 and/or participate in a clinical skills assessment as part of the application review process. Readmission does not guarantee returning to the curriculum at the exact point of departure, and may require the repeat of previously completed coursework and standardized examinations. Interested applicants are encouraged to contact the Director of Admissions for additional information. The deadline for application receipt is December 1 of the year prior to anticipated re-enrollment. Standard application fees may apply.

Official Transcript(s) Requirement

All candidates who matriculate into degree granting programs in the College of Medicine at NEOMED are required to submit a final, official transcript for all previously attended colleges and universities to the Office of Admission on behalf of Enrollment Services. NEOMED works with common application servicers (CAS) during the application process, and while CASS is authorized to receive, process, and verify transcripts, admission fees, and other supporting credentials on behalf of NEOMED, those supporting documents do not become part of the NEOMED student record. However, NEOMED is required by various practices and policies to possess official transcripts received directly from issuing institutions and agencies that include all completed coursework by matriculating students, and proof an earned undergraduate degree. As other

institutions' policies prohibit NEOMED from requesting final official transcripts on students' behalf, the responsibility to request official final transcripts lies with the students. Failure to comply with submittal of final, official transcripts to NEOMED upon matriculation will result in an Enrollment Services hold being placed on the student's record that will prevent registration in a future semester and the distribution of financial aid, and will restrict access to one's education record.

Year	Course ID	Course Name	Credit Hrs
M1 – Fall	IST1-10100	Prologue	2.5
(Class of	IST1-10201	Professional Foundations I	5.0
2021)	MS1-10110	Community Experience I	1.5
	IST1-10106	Evidence-based Medicine I	2.0
	MST1-10111	Foundations of Clinical Medicine I	2.5
	MST1-10101	Human Development and Structure	10.0
	MST1-10112	Human Values in Medicine I	2.0
M1 Spring	IST2-20101	Medical Neuroscience	6.5
M1 –Spring (Class of	MST2-20210	Community Experience II	1.5
(Class of 2021)	IST2-20210	Evidence-based Medicine II	1.0
2021)	MST2-20200	Foundations of Clinical Medicine II	3.0
	MST2-20211 MST2-20212	Human Values in Medicine II	1.5
	MST2-20212 MST2-20214	Molecules to Cells	9.5
	IST2-20100	Physiological Basis of Medicine	6.5
	MST2-20213	Professional Foundations II	1.5
	101512 20215		1.5
M2 – Fall	MST3-30111	Deliberate Practice and Development I	0.5
(Class of	MST2-20106	General Pathology	1.0
2020)	MST3-30108	Human Values in Medicine III	1.0
	MST2-20102	Infection and Immunity for MD	8.0
	MST3-30107	Principles of Clinical Medicine I	3.0
	MST3-30100	Principles of Medical Science I	12.0
M2 –Spring	MST3-30112	Deliberate Practice and Development II	1.0
(Class of	MST3-30110	Human Values in Medicine IV	1.5
2020)	MST3-30109	Principles of Clinical Medicine II	3.0
	MST3-30105	Principles of Medical Science II	25.0
M3 – Year			
(Class of	MST4-40010	Prerequisite to the Clinical Curriculum	5.0
2019)	MST4-40011	Human Values in Medicine V	0.5
	MST4-40007	Applications of Clinical Medicine (ACM)	4.0
	EMED-40007	Emergency Medicine Clerkship	3.0
	FMED-40002	Family Medicine Clerkship	6.0

Overview of Courses in the M.D. Program

Year	Course ID	Course Name	Credit Hrs
	MED-40001	Internal Medicine Clerkship	9.0
	OBGY-40003	Obstetrics and Gynecology Clerkship	6.0
	PEDS-40004	Pediatrics Clerkship	6.0
	PSYC-40005	Psychiatry Clerkship	6.0
	SURG-40006	Surgery Clerkship	9.0
M4* – Year (Class of 2018)	Variable	Core and Elective Rotations: Minimum of 7 rotations of four-weeks each: sub- internship/advanced Inpatient, out-patient, critical care and 4 in areas of student interest with at least three of four being clinical in nature (45 hours per week min/average)	4 credits @
	ST5-50002	Clinical Epilogue/Capstone	2.5
	ST5-50004	ACM: Social Determinants of Health (online)*	0.5
	ST5-50005	ACM: Quality Improvement (online)*	0.5
		*ACM on-line courses must be scheduled within an M4 block and both cannot be scheduled in the same block. May be used as a "bridge" if elective dates for other rotations do not line up exactly but may not overlap more than two weeks.	

Note: All curricula are under active review and are subject to change.

The granting of the Doctor of Medicine degree by NEOMED is contingent upon the recommendation to the Board of Trustees of the Committee on Academic Progress and Promotion (CAPP) and the Dean of the College. Students should refer to the most recent *NEOMED Student Handbook* for current CAPP standards, policies and procedures. The recommendation of CAPP is based upon the following criteria and processes:

- (1) All students in the College of Medicine are required to achieve at least a passing grade in all courses required by the faculty for the awarding of the doctor of medicine degree.
- (2) All medical students are required to take Step 1, Step 2CK and Step 2CS of the United States Medical Licensure Exam (USMLE) and to achieve a passing score on these examinations as determined by the National Board of Medical Examiners (NBME).
- (3) In addition to the acquisition of the basic tools of skill and knowledge, the College of Medicine emphasizes the importance of the maintenance of emotional stability, a practice of integrity, a habit of critical analysis, a spirit of inquiry, and an expressed sense of understanding and empathy for others. This reflects the concern of the College for the appropriate development of human qualities and commitment to professional standards

and professional conduct as well as development of technical competence in its students and graduates. Evaluation of students and their progress during the course of studies will include all of these criteria.

- (4) All students enrolling at any point in the M.D. degree program should do so with the clear understanding that they are required either to have completed a baccalaureate degree or to complete the requirements of the B.S. degree prior to, or concurrent with, the receipt of the M.D. degree.
- (5) Failure to meet any of the standards of the College will result in remedial or other actions, including delayed graduation and dismissal.

The minimum institutional residence requirement for the M.D. degree is at least two years of fulltime study and involvement in undergraduate medical studies that must include the third and fourth medical year. Students admitted to the program by the Advanced Standing Admissions Committee, for example, particularly those admitted into the third medical year, should be especially aware of this requirement. This requirement in no way precludes the taking of electives outside of the University's system, but administrative transfer during the senior year is not permitted for such advanced standing students.

Detailed Curriculum for the M.D. Degree

The curriculum of the College of Medicine is based on the Educational Program Objectives as specified earlier in this catalog with a focus on eight outcome expectations in the areas of patient care, knowledge for practice, practice-based learning and improvement, interpersonal and communication skills, professionalism, systems-based practice, interprofessional collaboration, and personal and professional development. The curriculum is structured in such a way that all program objectives are intentionally integrated throughout the curriculum with emphasis placed on the expectation of developmental progression as students advance from year to year.

First-Year Curriculum (M1)

A variety of the first year courses are shared between students in both the College of Medicine and the College of Pharmacy to promote interprofessional relationships and collaboration. Instruction in the basic medical science courses emphasizes the normal structure and function of the human body, the mechanisms by which these are maintained, and the factors leading to injury and disease. While basic science courses focus on medical knowledge competencies, other courses seek to develop other important competencies, such as practice-based learning and improvement, systems-based practice, communication skills, patient care skills and professional conduct. Most first year courses are taught using a combination of lecture, small group sessions and laboratories.

IST1-10100 – Prologue (2.5 credits)

Prologue is a one-week course offered at the start of the curriculum that introduces medical (M1) and pharmacy students (P1) to professional student responsibilities and provides information and

instruction that will encourage and enable success in professional education and beyond. Using team-based learning, journal club, independent learning and group presentations, students will develop skills that will foster independent learning, they will generate the concept of the multidisciplinary approach to understanding the science of health and disease, and they will have the opportunity to reflect on their own interactions within a team and be expected to give constructive feedback to other team members. Offered fall semesters.

IST1-10201/MST2-20213 - Professional Foundations I and II (5.0 and 1.5 credits)

These courses are an inquiry into the NEOMED student development process and include professional and personal identity, leadership and diversity and academic success strategies specifically focused on medical student development. They are considered to be inter-disciplinary with students participating from both the College of Medicine and the College of Pharmacy. Part I is commonly referred to as "Orientation." Students are challenged to enhance their intellectual potential, understand their academic and moral responsibilities and appreciate diversity in a framework that develops critical thinking, and learning and communication skills necessary to contribute successfully to the University's intellectual life and to their future careers as physicians and pharmacists in a global society. The use of theoretical models, student self-assessment using national assessment tools and in-class experiential learning components such as journaling and group discussion engage students in cognitive and psychosocial skill development. Professional Foundations I is offered fall semesters and Professional Foundations II is offered spring semesters.

IST1-10106/IST2-20206 – Evidence-based Medicine I and II (2.0 and 1.0 credits)

Evidence-based Medicine I focuses on the competency area of practice-based learning and improvement by presenting an introduction to clinical study designs, data analysis and the application of a wide variety of reference materials. Medical and pharmacy students will gain insight into the appropriate use of evidence and resource materials in clinical practice. Students will learn the importance of primary, tertiary and internet resources, as well as how to evaluate research-based evidence critically. Some of the areas in which students will gain competence are specification of a research question, selection of study design, formulation and literature support of a hypothesis, descriptive and inferential statistics, clinical trials, and reporting data and information. Evidence-based Medicine II introduces students to principles of drug information and scientific literature evaluation using concepts of evidence-based medicine. Students are provided the opportunity to apply knowledge of electronic databases, research design and literature evaluation to make effective journal club presentations. At the end of this course, students will be able to evaluate the clinical literature actively and understand the importance of critical analysis of the biomedical literature. These core principles will be reinforced in clinically based interdisciplinary conferences through the remainder of the curriculum. EBM I offered fall semesters and EBM II offered spring semesters.

MST1-10110/MST2-20210 - Community Experience I and II (1.5 credits each)

These courses are designed to provide year-one health professions students, including medicine and pharmacy, with the understanding that patients are situated within communities that define

and influence their health, well-being and response to healthcare. This understanding is essential to providing accessible, effective and sustainable care and understanding systems-based practice – a primary mission of the institution. The curriculum addresses basic concepts of population health and challenges students to apply those concepts. The course is delivered using didactic lectures, large groups, small groups and off-site community interaction. Students will develop, implement and evaluate a community project using interprofessional teams. Community Experience I is offered fall semesters and Community Experience II is offered spring semesters.

MST1-10112/MST2-20212 - Human Values in Medicine I and II (2.0 and 1.5 credits)

Human Values in Medicine (HVM), a four-year curriculum, is designed to provide educational experiences focused on themes arising from the broad areas of humanities, bioethics and reflective practice. Students will develop competencies in the area of professionalism as well as personal and professional development and communication skills. HVM I and II takes place in large group lecture settings, as well as in small discussion groups. Some of the lectures and small discussion groups include medical, pharmacy and graduate students. The component, Reflective Practice, will have only medical students. Narrative approaches to medicine, humanities, ethics and reflective practice sessions are utilized and help teach students not only how to read stories critically, but to look within themselves and others to understand multiple perspectives and issues. As patient-centered care is the focus of ethics training, this multi-disciplinary narrative approach enforces the importance of listening to patient stories and listening to the self. Human Values in Medicine I is offered fall semesters and Human Values in Medicine II is offered spring semesters.

MST1-10111/MST2-20211 - Foundations of Clinical Medicine I and II (2.5 and 3.0 credits)

This course introduces medical students to psychosocial principles and clinical practices for effective patient care. The curriculum derives from both the behavioral sciences and clinical medicine. Spanning the M1 year, Foundations of Clinical Medicine (FCM) is comprised of two parts. The first part, FCM I (September-December), introduces students to medical interviewing and general physical examination skills and techniques. The second part, FCM II (January-June), continues this learning by considering human behavior in health and illness as it affects clinical encounters and introducing students to primary care of the patient in an ambulatory clinical setting. Foundations of Clinical Medicine I is offered fall semesters and Foundations of Clinical Medicine II is offered spring semesters.

MST1-10101 - Human Development and Structure (10 credits)

This basic science course encompasses an integrated exploration of the human body from the level of gross anatomy to microscopic and submicroscopic anatomy and histology for medical students. The course has both lecture and laboratory components, including human dissection. The normal and pathological development of the body from conception to birth is included in this survey. Contemporary medical imaging is used to explore the body from a clinical perspective. Throughout the course, functional anatomy of body systems is emphasized, and appropriate

examples of pathological processes are outlined. Offered fall semesters.

MST2-20214 - Molecules to Cells (9.5 credits)

This basic science course enables students to describe the operation of the human body in health and disease at the most fundamental level possible, namely, the cellular and molecular level. Students will relate these operations to: 1) the utilization of food substances for the generation of energy in the body, 2) the relationship between clinical values and intermediary metabolism in disease processes, and 3) the flow of genetic information from genes to the organism within disease. Clinical correlations reinforce these concepts; however, the course focuses on the etiology and mechanism of diseases rather than on their diagnosis or treatment. (Cross-listed as P1-61112 and IPM-75003). Offered spring semesters.

IST2-20100 - Physiological Basis of Medicine (6.5 credits)

This basic science course covers the physiology of each major organ systems. Clinical correlations are emphasized. The course includes an understanding of normal organ function (physiology), thus permitting students to diagnose the causes of abnormal physiology (pathophysiology). This knowledge allows students to return organ function to normal pharmacologically or surgically. A number of clinical correlation sessions are included within the course. Offered spring semesters.

MST2-20101 – Medical Neuroscience (6.5 credits)

This basic science course integrates basic information relative to the structure and function of the central nervous system with clinical material commonly encountered in the practice of medicine. The course begins with an introduction to the basic anatomy and physiology of the central nervous system, and continues with an emphasis on functional concepts along with structure. Clinical correlation sessions are included in which case studies of patients whose central nervous systems are malfunctioning in one way or another are discussed. The later part of the course covers higher functions and system studies such as learning, memory, emotions and motor systems, and includes relevant psychiatry and neuropharmacology. A laboratory exercise spans the course to help integrate and relate concepts to actual nervous system structure. Offered spring semesters.

Second-Year Curriculum (M2)

M2 serves as the bridge from classroom and laboratory basic science work of M1 to clinical applications in hospitals and ambulatory settings in M3. The curriculum and educational activities cover material in body system modules and concentrate on basic pathophysiologic processes and the mechanisms underlying clinical signs and disease. The curriculum starts to shift emphasis from basic knowledge to more patient-centered applications by increasing hands-on experience in labs, hospitals and community settings, as well as the Wasson Center where students interact with standardized patients as well as actual patients. Students attend classes at the Rootstown campus and at the major teaching sites where small group teaching takes place.

MST3-30108/MST3-30110 - Human Values in Medicine III and IV (1.0 and 1.5 credits)

Human Values in Medicine (HVM), a four-year curriculum, is designed to provide educational experiences focused on themes arising from the broad areas of humanities, bioethics and reflective practice to promote student growth in the major competency areas of professionalism and systems-based practice. HVM III and IV will take place in large group lecture settings as well as in small discussion groups. In focusing on narrative approaches to medicine, humanities, ethics and reflective practice sessions teach students how to read stories critically as well as to look within themselves and others to understand multiple perspectives and issues. As patient-centered care is the focus of their ethics training, this multi-disciplinary narrative approach enforces the importance of listening to patient stories and listening to the self. Human Values in Medicine III is offered fall semesters and Human Values in Medicine IV is offered spring semesters.

MST3-30107/MST3-30109 - Principles of Clinical Medicine I and II (3.0 credits each)

Principles of Clinical Medicine is a continuation of the Foundations of Clinical Medicine course from the M1 year. Physical examination and interviewing skills continue to be mastered and students use the Wasson Center (for patient and simulated patient encounters) and small group seminars to enhance and monitor their progress in patient care and communication skills throughout the year. Students also continue working with a primary care physician in an ambulatory setting. The course is designed to integrate with the Infection and Immunity course and the corresponding modules of the Principles of Medical Science (POMS) course, so that course activities coincide with and build upon the knowledge content presented in these courses, and help students develop the skills and attitudes essential to the application of medical knowledge in the clinical setting. Principles of Clinical Medicine I is offered fall semesters and Principles of Clinical Medicine II is offered spring semesters.

MST2-20102 - Infection and Immunity for Medicine (8.0 credits)

The objectives of this course are to teach medical students the basic concepts in microbiology, immunology and infectious disease as they relate to the overall human organism in health and disease. This course emphasizes basic concepts and principles of microbes and the immune system and focuses on clinical infectious disease in organ systems in the host. Antibiotics, microbial resistance and drugs acting on the immune system are also covered. Self-directed laboratory exercises as well as clinical computer problems and case-based learning are also part of the course. Co-scheduled with P2-20602. Offered fall semesters.

MST2-20106 - General Pathology (1.0 credit)

The course is designed to help medical students integrate the basic science curriculum, particularly anatomy, histology, and physiology, with the Principles of Medical Science Course, and especially systemic pathology. The course covers pathology and pathophysiology of processes that are multi-systemic or stereotypical in multiple organ systems. Examples include cell injury and death, healing and repair, hemodynamic disorders, infectious diseases and neoplasia. This information is a prerequisite to the understanding of pathology in individual organ systems. In addition, the course introduces topics not included in systemic pathology such as the pathology of

pediatric, environmental and nutritional diseases. Independent online cases with interactive slides and in-class lectures are two modalities of learning that occur in this course. Offered fall semesters.

MST3-30100/MST3-30105 - Principles of Medical Science I and II (12.0 and 25 credits)

This course series provides medical students with basic concepts of pathophysiology of disease. Medical students will integrate medical knowledge from prior courses with new patient care competencies including differential diagnosis and testing, first line therapies, and health maintenance. Integrated core content includes components of internal medicine, pathology, pharmacology and radiology. The course instructional methods include lectures, independent online activities, small group case-based activities, patient presentations and laboratory sessions. The course series includes the following modules:

- **POMS I** Pulmonology/allergy; cardiology; nephrology, and general pharmacology.
- POMS II Endocrinology/reproductive medicine; gastroenterology/nutrition; neurology/eye/psychiatry; hematology/oncology; rheumatology/musculoskeletal; infection.

Principles of Medicine I is offered fall semesters and Principles of Medicine II is offered spring semesters.

MST3-30111/MST3-30112 – Deliberate Practice and Development I and II (0.5 and 1.0 credits)

This course is designed to promote the competencies of practice-based learning and improvement, as well as communication and teamwork. The course will facilitate medical students' integration of basic science knowledge with clinical problem solving, to enhance critical thinking and to assist with effective preparation for the USMLE Step 1 exam, as well as practice skills that will be important to succeed in M3 clerkships. Learning strategies include question based small group discussion sessions, self-directed learning of assigned reading, home study of USMLE World questions, case-based learning and the use of M4 students as mentors. Three NBME exams will be given throughout the course for formative feedback and several sessions will be held to identify individual strengths and challenges in understanding of material. The content of the course will be aligned with the M2 Principles of Medical Science to integrate and reinforce content and critical thinking, as well as provide an opportunity to practice leveraging the advantages of working with a team. Deliberate Practice and Development I (DPDI) is offered fall semesters and DPD II is offered spring semesters.

Third-Year Curriculum (M3)

The third year of medical school provides theoretical and practical foundations in the clinical disciplines. Working with clinical faculty and residents in affiliated hospitals, students learn diagnostic and therapeutic skills, gain experience in patient management and examine the ethical dilemmas of contemporary medicine. Faculty regularly provides special teaching sessions appropriate to the learning level of medical students. In each of the seven clerkships, students spend time in hospitals, private offices and clinics and study with a primary focus on the specific patients they encounter. They become the junior members of clinical teams, gradually taking on

active roles in support of the faculty, residents and nurses. The third year is a demanding, fulltime clinical experience, requiring students to apply the education they gained in the classrooms and labs of the first two years.

Required Clinical Clerkships

M3 students are required to complete seven discipline-specific clerkships during the M3 year with the order of clerkships and completion sites varying by student. A typical clerkship week is at least 45 clock hours, and each week equals one semester credit. The seven required M3 clerkships include:

- EMED-40007 Emergency Medicine Clerkship (3 weeks/3 credits)
- FMED-40002 Family Medicine Clerkship (6 weeks/6 credits)
- MED-40001 Internal Medicine Clerkship (9 weeks/9 credits)
- OBGY-40003 Obstetrics and Gynecology Clerkship (6 weeks/6 credits)
- PEDS-40004 Pediatrics Clerkship (6 weeks/6 credits)
- PSYC-40005 Psychiatry Clerkship (6 weeks/6 credits)
- SURG-40006 Surgery Clerkship (9 weeks/9 credits)

MST4-40010 – Prerequisite to the Clinical Curriculum (5.0 credits)

Prerequisite to the Clinical Curriculum (PCC) integrates the longitudinal courses and Principles of Medical Science by incorporating the information from the first two years while also adding new knowledge and new skills needed for the upcoming clinical years. It is designed to help students develop the skills and attitudes essential to the application of medical knowledge and professional behavior in the clinical setting. Students are expected to take increasing responsibility for their preparation and professional conduct, including attendance, timeliness, respect and feedback.

MST4-40011 – Human Values in Medicine V (0.5 credit)

Human Values in Medicine (HVM), a four-year curriculum, is designed to provide educational experiences focused on themes arising from the broad areas of humanities, bioethics and reflective practice to promote student growth in the major competency areas of professionalism and systems-based practice. HVM-V takes place in on-line and face-to-face small discussion groups. In focusing on narrative approaches to medicine, humanities, ethics and reflective practice, students learn how to read stories critically as well as to look within themselves and others to understand multiple perspectives and issues. As patient-centered care is the focus of their ethics training, this multi-disciplinary narrative approach enforces the importance of listening to patient stories and listening to the self.

MST4-40007 – Applications of Clinical Medicine (4.0 credits)

This course provides the students an opportunity to experience aspects of medicine not covered during the usual clerkship training. Students complete selected on-line modules designed to allow students to apply principles of patient safety, cultural competency and high value care to their clerkship experiences. Students also learn the principles of TeamSTEPPS, and they choose to

participate in one of several interprofessional care experiences. Curriculum about healthcare delivery systems via online health systems questions are integrated into the clerkships.

Fourth Year Curriculum (M4)

Guided by advisors and working within a set of requirements, senior medical students design their own curricula based on their educational and career priorities and interests. Over the year, students take at least seven, four-week core rotations and electives, two on-line Application to Clinical Medicine courses (ACM) and a Clinical Epilogue/Capstone course. Students are required to design a balanced schedule of clinical core rotations and electives across three major categories (advanced inpatient/sub-internship, critical care, and outpatient). Additionally, students roundout the M4 clinical curriculum by taking four electives of their choice (3 of which must be clinical in nature).

Required Core Rotations and Electives

- Core rotations
 - Any clinical rotation classified as a critical care experience (4 week minimum)
 - Any clinical rotation classified as a sub-internship or advanced inpatient experience (4 week minimum)
 - o Any clinical rotation classified as an outpatient experience (4 week minimum)
- Four electives of any choice, with at least three being clinical (4 week minimum, each)

A minimum of 180 clock hours are expected for each 4-week elective experience.

ST5-50002 - Clinical Epilogue and Capstone Course (2.5 credits)

This required course provides students with preparation for residency through examination and mastery of key skills, knowledge and attitudes necessary to thrive during residency. The course is divided into two parts: 1) large-group sessions on such topics as resident rights, palliative care and residency dilemmas; and 2) small-group electives whereby students choose two from such offerings as Medicine and Spirituality, Science Fiction and Medicine, Law and Medicine, Finding a Mindful Inner Balance in Medicine, Film and Medicine, and War and Medicine, among others. Both large-group sessions and electives ask students to reflect on the multiple and often contradictory challenges and meanings of a life in medicine. Offered spring semesters.

ST5-50004 – ACM: Social Determinants of Medicine (0.5 credit)

This on-line course is designed to expand upon previous instruction about health inequities. Societal factors of income, race, power, geography and employment will be examined within the context of their impact upon health. Students will be challenged to pose possible solutions to societal inequities and explore routes of patient advocacy that could be used to improve health outcomes. Offered each month throughout the M4 year. Concurrent registration with ST5-50005 is prohibited.

ST5-50005 – ACM: Quality Improvements (0.5 credit)

This on-line course introduces students to the cognitive processes and system-related issues that can lead to errors in the medical setting. Students will learn about health care improvement via the model for improvement, testing and measuring change with the PDSA cycles. It also will ask students to look at and solve problems regarding the quality, cost and value in health care through the lens of health equity and triple aim for populations. Finally, students will dissect specific cases of patient safety through the lens of medical overuse for themselves and their colleagues in order to apply what they have learned. Offered each month throughout the M4 year. Concurrent registration with ST5-50004 is prohibited.

College of Pharmacy

Accreditation – College of Pharmacy

The College of Pharmacy is fully accredited by the Accreditation Council for Pharmacy Education (ACPE). The ACPE is located at 135 S. LaSalle Street, Suite 4100, Chicago, IL 60603-4810; 312/664-3575, FAX 312/664-4652, website <u>www.acpe-accredit.org</u>.

Mission Statement – College of Pharmacy

Northeast Ohio Medical University College of Pharmacy prepares highly skilled pharmacists who play an indispensable role in a team-oriented approach to patient care and medication therapy management services. Our unique curriculum intermeshes with that of the College of Medicine to set new standards for interprofessional education, collaboration, community involvement, diversity and lifelong learning.

History – College of Pharmacy

In May 2005, the Northeast Ohio Medical University submitted its proposal to the Regents Advisory Committee on Graduate Study of the Ohio Department of Higher Education seeking approval to establish a College of Pharmacy, the only program in Eastern Ohio. The idea for a College of Pharmacy resulted from an assessment of the eastern Ohio community and was designed to help address the shortage of pharmacists in Northeast Ohio.

On Nov. 10, 2005, the Ohio Department of Higher Education approved the establishment of the Doctor of Pharmacy degree program. The NEOMED Board of Trustees ratified the appointment of the founding dean and officially approved the College of Pharmacy at their board meeting on Dec. 16, 2005. The College formally inaugurated its program on Aug. 27, 2007, with the induction of its first class of pharmacy students. The College provides a unique educational experience where pharmacy and medicine students learn and train side-by-side over the four-year curriculum, setting the stage for true interprofessional education of healthcare professionals.

The College of Pharmacy has partnered with The University of Akron, Cleveland State University, Kent State University, Youngstown State University, and member universities of the Northeast Ohio Council on Higher education (NOCHE), as well as affiliated hospitals, health departments, healthcare systems and community pharmacy practice facilities. Graduates of the College of Pharmacy are awarded a Doctor of Pharmacy (Pharm.D.) degree.

Essential Functions – College of Pharmacy

The faculty is responsible for development and implementation of a pharmacy curriculum designed to educate competent, caring pharmacists with strong communication skills, character and commitment to the community and dedication to lifelong learning.

Preparation and training to become a pharmacist requires each student to understand and meet the essential functions required for admission, continuation and graduation as identified below. The faculty has developed the course requirements and activities to provide critical elements of training. It is expected that students will participate in all course activities and must not be subject to any legal condition that would bar participation (including but not limited to lectures, seminars, laboratories, clinics, physical examinations, patient procedures) and adhere to individual clinical site rules and regulations as well as College of Pharmacy policies regarding these activities.

A candidate for the pharmacy degree must be able to demonstrate intellectual-conceptual, integrative and quantitative abilities; skills in observation, communication and motor functions; and mature behavioral and social attributes. Technological compensation and/or reasonable accommodation can be made for some handicaps in some of these areas, but a candidate should be able to perform in a reasonably independent manner without a trained intermediary. The use of a trained intermediary means that a candidate's judgment must be mediated by someone else's power of selection and observation.

Observation: The candidate must be able to:

- observe lectures, demonstrations, experiments and practice-based activities
- observe physiologic and pharmacologic demonstrations, evaluation of microbiologic cultures and microscopic studies of microorganisms and tissues in normal and pathologic states;
- observe a patient accurately at a distance and close at hand; observation necessitates the functional use of the sense of vision and somatic sensation. It is enhanced by the functional use of the sense of smell;
- read information on a computer screen;
- remain fully alert and attentive at all times in clinical settings; and
- evaluate visible patient signs and symptoms for the purposes of triaging patient complaints and monitoring drug therapy.

Communication: The candidate must be able to:

- communicate effectively, sensitively and at an appropriate pace with patients, caregivers and members of the healthcare team;
- speak, listen and read in order to elicit information and write in the English language;
- effectively communicate with instructors and peers;
- communicate with healthcare practitioners specifically about his/her patients in review of recommendations concerning verbal and written drug therapy orders;
- elicit information from patients and perceive and describe nonverbal communications from patients such as change in mood, activity and posture; and
- teach patient skills when dealing with drug administration devices (i.e., inhalers) or use of home diagnostic kits.

Motor: The candidate must be able to:

- have sufficient motor function to execute all aspects of processing multiple types of drug orders and compounding of medications;
- engage in safe and aseptic handling of sterile preparations;
- safely and effectively operate appropriate equipment (e.g., microscope, computer keyboard, glucose monitors, peak flow meters);
- engage in basic physical assessment activities including palpation, auscultation, percussion and other diagnostic maneuvers. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision; and
- perform CPR.

Intellectual-Conceptual, Integrative and Quantitative Abilities: The candidate must be able to:

- solve problems involving measurement, calculation, reasoning, analysis, synthesis and evaluation rapidly in a multi-task setting;
- comprehend three-dimensional relationships and understand the spatial relationships of structures;
- synthesize knowledge and integrate the relevant aspects of a patient's history, physical findings and monitoring studies; and
- be able to use information to develop drug therapy and monitoring plan in a reasonable amount of time.

Behavioral and Social Attributes: The candidate must be able to:

- possess the emotional health required for full use of his/her intellectual abilities, the exercise of good judgment and the prompt and safe completion of all responsibilities;
- adapt to change, display flexibility and learn to function in the face of uncertainties and stressful situations;
- possess compassion, integrity, interpersonal skills, motivation, empathy and concern for others;
- demonstrate ethical behavior;
- function effectively in situations of physical and emotional stress;
- accept appropriate suggestions and criticism and, if necessary, respond by modification;
- exercise good judgment and prompt completion of all responsibilities involved in the pharmacist care of patients; and
- have the capacity to develop mature, sensitive and effective relationships with patients.

Admission – College of Pharmacy

Traditional Admission

The traditional Doctor of Pharmacy Pathway to pharmacy school at NEOMED is designed for students who have either completed an entire baccalaureat degree program or who are completing the 72 semester hours of prerequisite coursework at a regionally accredited institution of higher education. A bachelor's degree is not required for admission, although students with a baccalaureate degree or higher may be considered more competitive in the admission process.

The Pharmacy Curriculum extends over four years, includes biomedical sciences, pharmaceutical sciences, social, behavioral and administrative pharmacy sciences, and clinical sciences, and includes a longitudinal course.

All candidates must complete the pre-professional pre-requisite coursework prior to matriculation to NEOMED as a P1 student. Candidates with pre-requisite coursework in-progress who are making progress toward timely completion are encouraged to apply for admission via the Pharmacy College Application Service (PharmCAS) at <u>www.pharmcas.org</u>.

Required Pre-Requisites	Semester Hours	Quarter Hours
Biology and Other Life Sciences	8	12
sequence with lab		
Inorganic Chemistry sequence	8	12
with lab		
Organic Chemistry sequence with	8	12
lab		
General Physics sequence	6	9
Biochemistry sequence	6	9
Calculus	3	4
Statistics	3	4
Economics	3	4
Literature or Composition	6	9
Speech/Communication	3	4
Psychology	3	4
General Educaton and/or	15	22
Additional Science*		
Required Pre-Requisites – Cont.	Semester Hours	Quarter Hours
Total	72	105

Required Pre-professional (Pre-requisite) Courses for All Pharmacy Admission Pathways

^{*}General education and/ or additional science courses are defined as humanities, social science, business, computer literacy, and additional coursework in the other prerequisite categories. A course can be used only once to fulfill a prerequisite.

Pre-requisite coursework is undergoing revision with the intention of issuing new guidelines for 2019. Candidates should check <u>www.neomed.edu</u> for updates.

The following minimum recommended guidelines should be met for admission consideration for the Pharm.D. Program:

- A cumulative GPA of 2.50 (all coursework), as well as a 2.50 GPA in all math and science courses;
- No grade lower than C- in any pre-professional pre-requisite course;
- Demonstrated progress toward completion of pre-professional pre-requisite coursework.

NEOMED is PCAT optional effective for the 2017-18 admission cycle. While candidates may continue to submit PCAT scores via PharmCAS, the PCAT is no longer required and will not be used in our holistic admissions process.

Successful applicants should also demonstrate:

- interest in the profession, as demonstrated by extracurricular activities;
- noncognitive factors such as maturity;
- leadership skills and abilities;
- community services and volunteer experiences;
- possible work experiences, especially experience with patients in a pharmacy or healthrelated setting and professional shadowing experiences. Applicants are highly encouraged to acquire volunteer or work experience in a pharmacy prior to admission to the College of Pharmacy.

Personal interviews, by invitation only, are a part of the screening process to assist with a holistic review of the applicant. The interview day may also include the administration of cognitive assessments used in the admission process. The Pharmacy Admissions Committee reviews applicant data after interview and makes admission recommendations to the College of Pharmacy Dean who has final decision authority.

To apply to the Pharm.D. Program, applicants are to complete the PharmCAS application by no later than March 1st prior to the term of desired initial enrollment. We recommend that candidates apply during the fall prior to year of desired initial enrollment as offers are made on a space-available basis. If NEOMED reaches enrollment capacity prior to March 1, an alternate list will be established. Enrollment capacity may be reached without prior communication to candidates yet to apply. Supplemental materials, transcripts from all previously attended colleges and two letters of evaluation/recommendation must be sent to PharmCAS by March 1st as well.

Early Assurance Pathway Admission

University Pathway

The university early assurance pathway program is available to currently enrolled college or university students at any regionally accredited college, university, or community college enrolled in their second year of study. This pathway is designed for college sophomores to apply by February 1 of their sophomore (second) year of post-secondary enrollment with the intent to enroll at NEOMED after one additional year of study, presumably their junior year, for a 3+4 enrollment model.

Student Eligibility for Provisional Admission

- Minimum completion of three semesters of post-secondary coursework to attain sophomore status, including enrollment at one regionally accredited institution of higher education for a year in residence following high school graduation. Sophomore status is generally defined as having earned between 30 and 60 credit hours. Candidates with greater than sophomore status where credit hours were accrued prior to high school graduation may apply at a higher-class standing level.
- Candidates must still complete one full year of residence and enrollment at their postsecondary institution <u>after</u> early assurance admission and prior to matriculation to NEOMED. Candidates with less than one year of coursework to complete should simply apply for traditional admission via PharmCAS.
- Completion of 8 semester hours of science major track biology sequence with a lab (Biology I and II) and 8 semester hours of science major track chemistry sequence (Chemistry I and II) with a lab is required to be eligible to apply for early assurance. All grades must be "C" or higher.
- Minimum overall/cumulative GPA of 3.20 or higher at a regionally accredited institution of higher education.
- Minimum science GPA of 3.20 or higher as determined by PharmCAS standards at a regionally accredited institution of higher education.
- No grade lower than a "C" in any math, biology or chemistry course completed to date. Students who have repeated courses have their second grades used inconsideration.
- Interested candidates must apply via PharmDirect (<u>www.PharmDirect.org</u>) beginning in mid-September but no later than the by February 1 deadline, using 3 semesters worth of secondary school grades for admission consideration.
- A successful interview at NEOMED is required prior to offer of early assurance. Interviews will be granted by invitation-only following application review.
- Selection into the University Pathway pool is via an annual selective admission process.

Student Provisional Admission Responsibilities for Promotion to the Pharm.D. Program

In order to fulfill provisional admission stipulations, provisionally admitted students are required to complete all of the following:

• Students must follow all application procedures following provisional admission.

- Students must continue to attend a regionally accredited institution of higher education and successfully complete all required pre-professional prerequisite courses. Provisional admission is portable should a student transfer undergraduate institutions. *Note: This will not be the case for any subsequent Baccalaureate/Pharm.D. articulation agreements between NEOMED and undergraduate institutions which may later result.*
- Students must successfully complete all NEOMED College of Pharmacy pre-professional prerequisite coursework.
- Students must attain a minimum grade of "C" or higher in all required pre-professional prerequisite courses. College Credit Plus and AP work may be used if determined acceptable by an undergraduate institution where credit is awarded.
- Students must possess a cumulative university GPA of 3.2 and a Science GPA of 3.2 (both GPA's as calculated by PharmCAS and may reflect work at multiple undergraduate institutions) at the time of Early Decision application to NEOMED to maintain provisional admission status and claim their reserved slot. Students who do not present 3.2 GPA's may forfeit provisional admission and any associated benefits, but will automatically roll to regular admission cycle.
- Students must complete any mandatory co-curricular program of engagement with the NEOMED College of Pharmacy as yet to be determined. There may be a modest fee associated with certain activities.
- Candidates do not need to take the PCAT.
- The university pathway early assurance slot is projected for one year after the offer of early assurance provisional admission. There is no automatically assured extension from this pathway where slots are automatically deferred should a provisionally admitted student take longer than anticipated to complete prerequisite coursework.

High School Pathway

Available to currently enrolled high school students in their 12th grade year of study. This pathway is not available to any students that have matriculated to a post-secondary institution in degree seeking status. College Credit Plus students yet to graduate high school are eligible for this pathway.

Student Eligibility for Provisional Admission:

- Minimum overall/cumulative high school GPA (weighted or unweighted) of 3.20 or higher on a 4.0 scale
- ACT (best score) Composite of 26 or higher
- ACT (best score) Math and Science sub-scores of 26 and above
- A successful interview at NEOMED is required prior to offer of early assurance. Interviews will be granted by invitation-only following application review.
- Selection into the interview pool is via a selective admission process allocating limited early assurance spaces to direct-from-high-school applicants.
- Interested candidates must apply via PharmDirect (<u>www.PharmDirect.org</u>) beginning in mid-September but no later than the February 1^s deadline, using 7 semesters worth of secondary school grades to determine provisional admission.

Student Provisional Admission Responsibilities for Promotion to the Pharm.D. Program

In order to fulfill provisional admission stipulations, provisionally admitted students are required to complete all of the following:

- Students must follow all application procedures following provisional admission.
- Students must attend a regionally accredited institution of higher education and successfully complete all required pre-professional prerequisite courses.
- Provisional admission is portable should a student transfer undergraduate institutions. Note: This will not be the case for any subsequent Baccalaureate/Pharm.D. articulation agreements between NEOMED and undergraduate institutions which may later result.
- Students must successfully complete all NEOMED College of Pharmacy pre-professional prerequisite coursework.
- Students must attain a minimum grade of "C" or higher in all required pre-professional prerequisite courses. College Credit Plus and AP work may be used if determined acceptable by an undergraduate institution where credit is awarded.
- Students must possess a cumulative university GPA of 3.2 and a Science GPA of 3.2 (both GPA's as calculated by PharmCAS and may reflect work at multiple undergraduate institutions) at the time of Early Decision application to NEOMED to maintain provisional admission status and claim their reserved slot. Students who do not present 3.2 GPA's may forfeit provisional admission and any associated benefits, but will automatically roll to regular admission cycle for admission consideration.
- Students must apply for annual evaluation for continuation of provisional admission status with NEOMED. NEOMED will implement a process for promotion review and tracking. This annual review process may carry a processing fee with it. Students who do not meet progression standards may lose provisional admission.
- Students must complete a mandatory co-curricular program of engagement with the NEOMED College of Pharmacy as yet to be determined. There may be a fee associated with certain activities.
- The early assurance slot is projected for two to three years after the term of initial firsttime, full-time enrollment at a college or university following high school graduation. The applicant selects the desired term of matriculation to NEOMED at the time of early assurance application via PharmDirect. While there is no automatically assured deviation from the projected term and year of matriculation for this pathway, the College of Pharmacy Admission Committee would govern all petitions should any extensions warrant consideration.

Advance Standing/Transfer Admission

Students enrolled at other pharmacy schools who desire to transfer to the College of Pharmacy for a reason unrelated to academic challenges and/or deficiencies may do so through special consideration by the Admissions Committee and Dean. Applicants must be in good academic standing at their current/former pharmacy school and must have successfully completed all NEOMED pre-requisite coursework at an accredited institution of higher education. Applicants are considered for admission into the College of Pharmacy at NEOMED as first- (P1), second- (P2) or third-year (P3) Pharmacy students. The number of seats available for students applying for advanced standing/transfer is limited, and varies from year-to-year based on new student admission caps and/or attrition of previously admitted students.

Individuals interested in pursuing advance standing/transfer admission should contact the Director of Admission no later than December 1 prior to the year of anticipated enrollment.

To be considered for advance standing/transfer, a student must meet the College's general requirements for admissions and must submit the following:

- 1. A letter to the director of admissions indicating why the student wishes to transfer and explain any difficulties encountered at his or her current institution;
- 2. Official transcripts from all schools attended (undergraduate, graduate, and professional);
- 3. A catalog and a detailed syllabus for all courses taken or currently enrolled in at your current/former school of pharmacy;
- 4. A letter from the dean, enrollment services or student affairs officer of the pharmacy school in which the student is enrolled/was formally enrolled indicating the student's current academic status and/or terms of withdrawal/dismissal;
- 5. A letter of recommendation from a pharmacy professional or pharmacy faculty member;
- 6. A completed NEOMED College of Pharmacy transfer admissions application;
- 7. Additional documents or letters of recommendation as determined necessary by the director of admissions.

The Admissions Office must receive all supporting documentation for advance standing/transfer admission consideration no later than May 1 prior to the anticipated fall matriculation date.

Upon review of the material, the Admissions Committee, Vice Dean and/or Dean of the pharmacy college will determine interview and admission candidacy.

Students offered admission to the College of Pharmacy as an advanced standing/transfer student will have their educational records from previously attended, U.S. accredited schools of pharmacy evaluated by the College Admissions Committee for professional competencies and applicability toward degree requirements at NEOMED. Transfer credit may only be considered for coursework in years one, two and three of the pharmacy curriculum and at one-year intervals. Curricular requirements and coursework vary by topic and sequence by institution. Consequently, being accepted in transfer does not necessarily mean a student will be placed in a class cohort that exactly matches their previous school. Students accepted in transfer by NEOMED may be required to repeat previously passed coursework in order to be appropriately prepared to navigate the curricular sequence and rigor at NEOMED. Once equivalencies and/or competencies are determined, the Admissions Committee provides that information to Enrollment Services for posting to the student's NEOMED transcript. Generally, summative transfer credit amounts and/or an advanced standing class level notation is posted to the transcript rather than individual course equivalencies.

International Candidates:

NEOMED will accept applications from J1 Visa candidates effective with the 2017-18 admission cycle. Candidates that present international education for pre-professional pre-requisite consideration should first apply for admission through PharmCAS. Upon application, candidates should have an international credential evaluation posted to PharmCAS using World Education Services (WES) in partnership with PharmCAS. The College of Pharmacy will determine the appropriate application of using international coursework to fulfill pre-professional pre-requisites on a case-by-case basis.

Readmission:

Former NEOMED students who left the College of Pharmacy voluntarily and in good standing may apply for readmission. Official transcripts reflecting any college level coursework completed during the time of absence from NEOMED, and an interview are the minimum requirements. Readmission candidates may be subject to other requirements that may be related to the circumstance of the length of absence. Readmission does not guarantee returning to the curriculum at the exact point of departure, and may require the repeat of previously completed coursework. Interested applicants are encouraged to contact the Director of Admissions for additional information. The deadline for application receipt is December 1 of the year prior to anticipated re-enrollment. The deadline for receipt of all application supporting materials is May 1 prior to the anticipated fall matriculation date.

Official Transcript Requirement

All candidates that matriculate into degree granting programs in the College of Pharmacy at NEOMED are required to submit a final, official transcript for all previously attended colleges and universities to the Office of Admission on behalf of Enrollment Services. NEOMED works with common application servicers (CAS) during the application process, and while they are authorized to receive, process, and verify transcripts, admission fees, and other supporting credentials on behalf of NEOMED, they do not become part of the NEOMED student record. However, NEOMED is required by records policy to possess Official Transcripts received directly from issuing institutions and agencies that include all completed coursework by matriculating students. Failure to comply with submittal of final, official transcripts upon matriculation will result in an Enrollment Services hold being placed on your record, which will prevent registration in a future semester and the distribution of financial aid, and will restrict access to your education record.

Curriculum and Degree Requirements – College of Pharmacy Overview of the Pharm.D. Curriculum

The College of Pharmacy offers an original and progressive curriculum that blends classroom and practice experiences to give graduates the knowledge, skills and professional attitude to succeed as a pharmacist. Student centered learning is a critical component as at least 30 percent of pharmacy courses are offered through active learning exercises. The pharmacy curriculum emphasizes the College's core values of competence, curiosity, communication, caring, character,

and community and uniquely offers an education that optimizes interprofessional learning experiences through a partnership with the College of Medicine.

The curriculum is organized to give each year a central theme that serves as a foundation for each successive year. Courses are developed and integrated to establish the annual theme and to allow the opportunity for students to learn information in the classroom and then to apply that knowledge and to practice pharmacy skills in experiential sites. NEOMED is in the midst of converting from contact hours to semester credit hours and will update the following table once that information becomes available.

YEAR 1	Credit Hours	YEAR 2	Credit Hours
Fall Semester - August/September	Fall Semester - August/September/October		
IST1-10201: Professional Foundations I	TBD	P2-20602 Infection & Immunity for Pharmacist	TBD
IST1-10100: Prologue – Bridge to Professional School	TBD	P2-62100: Medication Use Systems	TBD
Fall Semester -		P2-62102: Pharmacist Patient Care	TBD
September/October/November/Decemb	er	Experience 5	
P1-61101: Human Structure for Pharmacists	TBD	Fall Semester - October/November/De	ecember
P1-61102: Pharmaceutics w/ Lab	TBD	P2-62105: Principles of Drug- Body Interactions	TBD
P1-61111: OTC Self Care	TBD	P2-62103: Pharmacy Management: Operations	TBD
P1-61103: Health Care Delivery System	TBD	P2-62101: Natural Products and Nutraceuticals	TBD
IST1:10106: Evidence Based Medicine I	TBD	Professional Elective ** (students choice)	TBD
P1-61104: Pharmacist Patient Care Experience 1	TBD	P2-62104: Pharmacist Patient Care Experience 6	TBD
Winter Break	Winter Break		
Spring Semester - January/February		Spring Semester – January/February/March/April	
IST2-20206: Evidence Based Medicine II	TBD	P2-62107: Pharmacotherapeutics & Practice of Pharmacy I	TBD
P2-1108: Pharmacist Patient Care Experience 2	TBD	P2-62106: Pharmacy Management :Personnel	TBD
MST-20213: Professional Foundations II	TBD	Pharmacist Patient Care Experience 7	TBD
Spring Semester – January/February/March/April	June/July/August		
P1-61112: Molecules to Cells	9.5	Summer Break	

P1-61113: Physiological Basis of	TBD			
Medicine				
Spring Semester - February/March/April	T			
P1-61107: Parenteral Products w/lab	TBD			
P1-61110: Pharmacist Patient Care Experience 3	TBD			
Spring Break				
Spring Semester - April/May/June				
P1-61114: Foundational Neuroscience	TBD			
P1-1109: Pharmacist Patient Care Experience 4	TBD			
June/July/August				
Summer Break				
YEAR 3	Credit Hours	YEAR 4	Credit Hours	
Fall Semester - August-December		June – April		
P2-63103: Pharmacotherapeutics & Practice of Pharmacy II	TBD	Advanced Pharmacy Practice Experiences P4-64100; P4-64200; P4-64201; P4- 64300; P4-64301; P4-64400; P4- 64401; P4-64550; P4-64700; P4- 64700; P4-64701; P4-64800)	4 credits each	
P3-63102: Pharmacy Law I	TBD	(10 separate one-month long rotations)		
Professional Elective (take 2 at 16 hrs each) **	varies	Мау		
P3-63101: Pharmacist Patient Care Experience 8	TBD	P4-64900: Pharmacy Capstone	TBD	
Winter Break				
Spring Semester - January-May				
P3-63105: Pharmacotherapeutics & Practice of Pharmacy III	TBD			
P3-63104: Pharmacy Law II	TBD			
Professional Elective (take 2 at 21 hrs each) **	varies			
P3-63106: Pharmacist Patient Care Experience 9	TBD			

* The above-mentioned contact hours are currently under review and are subject to revision.

^{**} COP students who participated in the KSU-NEOMED Study Abroad Health Institute in the summer prior to their P2 year may utilize graduate level credits earned through cross-registration to fulfill P2 and P3 elective requirements, up to a maximum of 6 credits. Students interested in taking advantage of this opportunity must communicate that desire to the registrar staff in Enrollment Services, in writing, prior to the start of the P2 academic year.

Year 1 Theme: Dosage Forms

The cornerstone of pharmacy practice is to know the medication products that pharmacists dispense. Students need to understand the various forms by which medication can be effectively administered to patients and the advantages of the different routes of administration. Students must also have the knowledge and skill to compound a new form of medication if the patient situation necessitates such activity. Students will learn about the anatomy, biochemistry and physiology of the human body to aid in selection of appropriate routes of drug administration. They will gain a thorough understanding of the various physiological and drug formulation factors that influence the rate and extent of drug release from various delivery sites. The ability to search and analyze the medical literature enables the student to recommend new forms of therapy to healthcare providers when available medication and dosage forms do not meet the patient's needs. Interaction with medical students in classrooms and in simulated patient care situations will build communication skills in these situations.

IST1-10201 - Professional Foundations I

Professional Foundations I is an interprofessional course that helps students to explore professional and personal identity, leadership and diversity and academic success strategies specifically focused on student development. Students are challenged to enhance their intellectual potential, understand their academic and moral responsibilities and appreciate diversity in a framework that develops the critical thinking, learning and communication skills necessary to contribute successfully to the university's intellectual life and to their future careers as pharmacists and physicians in a global society. The use of theoretical models, student selfassessment using national assessment tools and in-class experiential learning components such as journaling and group discussion engages students in cognitive and psychosocial skill development. Offered fall semesters for approximately 40 contact hours.

IST1-10100 - Prologue

Prologue is a one-week interprofessional course that is meant to introduce medical and pharmacy students to professional student responsibilities and to provide information and instruction to encourage and enable success in professional education and beyond. Students will: 1) develop skills that foster independent learning; 2) generate the concept of the multi-disciplinary approach to understanding the science of health and disease; and 3) have the opportunity to reflect on their own interactions within a team and be expected to give construction feedback to other team members. All of this takes place within the context of professional school where professional behavior is paramount and the level of personal responsibility has increased. Offered fall semesters for approximately 32 contact hours.

BLOCK 1

P1-61101- Human Structure for Pharmacy

This course has been developed to provide pharmacy students with a general understanding of the structure (and function) of the human body. Students will develop a basic vocabulary of anatomic terminology used by healthcare professionals internationally. The human body will be explored using a systems approach, allowing the student to develop a core knowledge base of all the major body systems. At the conclusion of the course, it is expected that each student will be armed with the terminology and core concepts required of their profession. Offered fall semesters for approximately 39 contact hours.

P1-61102 - Pharmaceutics with Lab

This course introduces the pharmacy student to basic theory and principles applicable to functioning in a community pharmacy. There are two modules: 1) pharmaceutics and drug delivery systems and 2) pharmaceutics laboratory experience. In the first module, students will learn to formulate, design, compound and evaluate dosage forms and drug delivery systems needed for patient care. This module emphasizes the physiologic and drug formulation factors that influence extent and rate of drug release/absorption from various formulations. In the second module, students will learn the art of medication compounding in a laboratory setting. Dosage forms are prepared using patient profiles and appropriate auxiliary labels. Students will also learn important patient counseling points. The student is also introduced to the process of drug development and approval, including clinical trial descriptions. Offered fall semesters for approximately 104 contact hours.

P1-61104 - Pharmacist Patient Care Experience 1

This course is the first of nine experiential courses that focus on professional skills development for contemporary pharmacy practice. Pharmacy students will learn the basic skills of interviewing and counseling patients. Students will be introduced to medical terminology and the Top 300 prescription drugs. An interprofessional team project will be introduced, in which pharmacy and medical students will participate in groups to begin the assessment and planning stages of implementing a project intended to improve the health of the community. Offered fall semesters for approximately 65 contact hours.

P1-61111 - OTC Self-Care

This course will introduce students to the pharmacotherapy of OTC/Self-Care medications and emphasize the application of this knowledge to realistic case studies. Students review the over-the-counter (OTC) medications used most commonly in the day-to-day environment of a community pharmacy, as well as the self-managed disease states commonly encountered in this setting. A Team-Based Learning (TBL) approach will used to develop the knowledge of OTC medications and the skills for knowledge application. Offered fall semesters for approximately 52 contact hours.

P1-61103 - Health Care Delivery Systems

This course describes the current healthcare system and presents the critical issues and core challenges surrounding our system. Faculty from a variety of backgrounds provide an in-depth and objective appraisal of how our healthcare system is organized to deliver care; the enormous impact of health-related behaviors on the structure, function and financing of the healthcare delivery system; and other emerging and recurrent issues in health policy, healthcare

management and public health. A poster presentation of a current issue in the U.S. healthcare delivery system is required. Offered fall semesters for approximately 27 contact hours.

IST1-10106 - Evidence Based Medicine I

Evidence-Based Medicine 1 presents an introduction to clinical study designs, data analysis and the application of a wide variety of reference materials. Pharmacy and medical students will gain insight into the appropriate use of evidence and resource materials in clinical practice. Students will learn the importance of primary, tertiary and internet resources, as well as to how to critically evaluate research-based evidence. Some of the areas in which students will gain competence are specification of a research question, selection of study design, formulation and literature support of a hypothesis, descriptive and inferential statistics, clinical trials and reporting data and information. Offered fall semesters for approximately 32 contact hours.

BLOCK 2

P1-61112 - Molecules to Cells-Pharmacy (Block 2 and 3)

This cross-listed, integrated foundational course is taught to students in the Colleges of Pharmacy, Medicine and Graduate Studies. The focus for students in the College of Pharmacy will be to gain knowledge about the biochemical operations of the human body as related to health and disease. Furthermore, pharmacy students will be able to relate these concepts to the underlying mechanisms of therapeutic agents. The concepts are chosen to serve as a foundation that will prepare the student for subsequent courses within the pharmacy curriculum and serve as building blocks for continued learning within the pharmacy profession. The overarching mission of the course is to provide students with an integrated view of biochemical, chemical, and genetic concepts with reference to application of therapeutic agents in the treatment and management of disease using realistic case studies. At the conclusion of the course, students will have gained knowledge of invaluable scientific principles that can be built upon for rational practice within the pharmacy profession. (Cross-listed as MST2-20214 and IPM-75003). Offered in spring semesters for approximately 112 contact hours.

P1-61113 - Physiological Basis of Medicine-Pharmacy (Block 2 and 3)

This course is taught to both pharmacy and medical students and is designed to help students achieve an understanding of how the healthy cardiovascular, renal, respiratory, endocrine and gastrointestinal systems function. Students will gain understanding of the critical homeostatic mechanisms in the human body and multi-organ control of various bodily functions. For pharmacy students, this course forms a foundation for the understanding how medicines interact with the body. After mastering an understanding of normal physiology, students will be able to understand concepts of pathophysiology needed for the future study of pharmacology and pharmacotherapeutics. Examples of diseases and their related pharmaceuticals will be presented to demonstrate how organ function can be altered. This course affords an interprofessional environment for learning and students will gain an appreciation of the relevance of the material to each other's disciplines. Offered spring semesters for approximately 112 contact hours.

IST2-20206 - Evidence Based Medicine II

Evidence Based Medicine (EBM II) is an interprofessional course that reinforces principles of drug information gathering and critiquing of scientific literature using concepts of evidence based medicine. Mixed teams of pharmacy and medical students will prepare and present journal clubs using their knowledge of electronic databases, research design, and literature evaluation. At the end of this course, students will be able to actively evaluate the clinical literature and understand the importance of critical analysis of the biomedical literature. These core principles will be reinforced in clinically based interdisciplinary conferences through the remainder of the curriculum. Offered spring semesters for approximately 14 contact hours.

P1-61108 - Pharmacist Patient Care Experience 2

This course is the second of nine experiential courses that focus on professional skills development for contemporary pharmacy practice. Starting in PPCE 2 and continuing in PPCE 3 and 4, students will visit five different pharmacy practice sites during each seven-week course, each for three afternoons. Through these visits, the student will acquire basic skills in pharmacy practice, observe and demonstrate professionalism and further develop their sense of professional identity. Also during this block, students will be participating in discussions regarding medical ethics and reflecting on an ethical dilemma. The Community Educator Program begins in this block and students will visit their assigned Community Educator once during Block 2 (and once more in each of Blocks 3 and 4). During these visits, students will continue the practice of interviewing and gain an appreciation for the personal and environmental issues that affect the population of patients they will one day be helping. In this course, the students will learn about the principles of medication adherence and practice the skill of improving medication adherence with a standardized patient in the Wasson Center. Offered spring semesters for approximately 36 contact hours.

BLOCK 3

P1-61107 - Parenteral Products with Lab

This course is designed to understand and critique parenteral medication orders and to convert complex therapeutic infusion orders into finished products. Accurate calculation of parenteral ingredients, chemical interactions and stabilities will be stressed. Students will learn sterile techniques and safety precautions for compounding piggyback medications, large volume parenterals, parenteral nutrition and sterile irrigation solutions. Special emphasis will be placed on reconstituting chemotherapy agents. Students will learn the importance of in-line filters, specialized infusion tubing and shielding specific fluids from sunlight. Technology will be introduced through the use of specialized pumps for compounding parenteral nutrition solutions, infusion pumps for administering intravenous medication and mobile pumps for infusing pain medication or chemotherapy. Students will be introduced to specialized infusion lines such as the central line, PICC lines, infusion ports, and peripheral catheters. Students will learn about new standards for managing a sterile products area as well as current OSHA standards for employee and patient safety. Offered spring semesters for approximately 21 contact hours.

P1-61110 - Pharmacist Patient Care Experience 3

This course is the third of nine experiential courses that focus on professional skills development for contemporary pharmacy practice. Students will visit two more pharmacy practice sites during this block, each for three afternoons. Through these visits, the student will acquire basic skills in pharmacy practice, observe and demonstrate professionalism and further develop their sense of professional identity. Students will visit their assigned Community Educator once during Block 3 to take a medical history and continue to develop their communication skills. In this block, students will further develop counseling skills by formulating a written counseling document for a prescription medication. Offered spring semesters for approximately 36 contact hours.

BLOCK 4

P1-61114 - Foundational Neuroscience

This course introduces students to the central nervous system including: structures and the circuits they form, how they develop, how they function normally and, to some extent, how they malfunction with disease, disorders or damage. A relatively small proportion of students will go on to specialize in neuroscience-related areas, such as drug development, neurology, psychiatry, drug delivery, behavioral sciences or pharmaceutical sciences. Some students will pursue research in healthcare, including clinical research in neuroscience areas or basic neuroscience research. However, the majority of the students who take this course will not be specializing in neuroscience, but will care for patients who may turn to their pharmacist, family doctor or other healthcare provider for help in understanding what the "neuro" specialists are talking about. Foundational Neuroscience will provide the basis for numerous future courses, especially those related to drug actions and pharmacology. For those few who will specialize in neuroscience, this course will provide a first step toward deeper exploration of the relationships between the brain, the mind, and behavior. Offered spring semesters for approximately 93 contact hours.

MST-20213- Professional Foundations II

Professional Foundations II is an interprofessional course that helps students to explore professional and personal identity, leadership and diversity and academic success strategies specifically focused on student development. Students are challenged to enhance their intellectual potential, understand their academic and moral responsibilities and appreciate diversity in a framework that develops the critical thinking, learning and communication skills necessary to contribute successfully to the university's intellectual life and to their future careers as pharmacists and physicians in a global society. The use of theoretical models, student selfassessment using national assessment tools and in-class experiential learning components such as journaling and group discussion engages students in cognitive and psychosocial skill development. Offered fall semesters for approximately 16 contact hours

P1-61109 - Pharmacist Patient Care Experience 4

This course is the fourth of nine experiential courses that focus on professional skills development for contemporary pharmacy practice. Students will visit two more pharmacy practice sites during this block, each for three afternoons. Through these visits, the student will acquire basic skills in pharmacy practice, observe and demonstrate professionalism and further develop their sense of professional identity. This block will focus on aspects of mental illness and how it affects ethical dilemmas as well as specific aspects of pharmacy practice. In this block, students will further be tested on their communication skills by counseling a patient on a prescription and OTC product as the final Wasson assessment in the first professional year. Offered spring semesters for approximately 48 contact hours.

Year 2 Theme: Medication Use Systems

Pharmacists are responsible for providing medication to patients in an optimal dosage form that is appropriate for administration. Students will work closely with healthcare providers and patients to ensure the right drug is prescribed, documented and dispensed and will learn the pharmacology of drug action as well as the science behind the absorption, distribution, metabolism and elimination of drug molecules. Students will use this knowledge to guide the selection of the appropriate drug and dose as well as to counsel the patient on expected outcome and adverse effects. Technology in the form of mechanized dispensing systems, computerized prescribing and electronic patient profiles offer increased speed and efficiency in providing medication to the patient. Students will be exposed to and become competent in using this technology at various practice sites and will become certified in several skills including administering immunizations and Medication Therapy Management (MTM) services. Interaction with medical students will continue with a comprehensive self-directed interprofessional team project.

BLOCK 5

MST2-20102 - Infection and Immunity for Pharmacists

This course is designed to provide the fundamental knowledge necessary for the proper management of diseases that are either totally microbiological/immunological in nature or that have a significant microbiological/immunological component. Infections and the host immune responses to them affect every body system and are important to every medical discipline. The structure and features of the microbe determine the nature of the infectious diseases that they cause. The innate and immune responses are the best defense against infection, but will often contribute or cause the tissue damage and symptoms of the disease. Sometimes the innate and immune responses are the sole cause of disease. Understanding the pathogen and the response to the pathogen is the basis for successful diagnosis and treatment of patients. It is necessary to both understand the general principles as well as know specific details in microbiology/ immunology. The basic principles of this course supply the foundation for understanding the microbial disease process. The details about each microbe provide the specifics regarding the nature of the disease, means of identification, immune response, course of disease, treatment and prevention. Integrating the detail with the concepts will help the student learn the material better than just rote memorization of the factual details. Co-scheduled with MST2-20102. Offered fall semesters for approximately 118 contact hours.

P2-62100 - Medication Use Systems

Understanding and prevention of medication errors is the primary focus in the course. It will provide students with an understanding of the processes involved in the medication use system in outpatient and institutional pharmacy settings and the pharmacist's role and responsibilities in utilizing and maintaining the safety of such systems. The operational design of medication use systems is explored in the context of patient safety. Topics include: error nomenclature; error reporting; work flow design; personnel responsibilities; data entry; prescription processing; record-keeping systems; medication packaging, labeling and dispensing; drug distribution systems; drug storage; inventory control; information systems; legal implications; and quality improvement methods. Offered fall semesters for approximately 14 contact hours.

P2-62102 - Pharmacist Patient Care Experience 5

This course is the fifth of nine courses that focus on professional skills development for contemporary pharmacy practice. Pharmacy students will learn how to administer immunizations, establish an immunization service and evaluate a patient medical profile to determine steps necessary to bring a patient's vaccination status up to date. Offered fall semesters for approximately 14 contact hours.

BLOCK 6

P2-62101 - Natural Products and Nutraceuticals

This is a team taught course that provides an understanding of the basic scientific, therapeutic and clinical principles and the evidence based medicine underlying the use of medicinal plants, herbal medications, natural products and nutraceuticals. The course addresses the concepts that help the understanding of the pharmacognostic basis of natural medicinal products and nutraceuticals including pharmaceutical, pharmacological, toxicological and phytochemical aspects. In addition, a detailed overview of specific commonly used herbal medications in various therapeutic categories as well as vitamins, minerals and supplements - their efficacy, adverse effects and drug interactions along with clinical case studies will be provided. Offered fall semesters for approximately 27 contact hours.

P2-62103 - Pharmacy Management: Operations

This team-taught course will provide introductory level discussion and exploration of the "nuts and bolts" of pharmacy operations. Students will be provided information related to the day-today operations of various health system and community pharmacy settings. The course will deal with contemporary operations issues faced in various practice settings and examine trends that will affect future practice. Working in small groups, students will develop a formal proposal for the justification and implementation of a new service/program proposal, which will be presented at the end of the course. By the conclusion of this course, students will have obtained a deeper and broader understanding of basic pharmacy operations that they may use in future practice. Offered fall semesters for approximately 36 contact hours.

P2-62105 - Principles of Drug-Body Interactions

This course introduces the student to the properties of a compound that make it "drug-like" and therefore likely to make it through phase 1 human clinical trials in the drug development process. Structural, physicochemical, biochemical and pharmacokinetic/toxicological properties must all be considered and optimized for a drug to show efficacy, with minimal toxicity, in patients. For drugs that have made it to market, the students will learn methods to quantitate key pharmacokinetic parameters, predict the effects of diseases and drug-drug interactions on those parameters and use them to design optimal dosage regimens for patients. Offered fall semesters for approximately 95 contact hours.

P2-62104 - Pharmacist Patient Care Experience 6

This 10-week course is the sixth of nine courses that focus on professional skills development for contemporary pharmacy practice. This course will have a significant experiential component. The students will visit one pharmacy practice site on two mornings per week (8 hr./week) for 8 weeks. The sites will be in either community, institutional or specialty/elective settings. (Students will be assigned to the other practice sites in PPCE 7.) An additional 8 hours of on campus time will be spent developing and enhancing skills in journal club evaluation and presentation. Offered fall semesters for approximately 72 contact hours.

BLOCK 7

P2-62107/P2-63103/P2-63105 - Pharmacotherapeutics and Practice of Pharmacy I, II, III

The Pharmacotherapeutics course sequence spans three blocks during the second and third professional years and is divided into 12 different modules. Each module has a different theme, which builds upon material from previous modules. The course integrates basic sciences (physiology, pathophysiology), pharmaceutical sciences (pharmacology) and clinical pharmacy practice (therapeutic decision-making). It is team-taught, predominantly by faculty within the College of Pharmacy. A variety of teaching approaches is utilized within the course, including didactic lectures, problem-based learning and team-based learning. This course will build a foundation of knowledge related to normal physiology, pathophysiology and the related therapeutic decision making for the most common acute and chronic disease states and their associated complications. Students will learn about available pharmacologic and nonpharmacologic therapies and the role of the pharmacist in selecting the most appropriate treatment modality. Extensive use of patient case studies will help students continue to develop the critical thinking skills necessary to collect, analyze and evaluate appropriate information in order to develop comprehensive, individualized patient care plans. Application of learned material and development of pertinent skills are additional focal points within the course. This course is designed to prepare students for their advanced pharmacy practice experiential rotations in the 4th professional year. Pharmacotherapeutics I is offered spring semester for approximately 240 contact hours; Pharmacotherapeutics II is offered in fall semesters for approximately 240 contact hours; and Pharmacotherapeutics III is offered in the spring semesters for approximately 315 contact hours.

P2-62106 - Pharmacy Management: Personnel

This team-taught course provides discussion, debate and exploration of the "nuts-and-bolts" knowledge and skills required of pharmacists to manage and lead others. Students will be provided information related to, but not limited to managing oneself for greater effectiveness, writing position descriptions, recruiting and interviewing candidates, avoiding discriminatory hiring practices, delegating responsibility, developing others to enhance performance, documenting performance, conducting performance appraisals, handling disruptive employees, managing conflict, managing change and stress management. By the conclusion of this course, students will have obtained a deeper understanding and skills for managing and leading others. Offered spring semesters for approximately 40 contact hours.

P2-62108 - Pharmacist Patient Care Experience 7

This 20-week course is the seventh of nine courses that focus on professional skills development for contemporary pharmacy practice. This course will have a significant experiential component. The students will visit pharmacy practice sites for 16 weeks. The sites will be in either community, institutional, or specialty/elective settings. Up to an additional 50+ hours of on campus time will be spent reinforcing health literacy concepts, introducing and practicing medication therapy management (MTM), achieving competency for the top 300 medications, practicing patient counseling and communication skills and working collaboratively with the second year medical students on an interprofessional team project (ITP). Offered spring semesters for approximately 188 contact hours.

Year 2 Elective Course Offerings

P2-62202 – Advanced Pharmaceutical Compounding

The Advanced Pharmaceutical Compounding elective course is a faculty-mentored course that will provide an understanding of select advanced principles of compounding. The course is designed to actively engage students in knowledge acquisition and problem solving. Broad objectives of the course include: (i) encouraging learning by actively engaging students within a relatively small, select class group who share a common interest in pursuing compounding as a professional career option, (ii) fostering critical thinking abilities to solve real-life pharmacy compounding accreditation and unique and/or advanced pharmaceutical compounding problems, and (iii) increasing student-instructor and student-student interactions in a compounding laboratory, rather than a classroom setting. The overall goal of this course is to assist students to acquire a problem-solving learning style that fosters life-long learning, particularly aimed at individuals who elect to pursue the challenging career option of pharmaceutical compounding. The course will be divided into two general areas of study: (1) setting up a compounding center in a community pharmacy or small industrial environment (accreditation, regulations, quality assurance, equipment and hands-on advanced compounding), (2) in the Pharmacy Practice Laboratory, of diverse dosage forms. Offered fall semesters for approximately 16 contact hours.

P2-62203 – Interprofessional Management of the Geriatric Patient

This elective course is designed to expose students to the roles that various healthcare professionals play on a team providing care to geriatric patients. This course is also designed to introduce students to medications that are often not tolerated by geriatric patients. Classes will focus on geriatric syndromes. Subject covered will include assessment tools to identify various geriatric syndromes, methods to most effectively address geriatric issues through an interprofessional team and resources that are available to assist geriatric patients. Emphasis will be placed on medications that pose a higher risk to geriatric patients and alternatives to their use. Weekly reading assignments will be made. In addition, each student will be required to do a field observation of an interprofessional geriatric team in action. Offered fall semesters for approximately 16 contact hours.

P2-62205 – Principles of Leadership for Pharmacy Students

This course will focus on the attributes of positive leadership skills by gaining an understanding of differing leadership models. Students will gain an appreciation of personal leadership styles and how leadership is important in all aspects of practice as well as personal life. Through a series of self-assessments, students will gain a deeper appreciation for their own leadership style. The class will be very interactive and will provide opportunities for application of principles learned in class. Offered fall semesters for approximately 16 contact hours.

P2-62206 – Film and Pharmacy

This course is designed for second-year pharmacy students to examine health, illness, clinical issues and perceptions of health and wellness through the lenses of film. It is offered five times for 3.5 hours per meeting. The course will examine how specific issues are portrayed both clinically and artistically through the medium of film. Supplemental readings will be included that provide perspectives on the topics addressed in each film. These readings may encompass fiction/poetry/essays or selected pieces from the medical literature. The course director will facilitate each class; additional faculty from the Colleges of Pharmacy and Medicine may assist with the discussions. Short, reflective writing assignments are required. Offered fall semesters for approximately 16 contact hours.

P2-62208 – Research: Pharmacy Science

This elective experience involves active laboratory research under the mentorship of a faculty member in that faculty member's laboratory. Students are expected to complete a project that is an integral part of the faculty member's research, do literature searches, present to faculty and other students and – in ideal cases – present their work as part of a published peer-reviewed paper and/ or at a national conference. Students are also expected to complete all of the safety and other regulatory requirements to work in research labs on the NEOMED campus, if applicable for the type of work. Offered fall semesters for approximately 16 contact hours (plus an additional 48 hours of independent study).

P2-62209 – Research: Pharmacy Practice

This elective experience allows students to pursue research interests and become familiar with techniques used in practice – or education-based research. Under the mentorship of a Department of Pharmacy Practice faculty advisor, the student will complete a project that is an integral part of the faculty member's research. This will involve identifying a research hypothesis, doing a literature search, writing a research proposal, collecting, analyzing and summarizing data (time permitting) and presenting findings thus far through the preparation of a formal research report. The student will present their work to department faculty and interested others (via presentation or poster) and – ideally – ultimately present their work as part of a poster or published peer-reviewed paper at a state or national conference. Students admitted into this elective should possess initiative and interest, have adequate course background and show evidence of strong conceptual knowledge in the area of research selected. The faculty project advisor may require their student to complete the online CITI Course in The Protection of Human Research Subjects. Offered fall semesters for approximately 16 contact hours (plus an additional 48 hours of independent study).

P2-62211 – Evidence Based Decision-Making in Patient Care

This course will build on drug information skills learned in the P1 year and be of interest to P2 and P3 students who want to optimize their evidence based medicine skills for rotations and/or residency training. This course will provide additional instruction and practice opportunities for applying evidence based decision making to patient care using the core skills learned in EBM 1 and EBM 2. The course will be largely facilitated by pharmacy residents and activities will focus on evaluating the literature and communicating recommendations to various healthcare providers and patients using common examples from clinical practice. Opportunities for P2 and P3 interaction and peer feedback will take place throughout the course.

P2-62214 - Independent Study in Teaching and Learning

This independent study is designed to help students to begin to develop knowledge and skills needed for teaching in the classroom and clinical settings. They will be introduced to teaching theories, styles, and methods in the context of their own teaching philosophy. Students also will be expected to create a teaching portfolio as a result of this course. Each student will be expected to attend four group class sessions (2 hours each) and will be required to document 8-10 hours of independent study time. Additionally, students will individually meet with the course director for 1 hour at the beginning of the course and 1 hour at the end of the course to review completed project(s). The students also will be required to demonstrate their knowledge of program assessment by working as a group to evaluate the elective and generate a written proposal for the 2016 independent study. Offered fall semesters for approximately 16 contact hours.

P2-62216 - Critical Issues in Global Health

This course explores key pharmaceutical related global health issues by focusing on a) the global burden and distribution of disease and mortality; b) the determinants of global health disparities; c) the development of global health policies; and d) the outcomes of global health

interventions. All are examined in relation to wider patterns of global interdependency, highlighting how both global health disparities and global ties and tensions themselves shape global health policy responses. Offered fall semesters for approximately 16 contact hours.

P2-62217 – Personal Finance for the Student Pharmacist

This elective, offered in fall of the P2 and P3 year, will utilize active-learning and case scenarios to introduce basic principles and skills of personal financial management relevant to student pharmacists including financial goal setting, budgeting, saving, investing, debt repayment and insurance.

GLBH 5095X - KSU ST: Italian for Medical Purposes (1 credit)

This elective is available to P2 and P3 student and is part of the KSU-NEOMED Study Abroad Health Institute in Florence Italy. Delivered in a modular, integrated approach, it is designed to provide students with a foundation of elementary-level Italian, and gradually builds knowledge of vocabulary and grammatical elements. Students will develop speaking, writing, listening and reading skills as well as a familiarity with Italian regions and culture through a series of contextualized communication activities. It focuses on language and culture specific to healthcare professions and will include written and oral communication will occur between patient and doctor; medical phrases and terminology; lexicon of the medical field and comparisons between the Italian and US health systems. Summer offering; 1 semester credit. (KSU Course Id TBD).

GLBH 5295X - KSU ST: Social Determinants of Health on Communities & Persons (3 credits)

This elective is available to P2 and P3 student and is part of the KSU-NEOMED Study Abroad Health Institute in Florence Italy. This four-week course challenges students to explore global and local communities within Italy to evaluate social determinants of health (SDH) and their impact on persons and society, and their relationship to concepts of health and disease. Summer offering; 3 semester credits. (KSU Course Id TBD)

GLBH 5395X - KSU ST: Plagues that Shaped the World (3 credits)

Offered as part of the KSU-NEOMED Study Abroad Health Institute in Florence Italy. This course introduces students to the fundamentals of public health microbiology; establish the epidemiological principles that explain how plagues erupt and propagate, decimating populations and their cultures. Social determinant that fuel plague outbreaks and the often-ill-informed policy-making that slowed recovery will be discussed, as will modern examples such as Ebola and Zika. City excursions and a field trip are included to assess cultural changes resulting from historical plagues. Summer offering; 3 semester credits. (KSU Course Id TBD)

Year 3 Theme: Patient Safety

Society expects healthcare providers to heal and protect it from adverse outcomes. Pharmacists are charged with providing medication that is individualized for the patient based upon medical needs, limitations imposed by disease processes and the potential for adverse events while being error free in dispensing prescription drugs. Students will develop an understanding and

appreciation of pharmacotherapeutics as they are immersed in pathophysiology, pharmacology and management of disease with therapeutic agents. Students will continue to grow as a pharmacist by developing skills in patient assessment, therapeutic decision making and monitoring of patient outcomes, while gaining an appreciation for the outcome of individual patients. Students will also learn how to manage populations of patients through institutional medication safety programs. Interactions with medical students in this step may occur in interprofessional case discussions, standardized patient encounters, health fairs and immunization clinics. Experiences in class and in practice settings will prepare students to enter full time patient contact in year four where they will share in the care of and decisions concerning patients.

BLOCK 8

P3-63103 - Pharmacotherapeutics & Practice of Pharmacy II (Refer to description provided earlier in Block 7) Offered fall semesters for approximately 240 contact hours.

P3-63102 - Pharmacy Law

This course is lecture-based and provides discussion and debate on a variety of topics related to Federal Pharmacy Law issues. Students will be provided information pertaining to, but not limited to, significant Federal Laws, industry standard acronyms and definitions, the drug development process, labeling and new product requirements, issues related to prescriptions, issues related to controlled substances, OTC drugs, dietary products, nutritional products and cosmetics. By the conclusion of this course, students will have obtained a deeper and broader understand of existing Federal Laws and their application in the practice setting. Offered fall semesters for approximately 16 contact hours.

P3-63101 - Pharmacist Patient Care Experience 8

This is the eighth in a series of nine courses within the PPCE sequence. This course will have a significant experiential component. Students will visit one pharmacy practice site in either a community, institutional or elective setting. Each site will be visited for 8 weeks on two afternoons per week. Additional time is required on campus to engage in demonstrations and practice giving formal patient case presentations; pharmacy skills assessment (PSA) activities in the Wasson Center; an assessment of top medication knowledge; response to a drug information question; and the continuation of the professional development series, with a focus on professional communication (e-professionalism). Offered fall semesters for approximately 72 contact hours.

BLOCK 9

P3-63105 - Pharmacotherapeutics & Practice of Pharmacy III (see above) (Refer to description provided earlier in Block 7)Offered spring semesters for approximately 315 contact hours.

P3-63104 - Pharmacy Law & Ethics II

This offering is a lecture based course that will provide discussion and debate on a variety of topics related to State of Ohio Pharmacy Law issues. Students will be provided information pertaining to, but not limited to, significant Ohio Laws, pharmacists, interns, technicians, dangerous drugs, Pure Food & Drug Laws, controlled substances, continuing education, impaired professionals, licenses, institutional facilities, sterile products, fluid therapy, charitable & repository pharmacies and the drug database. By the conclusion of this course, students will have obtained a deeper and broader understand of existing Ohio Laws & Rules and their application in the practice setting. Offered spring semesters for approximately 21 contact hours.

P3-63106 - Pharmacist Patient Care Experience 9

This is the last of nine experiential courses that focus on professional skills development for contemporary pharmacy practice. This course will have a significant experiential component. Students will visit two different pharmacy practice sites in either community, institutional or elective settings (whichever sites were not visited in PPCE 8). Each site will be visited for 8 weeks on two afternoons per week. Additional time is required on campus to engage in: demonstrations and practice giving formal journal club presentations; writing and presenting formal drug information responses; a pharmacy skills assessment activity in the Wasson Center; the end-of-year Stage Exam; individual and group Professional Development Advising Team meetings; and continuation of the professional development series, with a focus on: 1) evaluation of career options; 2) job searching skills; 3) residency and job applications; and 4) interviewing skills. Offered spring semesters for approximately 150 contact hours.

Year 3 Elective Course Offerings

P3-63226 – Advanced Pharmaceutical Compounding

Available to both P2 and P3 students. Please refer to P2 entry for course description details. Offered fall semesters for approximately 16 contact hours.

P3-63232 – Critical Issues in Global Health

Available to both P2 and P3 students. Please refer to P2 entry for course description details. Offered fall semesters for approximately 16 contact hours.

P3-63227 – Evidence Based Decision- Making in Patient Care

Available to both P2 and P3 students. Please refer to P2 entry for course description details. Offered fall semesters for approximately 16 contact hours.

P3-63208 – Film and Pharmacy

Available to both P2 and P3 students. Please refer to P2 entry for course description details. Offered fall semesters for approximately 16 contact hours.

P3-63230 - Independent Study in Teaching and Learning

Available to both P2 and P3 students. Please refer to P2 entry for course description details. Offered fall semesters for approximately 16 contact hours.

P3-63214 – Institute for Healthcare Improvement

Available to P3 students only. This elective pharmacy course will require students to complete the online curriculum developed by the IHI Open School. Students will complete at least 16 online modules on the topics of Leadership, Patient Safety and Quality Improvement by the established deadlines. Students will independently complete these modules and will be required to achieve a passing score in each. Students will receive a certificate of completion from IHI. Activities will be self-directed; however, the class will have a mandatory 1-hour session at the beginning of the grading period. Offered fall semesters for approximately 16 contact hours.

P3-63219 – Pediatric Pharmacotherapy

Available to P3 students only. This elective course consists of lectures and in class discussion designed to build upon the information that has been covered in the required Pharmacotherapeutics course. The goal of the course is to give students an expanded understanding of the most common disease states primarily in outpatient pediatric patients in order to apply these skills to future clinical rotations and the care of pediatric patients in their future career. This course will serve as the required pre-requisite for the Advanced Pediatric Pharmacotherapy elective offered in the spring 2016 semester.

P3-63217 – Pharmacy Residency Preparation

This elective, offered in the fall (16 hours) and spring (21 hours) of the 3rd year, will be open to approximately 20 students. Students will develop, practice and refine skills that will be necessary during postgraduate training and/or employment. The areas of focus will be: presentation skills, basics of practice based research, teaching, goal setting, and professionalism. In addition, a small portion of the course will be spend on reviewing postgraduate training options.

P3-63231 – Principles of Leadership

Available to both P2 and P3 students. Please refer to P2 entry for course description details. Offered fall semesters for approximately 16 contact hours.

P3-63215 – Research: Pharmacy Practice

Available to both P2 and P3 students. Please refer to P2 entry for course description details. Offered fall and spring semesters for approximately 16 contact hours.

P3-63209 – Research: Pharmacy Science

Available to both P2 and P3 students. Please refer to P2 entry for course description details. Offered fall and spring semesters for approximately 16 contact hours.

P3-63229 - Ambulatory Care Clinic Design: Developing a Sustainable Patient Care Service

Available to P3 students only. The consult agreement law has just passed in Ohio (hypothetical) and as a patient-oriented pharmacist, you want to start a collaborative drug therapy management (CDTM) service...how and where do you start? The goal of this course is to have the students develop a business plan for a pharmacist-driven ambulatory care service within an institutional setting such as an outpatient clinic or a non-institutional setting such as a community pharmacy practice. The course is based on assignment of a case or scenario, which will require the students

working in teams to develop a business plan and accompanying documents that address a patient care need and is financially sustainable. Students will utilize and build on previously taught knowledge and skills: specifically, they will address communication skills through development of motivational interviewing techniques for healthcare providers and managers, assessment and diagnostic skills as they relate to successful disease management, and team-building skills.

P3-63220 – A Pharmacist's Approach to Women's Health

Available to P3 students only. This course consists of lectures, in class discussion, reflection writing, and a final project to give students an understanding of the how diseases and conditions affect women and men differently. The goal of this course is to give students an understanding of how specific issues related to women affect their health care and apply this knowledge to obtain optimal care of the female patient. Pharmacists need a thorough understanding of how such issues affect women differently to order to deliver effective pharmaceutical care. Offered spring semesters for approximately 20 contact hours.

P3- 63233– Emergency Medicine & Critical Care

Available to P3 students only. The Emergency Medicine/Critical Care Elective course is designed to provide in-depth, advanced instruction concerning the pharmacotherapeutic management of patients with emergent medical conditions, and commonly encountered critical care diseases. Emphasis is placed on the efficacy, safety, and comparative value of drug therapy in this specialized patient population. Knowledge of physiology, pharmacology, toxicology, and therapeutic management is applied to disease states and conditions specific to critically ill patients. Didactic instruction is combined with clinical scenarios and interactive discussions concerning emergency medicine and critical care pharmacy-related issues. Offered spring semesters for approximately 20 contact hours.

P3-63223 – Drugs of Review

Available to P3 students only. In order for a clinician to develop a patient specific treatment plan, they must understand core pharmacology, disease pathophysiology and learn to "think clinically". NEOMED students typically learn quickly to apply what they have learned in the classroom but have difficulty demonstrating core pharmacology, disease understanding and clinical thought processes. This course focuses on the top 200 medications, reviewing the most important aspects of clinical pharmacology and the evidence based medicine behind pharmacotherapy choice. The course uses a case-based learning opportunity that highlights the unique aspects of the agents covered in class. Offered spring semesters for approximately 20 contact hours.

P3-63225 – Healthcare & Media

Available to P3 students only. This course explores whether the public believes everything they read and hear. Do the messages in the media about benefits of certain therapies and treatments truly reflect valid science? Wherever one turns, whether it is watching the nightly news, reading a weekly news periodical, tuning into an afternoon talk show, or driving to work and seeing billboards and advertisements on the side of a city bus, the public is bombarded with claims for medical cures and beneficial products for one's health. The explosion of social media, almost

continuous access to the internet, and the growth of so-called 'experts' in health and wellness, have all led to a significant growth in promotion of products, according to the promoter/manufacturer, to slow aging, enhance 'stamina', eliminate wrinkles and belly fat, reduce cholesterol, cure diabetes, improve focus and increase intelligence. How many of these claims are based on valid science? How does a healthcare provider respond to these issues when asked by a patient or customer interested in trying one/some of these? This class is designed to explore many of these scenarios and will provide the students with an opportunity to compare fact from fiction. The format of the class will be Team-Based Learning, where students will be divided into teams and given assignments. Offered spring semesters for approximately 20 contact hours.

P3-63202 – Interprofessional Management of Palliative Care Patients

Available to P3 students only. This course is designed to introduce the management of the palliative care patient by an interprofessional team. The students will learn the role and responsibilities of the team members. In addition, management of common symptoms -- including pain -- seen in the palliative care patient will be discussed with a focus on how the pharmacist interacts with the interprofessional team to assist in the overall care of the patient. Class sessions will involve interactive lecture presentations and case-based discussions. Each student will be required to do a field observation of an interprofessional team in action and report their observations by reflective essay. Offered spring semesters for approximately 20 contact hours.

P3-63224 – Legislation and Advocacy in Pharmacy

Available to P3 students only. This course is designed to provide a discussion forum for exploring current legislative issues influencing the pharmacy profession. Students will be engaged in a variety of activities, which will introduce them to advocacy opportunities. Students will participate in retrieving legislative information, interpreting legislation and its potential impacts, engaging in discussion on various perspectives of the issues and presenting information on legislation that affects pharmacy to their peers. By the end of the course, students will have developed their own individual templates/toolkits for discussion and communication regarding pharmacy-impacted legislation with their representatives on local, state and national levels. Offered spring semesters for approximately 20 hours.

P3-63234 - Advanced Pediatric Pharmacotherapy

Available to P3 students only. This advanced elective course consists of lectures and in class discussion designed to build upon the information that has been covered in the required Pharmacotherapeutics course and the Pediatric Pharmacotherapy elective. The goal of the course is to give students an expanded understanding of the most common inpatient disease states in pediatric patients in order to apply these skills to future clinical rotations and the care of pediatric patients in their future career.

GLBH 5095X - KSU ST: Italian for Medical Purposes (1 credit)

This elective is available to P2 and P3 student and is part of the KSU-NEOMED Study Abroad Health Institute in Florence Italy. Delivered in a modular, integrated approach, it is designed to provide students with a foundation of elementary-level Italian, and gradually builds knowledge of vocabulary and grammatical elements. Students will develop speaking, writing, listening and reading skills as well as a familiarity with Italian regions and culture through a series of contextualized communication activities. It focuses on language and culture specific to healthcare professions and will include written and oral communication will occur between patient and doctor; medical phrases and terminology; lexicon of the medical field and comparisons between the Italian and US health systems. Summer offering; 1 semester credit. (KSU Course Id TBD).

GLBH 5295X - KSU ST: Social Determinants of Health on Communities & Persons (3 credits)

This elective is available to P2 and P3 student and is part of the KSU-NEOMED Study Abroad Health Institute in Florence Italy. This four-week course challenges students to explore global and local communities within Italy to evaluate social determinants of health (SDH) and their impact on persons and society, and their relationship to concepts of health and disease. Summer offering; 3 semester credits. (KSU Course Id TBD)

GLBH 5395X - KSU ST: Plagues that Shaped the World (3 credits)

Offered as part of the KSU-NEOMED Study Abroad Health Institute in Florence Italy. This course introduces students to the fundamentals of public health microbiology; establish the epidemiological principles that explain how plagues erupt and propagate, decimating populations and their cultures. Social determinant that fuel plague outbreaks and the often-ill-informed policy-making that slowed recovery will be discussed, as will modern examples such as Ebola and Zika. City excursions and a field trip are included to assess cultural changes resulting from historical plagues. Summer offering; 3 semester credits. (KSU Course Id TBD)

Year 4 Theme: Patient Centered Care

In the fourth year students will be directly involved in patient care at acute care, ambulatory care and pharmacy practice settings. They will work with healthcare teams to assess patient medical problems, decide on therapeutic and non-therapeutic care and assume responsibility of monitoring patient outcomes. This time will be an opportunity to apply the knowledge and experience they have gained from the previous three years to patient care. High quality pharmacist preceptors who invite you to share their professional responsibilities and personal fulfillment of caring for patients will mentor students. As the year progresses, they will grow in comfort and skill for guiding decisions and interacting with patients.

BLOCK 10

Advanced Pharmacy Practice Experiences

This is the final block of the Pharmacist Patient Care Experiences sequence. This series of experiences occurs in the final year of the curriculum and will reinforce and continue the development of skills and knowledge students received during the previous three years of the

curriculum (didactic, laboratory and early experiential training). Students will have the opportunity to service various patient populations in a variety of settings and to collaborate with other healthcare professionals. These experiences will offer exposure to patients and disease states that pharmacists are likely to encounter in practice. Rotations take place over 10 months and include ambulatory care, inpatient/acute care internal medicine, advanced community pharmacy practice, advanced hospital pharmacy practice, selective leadership, selective pediatric or geriatric medicine, underserved and an elective. Students will complete the stated requirements through selection of the following offerings:

- P4-64100 Acute Care/Internal Medicine (8 weeks/8 credits)
- P4-64200 Ambulatory Care (8 weeks/8 credits)
- P4-64201 Ambulatory Care & Underserved (8 weeks/8 credits)
- P4-64300 Advanced Hospital Practice (4 weeks/4 credits)
- P4-64301 Advanced Hospital Practice & Leadership (8 weeks/8 credits)
- P4-64400 Advanced Community Practice (4 weeks/4 credits)
- P4-64401 Advanced Community Practice & Leadership (8 weeks/8 credits)
- P4-64550 Clinical Selective (4 weeks/4 credits)
- P4-64700 Underserved Populations (4 weeks/4 credits)
- P4-64701 Underserved Populations and Leadership (8 weeks/8 credits)
- P4-64800 Pharmacy elective (4 weeks/4 credits)

P4-64900 - Pharmacy Capstone

This is the final didactic course in the doctor of pharmacy curriculum. The culmination of experiences is designed to assist student pharmacists with the transition to becoming licensed pharmacists and to the next stage of their professional lives. During the course, students will reflect on their knowledge and skill development over the previous four years, develop a plan for licensure exam preparation, and explore topics beyond licensure that will affect their short- and long-term professional lives. Offered spring semesters for approximately 57 contact hours.

Degree Requirements – Pharm.D.

The granting of the Doctor of Pharmacy degree by Northeast Ohio Medical University is contingent upon the recommendation to the Board of Trustees by the Committee on Academic Progress and Promotion (CAPP) and the dean of the College.

Students should refer to the most recent NEOMED Student Handbook for current CAPP Standards, Policies, and Procedures.

(1) All students of the Northeast Ohio Medical University College of Pharmacy are required to achieve at least a passing grade in all courses required by the faculty for the awarding of the doctor of pharmacy degree.

(2) In addition to the acquisition of the basic tools of skill and knowledge, the College of Pharmacy emphasizes the importance of the maintenance of emotional stability, a practice of integrity, a habit of critical analysis, a spirit of inquiry and an expressed sense of understanding and empathy for others. This reflects the concern of the College for the appropriate development of human qualities and commitment to professional standards as well as development of technical competence in its students and graduates. Evaluation of students and their progress during the course of studies will include all of these criteria.

(3) Failure to meet any of the standards of the College will result in remedial or other actions, including dismissal.

Area Health Education Centers (AHEC)

The Area Health Education Center (AHEC) program promotes primary care practice in medically underserved areas of the state. The NEOMED AHEC participates with other Ohio medical schools in implementing the AHEC program, which was established in 1978 to support undergraduate and graduate medical, nursing and allied health education programs in rural and inner city settings.

The AHEC program is linked through four community-based AHEC centers: Akron-Region Interprofessional (Akron), Canton Regional (Canton), Cleveland-Region Interprofessional (Cleveland), and Eastern Ohio (Youngstown). These centers, in collaboration with the NEOMED AHEC Program Office, plan and develop educational programs based on their assessment of local resources, health personnel needs and the interest of each community. In addition to medical education, the Centers develop clinical-based educational programs for other health professions with The University of Akron, Cleveland State University, Kent State University and Youngstown State University.

AHEC provides recruitment programs for students who are considered under-represented in the health professions; community-based student education for health professional students; and professional development/continuing education for health professionals focusing on primary care.

The AHEC Program and its centers collaborate with other Ohio medical colleges, the Ohio Department of Health and other state agencies, nearby partner universities and local hospitals. The program is funded through the Ohio Legislature through the Ohio Department of Higher Education, the federal AHEC Program (HRSA); Bureau of Health Workforce, and by partner universities, local grants and program- generated funds.