



NOTRE DAME  
OF MARYLAND  
UNIVERSITY

SCHOOL OF PHARMACY



---

**Catalog**

# 2020-2021

\*\*\*\*\*

This catalog is published for the convenience of students at Notre Dame of Maryland University School of Pharmacy. It is effective May 18, 2020. The School reserves the right to make changes in any or all specifications contained herein and to apply such revision(s) to registered and accepted students as well as new admissions. No contractual rights between Notre Dame of Maryland University School of Pharmacy and any student are intended and none may be deemed to be created by issuance of this catalog.

All references to the dean, associate dean and assistant dean are individuals in the School of Pharmacy. University administration will be noted as such.

## ACCREDITATION

Notre Dame of Maryland University is accredited by the Middle States Association of Universities and Secondary Schools and by the Maryland State Department of Education.

# TABLE OF CONTENTS

<b>Academic Calendar</b> .....	4
<b>Notre Dame of Maryland University Overview</b> .....	6
<b>School of Pharmacy Overview</b>	
Vision, Mission and Values Statement.....	7
Accreditation Status.....	8
Complaints Regarding Program Compliance.....	8
<b>General Information - University</b>	
Financial Aid.....	10
Scholarships.....	10
Student Records.....	11
Address of Record.....	13
<b>School of Pharmacy</b>	
Admissions.....	14
Matriculation Process.....	23
Criminal Background Check Policy.....	24
Curriculum.....	27
Course Descriptions.....	30
Co-curricular Requirements.....	49
Interprofessional Education Requirements.....	49
Academic Policies.....	49
Grades.....	49
Academic Progression.....	51
Health Requirements.....	53
Course Grade & Student Promotion Committee Action Appeal.....	53
Graduation Requirements.....	55
Graduation Honors.....	56
Graduation Awards.....	56
Professionalism .....	58
School Dress Code.....	61
Administrative Polices.....	61
Absence Reporting Procedure.....	61
Absence (Excused) .....	62
Advanced Standing.....	62
Accessibility, Accommodation & Health Promotion.....	62
Appropriate Use of Technology in Classroom.....	63
Attendance and Student Employment.....	63
Audio Recording in Classrooms.....	63
Classroom Food/Drink.....	64
Eligibility for Participation in Activities.....	64
E-mail Communication.....	64
Faculty Advisor Program.....	64
Licensure.....	65
Transportation & Housing for Experiential Education.....	65
<b>Tips for Avoiding Plagiarism</b> .....	66
<b>School of Pharmacy Faculty and Administration</b> .....	67

## Academic Calendar

### Summer 2020

Advanced Practice Experiences (P4)

Monday, May 18, 2020 - Friday, July 24, 2020

### Fall 2020 - P1

August 11-14, 2020	Tuesday-Friday	SOP New Student Orientation
August 17-31, 2020	Monday-Tuesday	SOP Drop/ Add period
August 17, 2020	Monday	First day of didactic classes
September 7, 2020	Monday	Labor Day – No classes, IPPEs, or APPEs
September 21-25, 2020	Monday-Friday	P1 Success Week
October 10, 2020	Saturday	White Coat Ceremony
October 16, 2020	Friday	Last day to withdraw from classes
October 17, 2020	Saturday	Career RxPO
October 20, 2020	Tuesday	Community Day – no classes
November 2-6, 2020	Monday-Friday	Registration for spring 2021
November 25-29, 2020	Wednesday- Sunday	Thanksgiving break – No classes
November 30, 2020	Monday	Classes resume
December 4, 2020	Friday	Last day of semester classes
December 7, 2020	Monday	Reading Day
December 8-14, 2020 (includes Sat.)	Tuesday – Monday	Final exams

### Fall 2020 - P2, P3 & P4

July 24 – August 14, 2020*	Friday – Friday	Introductory Practice Experiences (P2) and special electives
July 27, 2020 – Friday, November 6, 2020	Monday-Friday	Advanced Pharmacy Practice Experiences (P4)
August 17-31, 2020	Monday-Monday	SOP Drop/ Add period
August 17, 2020	Monday	First day of didactic classes
September 7, 2020	Monday	Labor Day – No classes, No APPEs
October 10, 2020	Saturday	White Coat Ceremony (P1)
October 16, 2020	Friday	Last day to withdraw from classes
October 17, 2020	Saturday	Career RxPO
October 20, 2020	Tuesday	Community Day – no classes
November 2-4, 2020	Monday-Friday	Registration for spring 2021
November 9-10, 2020	Monday-Tuesday	P4 Career Workshop
November 25-29, 2020	Wednesday- Sunday	Thanksgiving break – No classes, APPEs
November 30, 2020	Monday	Classes resume & last day of semester classes
December 1, 2020	Tuesday	Reading Day
December 2-8, 2020	Wednesday – Tuesday	Final exams

\* To complete the initial 125 IPPE hours required for the **Fall** semester, students will be at the rotation site for a combination of 9 hour days and weekends.

## Spring 2021 - P1, P2, P3, P4

January 4-11, 2021*	Monday-Monday	Select Required Courses
January 11-April 23, 2021	Monday-Friday	Advanced Practice Experiences (P4)
January 12, 2021	Tuesday	First day of didactic classes (all) <i>(follow Monday schedule)</i>
January 12-26, 2021	Tuesday-Tuesday	SOP Add/Drop period
January 18, 2021	Monday	MLK Birthday-no classes
March 12, 2021	Friday	Last day to withdraw from classes
March 15-19, 2021	Monday - Friday	<b>Spring Break (No didactic); APPEs must attend</b>
March 22, 2021	Monday	All classes resume
April 2-5, 2021	Friday - Monday	<b>Easter Holiday</b> (no classes, & APPEs)
April 6, 2021	Tuesday	Classes Resume
April 7-9, 2021	Wednesday -Friday	Registration for summer/fall 2021
April 16, 2021	Friday	PCOA Exam (P-3 only)
April 26-May 3, 2021	Monday-Monday	P4 Capstone experience
April 28, 2021	Wednesday	<i>Follow Friday class schedule</i>
April 29, 2021	Thursday	Last day of semester classes <i>(all follow Monday schedule)</i>
April 30, 2021	Friday	Reading Day (all)
May 3-10, 2021	Monday-Monday	Final exams – all <i>*includes Saturday exams</i>
May 3-10, 2021	Monday-Friday	P4 Assessments
May 11, 2021	Thursday	SOP Pinning Ceremony (P3)
May 12 - June 3, 2021	Wednesday - Thursday	Introductory Pharmacy Practice Experiences (P2 only)
May 17-19, 2021	Monday-Wednesday	NAPLEX Review (P4)
May 20-21, 2021	Thursday - Friday	MPJE (Law) Review (P4)
May 21, 2021	Friday	Graduation Awards Banquet
May 23, 2021	Sunday	University Commencement

\* To complete the initial 125 IPPE hours required for the **Fall** semester, students will be at the rotation site for a combination of 9 hour days and weekends.





## **The University**

The 2011-12 academic year marked a historic transition for Notre Dame of Maryland. On September 9, 2011 – the 116th anniversary of the institution’s first day of class in 1895 – the College became Notre Dame of Maryland University. In making this transition, Notre Dame continues to honor the proud traditions of its past. A Catholic liberal arts university, Notre Dame is grounded in a deep sense of history and distinction as the first Catholic women’s college in the country to award the four-year baccalaureate degree. Today, Notre Dame of Maryland University enthusiastically embraces a path forward in leadership in liberal arts, health sciences and education. Notre Dame’s programs reflect its place in history as an institution that anticipates and meets contemporary needs with a visionary and pragmatic education.

Notre Dame students enjoy the University’s beautiful 58-acre landscaped and wooded campus, scenically located in a residential part of Baltimore’s North Charles Street corridor. From the campus, students can easily access resources throughout the city, including a number of neighboring colleges and universities. Notre Dame offers courses at convenient locations throughout Maryland, and even brings its programs into workplaces.

As the University offers its students solutions to meet their needs in a modern world, the University embraces the pioneering spirit of its founders, the School Sisters of Notre Dame. A commitment to academic excellence remains the foundation of the institution. At Notre Dame, scholarship and faith are partners. The University enthusiastically welcomes students, faculty and staff of all faith traditions. Campus-wide programs encourage students to explore, understand and express their personal beliefs and values and to respect those of others.

## School of Pharmacy

With greater numbers of America's population aging, and growing advances in medicine creating more pharmaceutical products, our country has critical shortage in an area of health care delivery – qualified pharmacists.

Though pharmacists are seriously needed by community pharmacies, medical centers and other health care facilities to meet today's rising consumer demand, our nation's educational institutions could not keep pace. In 2006, with five to ten qualified applicants for every one opening in U.S. pharmacy schools, the need for a new professional school was clear. In response, Notre Dame launched a bold new initiative in fall 2008 – the School of Pharmacy. Adding to the University's history of firsts, the new School of Pharmacy is the first of its kind created by a women's college in the U.S. In addition, it is Notre Dame's first professional degree program. More importantly, the School reflects Notre Dame's commitment to service to the world by solving social challenges through innovative educational efforts.

The School of Pharmacy is comprised of three academic units – department of clinical and administrative sciences, department of pharmaceutical sciences and office of experiential education. The department of clinical and administrative sciences is comprised of two types of faculty – those who are advanced pharmacy practitioners and those whose expertise include health care policy and advocacy, pharmacy practice management, public health and other relevant social and administrative sciences. The department of pharmaceutical sciences is comprised of faculty with expertise in pharmacology, medicinal chemistry, pharmaceuticals and the biological sciences. The office of experiential education is responsible for the overall operation of introductory and advanced pharmacy practice experiences which spans over the entire curriculum.

### **Vision**

To provide exceptional pharmacy education by creating a model learning community dedicated to the transformation of societal health.

### **Mission**

We educate student pharmacists to be compassionate, ethical professionals who improve medication use and provide quality patient care to a diverse population. We develop leaders and advance public health.

### **Values (ACEI<sup>2</sup>)**

The faculty, staff and student pharmacists pledge to work together to achieve our vision and mission by embracing the values of **A**ltruism, **C**ollaboration, **E**xcellence, **I**nnovation and **I**ntegrity.

## **Accreditation Disclosure Statement**

Notre Dame of Maryland University School of Pharmacy's Doctor of Pharmacy program is accredited by the Accreditation Council for Pharmacy Education, 135 South LaSalle Street, Suite 4100, Chicago, IL 60503, 312/664-3575; FAX 312/664-4652, web site [www.acpe-accredit.org](http://www.acpe-accredit.org).

## **Complaints or Comments Regarding Program Compliance**

The accreditation standards are located on ACPE Web site ([www.acpe-accredit.org](http://www.acpe-accredit.org)). Comments or complaints regarding program compliance with the accreditation standards should be submitted to the office of the dean in writing. Complaints will be reviewed on a timely basis, and a response or plan of resolution will be communicated to individuals interested in the issue. Programmatic comments and complaints are kept on file in the office of dean and are available for review by ACPE.

ACPE has an obligation to assure that any program that seeks or holds an accreditation status remains compliant with the standards and conducts its affairs with impartiality, non-discrimination, honesty, and frankness. Any complaints from institutions, students, faculty, or the public against an accredited pharmacy program or institution housing an accredited pharmacy program must be based upon the fact that such program or institution is not in compliance with a standard or standards as established, from time to time, by ACPE.

Any complaint must be submitted to ACPE within one hundred and eighty (180) days from the date the complainant knew or should have known of the occurrence of facts on which the complaint arose. Any complaint not filed with ACPE within the time limitations set forth above shall not be considered by ACPE, except when: 1) the Executive Director determines the matter's seriousness warrants investigation to ensure continued compliance with one or more accreditation standards; or 2) any complaint held in abeyance by ACPE by reason of threatened or existing legal challenge before a court of law or governmental agency as provided in the last paragraph may be reinstated by the complainant by written notice to ACPE within thirty (30) days after the latter of (a) a final judgment by the court of law or governmental agency or (b) finalization of any appeal of such judgment. The Executive Director may proceed with the investigation of the complaint held in abeyance without notice by the complainant if the Executive Director determines, in his or her discretion, that such is warranted due to the severity of the complaint and potential impact on the quality of the program and the effect on students.

ACPE will consider formal complaints about Doctor of Pharmacy programs (PharmD) that allege a program is either (a) not in compliance with one or more of ACPE's Standards and Key Elements, or (b) has violated any of ACPE's expectations related to academic integrity. The complaint must specify which Standard(s) or Key Element(s) are implicated or how the program violated expectations of integrity. Complaints fall into one of two categories: (1) those that involve situations subject to formal institution/program due process policies and procedures and (2) those that involve situations not subject to formal due process procedures: 1) If the complainant is involved with an institution/program grievance subject to formal due process and procedure, ACPE requires that the process be completed prior to initiating ACPE's formal complaint process, unless the complaint includes an allegation that the institution/program process has not been handled in a timely manner as defined in the institution/program policy. In such cases, ACPE will consider the



complaint prior to completion of the grievance process. Evidence of completion of the institutional process or of the untimely handling of such must be included in the complaint materials. 2) If the complaint is related to situations that fall outside of formal due process policies and procedures, the complaint may be filed at any time.

ACPE does not: 1) consider complaints that fall outside its jurisdiction/authority as expressed in the Standards and Key Elements and the academic integrity statements. When appropriate, complainants will be referred to other organizations to pursue their concern(s); 2) intervene on behalf of individuals or act as a court of appeal for faculty members or students in matters of admission, retention, appointment, promotion, course grading, or dismissal unless such practices or conditions indicate that the program may not be in compliance with the Standards and Key Elements; 3) promise that it will force programs into specific resolutions requested by the complainant, but may instead require the program to comply with Standards and Key Elements. Such is in the sole discretion of ACPE. All complaints must be filled using the link found here: ([https://acpe-accredit.formstack.com/forms/complaint\\_form](https://acpe-accredit.formstack.com/forms/complaint_form))

Complaints that are submitted anonymously will not be considered by ACPE. Depending on the circumstances and severity of the complaint, it may or may not be forwarded to the program for information purposes only. The decision to forward a complaint is made by the ACPE Director of Program Accreditation or the ACPE Executive Director. During the eight-year cycle between each program's self-studies, a record of anonymous complaints received for the program will be maintained by ACPE.

ACPE will proceed expeditiously in the investigation and resolution of complaints in a manner that is fair and equitable to all parties. The ACPE Executive Director, or his/her designate, shall have the authority to: (i) review the complaint in order to determine relevance to the standards, policies, or procedures; (ii) dismiss a complaint if it is determined that such complaint has no merit or is outside the scope of ACPE accreditation activities; (iii) forward relevant complaints to the dean of the program for a response to ACPE; and (iv) conduct any further investigation deemed necessary to promptly determine the facts surrounding the issue and the validity of the complaint. ACPE shall diligently investigate and resolve complaints in a timely manner, taking into consideration all parties involved the severity and complexity of the allegations, and pursuant to any legal obligations.

If, on the basis of such investigation, after notice to the program and opportunity for response from the program, the Executive Director finds a complaint to be extremely serious in nature, charging egregious conduct that may warrant adverse action by ACPE, or involve an interpretation that the Executive Director believes should be made by the Board, the complaint will be submitted to the Board for consideration at the next regular meeting. Where the Board finds that a program has violated the standards, engaged in unethical conduct, or that its integrity has been seriously undermined, the Board will either: (A) request that the program show cause, within a stated time period, as to why adverse action should not be taken; or (B) in extreme cases, immediately discontinue its relationship with the program by denying or withdrawing the offending program's accreditation status.

A record of complaints regarding a specific college or school is maintained in perpetuity at the ACPE office for future consideration. The complaint file will be reviewed as a component of the on-site evaluation process. Site team leaders will review all complaints received against a program since the time of the program's last comprehensive on-site evaluation with all members of the team.

Information provided to the evaluation team will include the following for any complaint: (1) the nature of each complaint; (2) the process used to review the complaint; and (3) the status of the complaint. The evaluation team's review of complaints will be documented in the Evaluation Team Report. Any complaints received since the prior on-site evaluation and the related investigative materials will be provided to the ACPE Board of Directors as a component of the review process. The Board will also conduct a general review of all open complaints at each meeting, including those against a program not being considered for initial or continued pre-accreditation or accreditation at a given meeting.

Where a complainant has threatened or filed legal action in a court of law or before a governmental agency against a program or institution housing said program, ACPE reserves the right to hold such complaint in abeyance until after a final judgment by a court of law or governmental agency or finalization of any appeal of such judgment.

## GENERAL INFORMATION

### FINANCIAL AID

#### **Tuition and Fees - School of Pharmacy 2020-2021**

Tuition	\$39,950
Consolidated Fee	\$2,000

Financial aid is available to students in the form of federal student loans, Maryland state scholarships, and limited institutional assistance. Students interested in receiving financial aid must meet certain eligibility requirements including: be enrolled for at least five credits per semester (half time enrollment for Pharmacy students), be in good academic standing (see Financial Aid Academic Standards Policy on the web), and be a matriculant in a degree program. Students who do not meet these criteria may be able to apply for private student loans.

The Office of Financial Aid website, <http://ndm.edu/admissions-aid/financial-aid/contact-us> provides detailed and up to date information on the types of aid available, how to apply, policies and procedures, external scholarships for pharmacy students, deadlines, a checklist and more. It is the responsibility of all students to read and familiarize themselves with the information contained on the financial aid website. Students have access to their own financial aid data 24 hours a day on WebAdvisor.

### SCHOLARSHIPS

*Scholarship availability is dependent on funding and may vary each year. Eligibility criteria may also vary each year based on requirements of the scholarship sponsor.*

#### **Morris-Jones School of Pharmacy Scholarship for Excellence Award**

This admission scholarship is awarded to students who have excelled academically and have the potential to be an outstanding pharmacist. The award will be applied to the first and second semester's tuition. Students must maintain a 3.0 GPA at the end of the Fall semester in order to retain the scholarship for the Spring semester.

**Roskopf Family Scholarship**

All matriculated female students are eligible. Student must be female, a resident of MD, VT, or any other state (residency preference is in the list of priority). GPA of 3.0 or above is required.

**School of Pharmacy Merit Scholarship I**

This \$60,000 four-year (\$15,000 per year) admission scholarship is awarded to students who have excelled academically and who have demonstrated through their extracurricular activities the potential to be an outstanding pharmacist. Awardees must maintain a 3.0 GPA at the end of each semester in order to retain the scholarship.

**School of Pharmacy Merit Scholarship I**

This \$40,000 four-year (\$10,000 per year) admission scholarship is awarded to students who have excelled academically and who have demonstrated through their extracurricular activities the potential to be an outstanding pharmacist. Awardees must maintain a 3.0 GPA at the end of each semester in order to retain the scholarship.

**Women's College/School of Pharmacy**

This \$60,000 four-year (\$15,000 per year) admission scholarship is awarded to a Notre Dame of Maryland University undergraduate student who has been accepted into the School of Pharmacy program. Awardees must maintain a 3.0 GPA at the end of each semester to retain the scholarship.

**CVS Scholarship**

P1, P2, P3 students are eligible. Additional criteria will be provided at the opening of each application cycle.

**Walgreens Diversity & Inclusion Excellence Award**

P1, P2, P3 students are eligible. Additional criteria will be provided at the opening of each application cycle.

**Walgreens Diversity Scholarship**

P1, P2, P3 students are eligible. Additional criteria will be provided at the opening of each application cycle.

**Housing Scholarship**

P1 eligible students are awarded two-year housing scholarship for which they received free housing for the P-1 and P-2 year upon matriculation.

**Student Academic Records (FERPA)**

Academic records and transcripts are also housed in the registrar's office. Notre Dame of Maryland University has a commitment to protect the confidentiality of student records. The Family Educational Rights and Privacy Act ([FERPA](#)) provide students with certain rights with respect to their education records. These include: the right to inspect and review their records; the right to request an amendment of the student's education record they believe is inaccurate; the right to consent to disclosure of personally identifiable information contained in the

student's record (except where FERPA authorizes disclosure without consent). One exception that permits disclosure without consent is for school/ university officials with legitimate educational interests. For more detailed information on academic records (<http://ndm.edu/registrarstudent-records>)

Students have the ability to provide an approval for others (parents, spouses, etc) to have access to educational and financial records by completing an Authorization to Release Student Information form ([http://ndm.edu/sites/default/files/pdf/univ-ferpa\\_2.pdf](http://ndm.edu/sites/default/files/pdf/univ-ferpa_2.pdf))

Directory information may be released to the general public without prior written consent. Notre Dame considers the following to be directory information: name, date and place of birth, address and phone number, classification, degrees and awards received, major/concentration/minors, dates of attendance and participation in athletics/official NDMU activities. Students must send a written request to the registrar's office before the first Friday of each semester to place a hold on the release of any of this directory information. The hold is valid for one semester and must be submitted at the beginning of each subsequent semester. If a hold is placed on the release of information, that hold prohibits the release of all items of directory information to all outside persons, organizations or agencies.

### **Privacy Rights of Students**

<http://ndm.edu/registrarstudent-records>

### **File Confidentiality and Availability**

<http://ndm.edu/registrarstudent-records>

### **Additional Academic Files**

Faculty advisors have access to the academic records of their advisees. The Office of the Dean have access to the academic records of matriculated School of Pharmacy students. They also maintain a checklist of the student's progress toward degree requirements. These files are retained for the advisor's use only and are not official records or documents.

Any additional academically related files held by individual members of the faculty and/or administration are for the use of the individual holder only.

### **Release of Records**

#### Transcripts

<http://ndm.edu/registrar/transcripts>

#### **Directory Information**

<http://ndm.edu/registrarstudent-records>

## Address of Record

All correspondence from University offices is sent to the student's priority address on file in the Registrar's office. Any change to this address should be reported to the Registrar's office as soon as possible. Failure to keep this address up to date may result in delays in receiving important information. It is the student's responsibility to provide the University with correct address information.



*Pharmacy Practice Simulation Lab*

## Program

The School of Pharmacy offers the Doctor of Pharmacy degree; the entry-level degree required for practice in the U.S. Students must complete the required 72 credits of pre-requisite coursework at Notre Dame of Maryland University or another institution of higher education and a 145-150 credits of course work (4 years) within the School of Pharmacy.

The parent institution of the School of Pharmacy, Notre Dame of Maryland University, has been granted authority by the Maryland Higher Education Commission to confer the Doctor of Pharmacy degree.





## Admissions

The School will consider for admission those applicants who possess the academic and professional promise necessary to become outstanding members of the pharmacy profession. The admissions process is highly selective. All applicants must submit an application via the [Pharmacy College Application Service \(PharmCAS\)](#).

Evaluation of completed applications (PharmCAS) will begin in September 2020 and continue until all seats in the class are filled. This initial evaluation will determine which applicants are eligible for an on-campus interview; a final evaluation will determine which applicants are eligible for acceptance. Given the competitive admissions environment, multiple criteria are used to select the most qualified candidates. Grade point averages, PCAT scores, letters of evaluation, professional preparedness and motivation, personal qualities, communication skills, ability to be a team player and decision making will all be considered when reviewing an applicant's file.

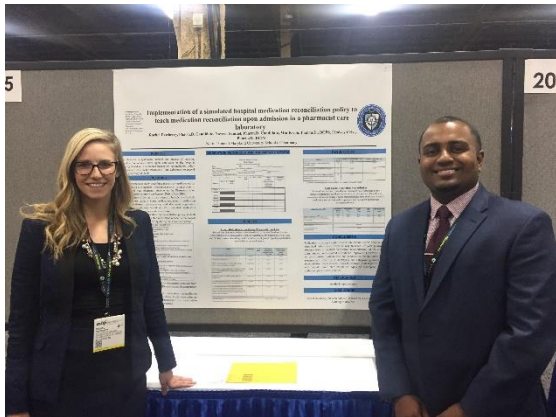
For more information, contact Larry Shattuck, director of admissions for the School of Pharmacy, at 410-532-5551 or e-mail [lshattuck@ndm.edu](mailto:lshattuck@ndm.edu)

### Requirements for Applicants Seeking Admission for Fall 2020

To be considered for admission to the School of Pharmacy, an applicant must:

1. Have completed or be in the process of completing 72 semester hours or 102 quarter hours of non-remedial, prerequisite coursework from a regionally accredited U.S. university. The student must earn a grade of C (not C minus) or better in each pre-requisite course.
2. International applicants must complete a minimum of 30 semester hours of non-remedial pre-requisite coursework from a regionally accredited college or university in the United States. Of the 30 semester hours, 15 hours must be in the sciences, six hours in non-remedial English composition, and three hours in speech/public speaking. These additional requirements are waived for applicants who completed their pre-requisite coursework at a post-secondary Canadian institution that uses English as its primary language of instruction and documentation.
3. All pre-pharmacy coursework requirements must be completed by the end of summer session I prior to matriculation to the School of Pharmacy.

4. Earn, preferably, a cumulative grade point average and science grade point average of 2.50 on a 4.00 scale. PharmCAS calculates the overall and science grade point average. Grades from all non-remedial courses completed post-high school are used to calculate the grade point average.
5. Possess a people/service orientation as demonstrated through community service or extracurricular activities.
6. Possess the proper motivation for and commitment to the pharmacy profession as demonstrated by previous work, volunteer, or other life experiences.
7. Possess the oral and written communication skills necessary to interact with patients and colleagues.
8. Complete the School of Pharmacy's on-campus interview process (by invitation only).
9. Pass the School of Pharmacy criminal background check.
10. Abide by Notre Dame of Maryland University Substance Use Disorder Policy.



*American Society of Health-System Pharmacists  
Midyear Clinical Meeting*



*American Pharmacists Association –  
Academy of Students Multicultural Night*

**Pre-Requisite Courses** (students completing coursework at other colleges or universities of higher learning.)

Course	Semester Credit Hours	Quarter Credit Hours
English	6	6
Speech/Public Speaking	3	4
Ethics ( <i>medical ethics preferred</i> )	3	4
Economics	3	4
Calculus	3	4
Statistics	3	4
General Chemistry with lab ( <i>for science majors</i> )	8	12
Organic Chemistry with lab ( <i>for science majors</i> )	8	12
General Biology with lab ( <i>for science majors</i> )	8	12
Microbiology with lab ( <i>for science majors</i> )	4	6
Human Anatomy & Physiology ( <i>for science majors</i> ) ^	8	12
Physics ( <i>for science majors – mechanics, heat, force and motion must be included in the course</i> )	3	4
Psychology/ political science/ social science	6	9
General Education* ( <i>divided among humanities, fine arts, foreign language, business, computer sciences, religious studies</i> )	6	9
<b>Total Credits</b>	72	102

^ Anatomy & Physiology (A & P) course taken at community colleges may not fulfill the School of Pharmacy's A & P pre-requisite requirement. Students taking these courses at a community college may be required to submit an Equivalency Course Request Form (<https://ndm.edu/sites/default/files/pdf/equivalencycoursereqform.pdf>). A & P course listed in the pre-requisite equivalent tables for community colleges on the Notre Dame of Maryland website are not necessarily approved to fulfill this requirement. Please contact the School Office of Admissions with any related questions.

\*Science, math, physical education, and health care courses will not satisfy the general education requirement.

**Note 1:** The Admissions Committee will pay special attention to pre-pharmacy math and science coursework that were taken more than five years ago. Science and math coursework that were taken within five years are preferred.



*National Association of Chain Drugstores  
RxImpact Program on Capitol Hill*

### **Pre-Pharmacy Curriculum to be Followed at Notre Dame of Maryland University**

*Notre Dame of Maryland University reserves the right to revise the curriculum at any time when deemed necessary and to apply such revisions to registered and accepted students and to new admissions.*

<b>Course</b>	<b>Credits</b>
ENG-101 College Writing	3
ENG Literature Course	3
COM-106 or 206 Fundamentals of Oral Communication/Speaking in Professional Settings	3
PHL-330 or PHL 339 Ethics/Medical Ethics	3
ECO-211 or 212 Macro-or-Microeconomics	3
MAT-211 or 212 Calculus I or II	4
MAT-215 Basic Statistics	3
CHEM-110 , 111 General Chemistry	8
CHM-210, 211 Organic Chemistry	8
BIO-111 Fundamentals of Biology	4
BIO-201, 202 Human Anatomy and Physiology I, II *	8
BIO-340 Microbiology	4
BIO-239 Genetics	4
PHY 101 or 102 General Physics I or II	4
Social Sciences	6
NDMU-100 First Year Seminar	3
Elective credits from religious studies, fine arts, humanities, languages, business or interdisciplinary studies, <b>excluding</b> science, mathematics, physical education or health care courses.	3
<b>Total Credits</b>	<b>74</b>

*\*Students matriculating in the Women's College in fall 2009 and thereafter cannot use credits for anatomy & physiology received from community colleges to satisfy the School of Pharmacy pre-requisite requirement. Additionally, such students are required to take 8 credits of anatomy and physiology at Notre Dame of Maryland University should they wish to apply to the School of Pharmacy.*

The following elective courses are recommended for pre-pharmacy students:

Course	Credits
COM-201 Interpersonal & Team Communication	3
COM 303 Intercultural Communication	3
COM 515 Cross-Cultural Communication	3
ENG 103 Writing Well	3
PHL-302 Philosophy of Human Nature	3
PHL -330 or PHL-339 Ethics or Medical Ethics	3
PHL-334 Business Ethics	3
POL-202 American Politics in Comparative Perspective	3
POL-217 Civic Participation and Leadership	3
POL-401 Political & Economic Globalization	3
POL-440 Global Issues	3
PSY-205 Theories of Personality	3
PSY-208 Multicultural Psychology	3
PSY-209 Social Psychology	3
PSY-233 Human Growth & Development	3
PSY 304 Adulthood and Aging	3
RST-306 Christian Bioethics	3
RST-311 World Religions	3
RST-331 Comparative Religious Ethics	3
RST-450 Judaism, Christianity and Islam	3
RST-452 Buddhism and Christianity	3
RST-347 Introduction to Spirituality	3
RST-409 Death & Dying	3

### Technical Standards for Admission & Continued Matriculation

Notre Dame of Maryland University School of Pharmacy must evaluate not only the scholastic aptitude of each and every student, but also must consider students' current ability to safely apply their knowledge and skills to effectively interact with patients and others in educational and healthcare settings. Graduates of the School of Pharmacy are eligible to become pharmacists without restrictions on their practice; therefore, the curriculum requires students to successfully complete all components of the program. Depending on the circumstances, some reasonable accommodation may be possible and made available to students with disabilities in accordance with University policy, state, and federal laws. However, a student must be able to perform in a reasonably independent manner. Upon request of the student, the University will make good faith efforts in providing reasonable accommodation as required by law.

The School of Pharmacy engages in an interactive process with applicants and students with disabilities and complies with all state and federal laws regarding reasonable accommodation. The School of Pharmacy adheres to the highest ethical and professional standards of the pharmacy profession. While the School of Pharmacy will attempt to identify ways of opening the curriculum to competitive, qualified disabled students, the School must maintain the integrity of its curriculum and preserve those elements deemed essential to educating a



pharmacist. As such, the School of Pharmacy reserves the right deny admission or dismiss any student who, upon completion of the interactive process, is unable to meet these technical standards with reasonable accommodations and/or would be deemed to pose a threat to patients and others in the educational and healthcare environment.

The following technical standards, although not exhaustive, describe the basic-non-academic qualifications required in addition to academic achievements, which the School of Pharmacy considers essential for admission and successful completion of the educational objectives of its curriculum.

A student must have abilities and skills in five areas: 1) observation; 2) communication; 3) motor; 4) intellectual, conceptual, integrative, and quantitative; and 5) behavioral and social. Technological compensation can be made for some limitation in certain of these areas, but a candidate should be able to perform in a reasonably independent manner.

1. **Observation:** The student must be able to accurately make observations at a distance and close at hand. Observation necessitates the functional use of the sense of vision and somatic sensation and is enhanced by the functional use of all of the other senses.
2. **Communication:** The student must be able to communicate effectively, efficiently and sensitively in both oral and written form and be able to perceive nonverbal communication. Students must be able to read, write, speak and comprehend English with sufficient mastery to accomplish didactic, clinical and laboratory curricular requirements in a timely, high-quality professional and accurate manner.
3. **Sensory and Motor:** Students must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of touch and vision. The student must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The student must be able to problem solve, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The student must be able to comprehend three-dimensional relationships and understand spatial relationships. Students must be able to learn in various conditions and environments including the classroom, laboratory, small groups, experiential settings and independent study.
5. **Behavioral and Social Attributes:** Students must demonstrate maturity, integrity, compassion and respect for others. The student must possess the emotional and mental health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the consistent, prompt completion of all responsibilities and the development of mature, sensitive and effective relationships. The student must have the capability to recognize and show respect for differences in culture, values and ethics among people. Students must be able to tolerate physically, mentally and emotionally taxing workloads, function effectively under stress, and must display appropriate coping responses. The student must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

An individual with a diagnosed psychiatric disorder may function as a pharmacy student as long as the condition is under sufficient control to allow accomplishment of the above goals with or without reasonable accommodation. He or she must exhibit behavior and intellectual functioning that does not differ from acceptable standards. In the event of deteriorating emotional function, it is essential that a pharmacy student be willing to acknowledge the disability and accept professional help before the condition poses danger to self, patient, and colleagues.

Candidates must provide certification that they understand the technical standards upon their acceptance. Candidates who may not meet the technical standards are encouraged to contact the Director of Admissions to discuss and identify what accommodations, if any, the School of Pharmacy would need to make in order that the candidate might be able to meet the standards.

### Professionalism

Pharmacy applicants are expected to act professionally in all of their dealings with admissions office staff and School personnel. Applicants are expected to follow instructions properly and meet deadlines and abide by the Code of Conduct on the PharmCAS website. Responsible behavior, respect for others, good judgment and cooperation are qualities valued by the pharmacy profession. Applicants should demonstrate these qualities beginning with the application process.

### Application Process

The School of Pharmacy uses a two-step application process. The applicant must submit both a completed PharmCAS application and a School supplemental application and meet both the PharmCAS application deadline and the School supplemental application deadline.

#### 1. *PharmCAS Application:*

Applicants must apply via the [PharmCAS](http://www.pharmcas.org) application ([www.pharmcas.org](http://www.pharmcas.org)) which is available usually in June of the academic year preceding the year in which they plan to matriculate. Applicants must send transcripts directly to the offices of PharmCAS.

Applicants who have taken coursework and/or earned a degree from a foreign institution must also submit to PharmCAS an evaluation of their transcripts from one of the following approved foreign transcript evaluation services:

- Education Credential Evaluators (ECE): 414-289-3400, [www.ece.org](http://www.ece.org)
- World Education Service (WES): 212-966-6311, [www.wes.org](http://www.wes.org)
- Josef Silny & Associates, Inc.: 305-273-1616, [www.jsilny.com](http://www.jsilny.com)

### Summary of Deadlines

Deadline	
PharmCAS Application	May 1, 2021
Letter of Recommendation	May 1, 2021

1. The deadline for submitting a PharmCAS application for is **May 1, 2021**. In addition to the online application and application fee, applicants are strongly encouraged to also

forward official transcripts from all colleges and universities attended to PharmCAS by May 1<sup>st</sup>. PharmCAS will not consider an application complete and will not begin the verification process until all official transcripts are received. The School will only receive complete applications from PharmCAS.

## 2. *Letters of Reference*

The applicant must request letters of reference from **three** individuals to be submitted directly to PharmCAS. The School of Pharmacy will only accept letters received directly from PharmCAS. One letter must be from a University professor who has actually taught the applicant in a science course and the other two letters may be from a pre-health advisor/committee, science or other University professor that taught the applicant, an employer who had direct supervisory responsibilities for the applicant or a health professional who knows the applicant well. Letters of reference must be received by the PharmCAS deadline date of **May 1, 2021**.

## 3. *On-Campus Interview*

Once an applicant's file is complete, the director of admissions and the admissions committee review an applicant's GPA to determine the applicant's interview eligibility. If they consider the applicant eligible for an on-campus interview, an invitation will be sent to the applicant. All interviews are scheduled on a first-call/first-scheduled basis. No interviews will be granted until an individual's application process is complete.

During the interview process, the applicant will meet with an interview panel consisting of pharmacy faculty members and pharmacists. Panel members will evaluate the applicant's professional motivation and preparedness, personal qualities, communication skills and decision-making ability by rating the applicant on a standardized evaluation scale. The interview panel members will also review each interviewee's PharmCAS application to facilitate the interview process. After reviewing the applicant's completed application and interview evaluation, the admissions committee can recommend accepting, denying, or placing the applicant on an alternate list. This recommendation is then forwarded to the Dean for final approval.

Applications to the School of Pharmacy are processed and reviewed during regular intervals in the admissions cycle until the class is filled.

**Note:** *An applicant who has been accepted for a given year must matriculate during that year. No admission deferments are allowed. If a student fails to matriculate, the student must reapply the following year if he/she wishes to be admitted to the School.*

## 4. *Reapplication Process*

Applicants who are denied admission may re-apply to the School the following academic year. It is strongly recommended that applicants seek guidance from the office of admissions for strengthening their application. If an applicant wishes to re-apply, a

new application must be submitted to PharmCAS and the application will be processed in the same manner as any other application.

#### 5. *Readmission of Matriculated Students*

Students who were dismissed due to poor academic performance or ethical and professional infractions will not be re-admitted.

A student who voluntarily withdrew or were administratively withdrawn from the School may apply for re-admission by contacting the Dean of the School of Pharmacy. Before re-applying, former students are encouraged to meet with the Dean regarding re-admission. The application and its associated documents must be submitted no later than 60 calendar days prior to the first day of classes before the semester in which readmission is sought. In addition to the application, the following must be submitted:

- A letter stating the reason the student withdrew from the School and reasons for re-turning to the School. The content of the letter must provide full explanation of the circumstances.
- A detailed plan for how the student will successfully complete the program.
- Additional supporting documents as needed and/or those requested by the School

Re-admission will only be considered for former students who separated from the School for a period of less than two years. Re-admission is discretionary and is not guaranteed.

#### **Transfer Admission from Another Pharmacy School**

The School of Pharmacy may accept transfer students from other ACPE-accredited pharmacy schools or colleges as long as these students are in good academic and disciplinary standing and have legitimate reasons for seeking a transfer. All requests for transfer information should be referred to the office of admissions so that the potential transfer applicant can be counseled prior to submitting an application. To be considered for transfer, a student must meet the School of Pharmacy's general requirements for admission. He/she must also submit the following documents by **March 15, 2021**:

1. A letter to the director of admissions indicating why he/she wishes to transfer and explaining any difficulties encountered at his/her current institution;
2. A completed School of Pharmacy transfer application;
3. Official transcripts from all schools attended – undergraduate, graduate and professional;
4. A catalog and a detailed pharmacy syllabus for any courses for which advanced standing consideration is requested (*due to differences in curricula, a student may not receive advanced standing and;*

5. A letter from the dean of the school or college of pharmacy in which the student is enrolled. The letter must indicate the student's current academic and disciplinary status and/or terms of withdrawal/dismissal;
6. One letter of recommendation from a faculty member at the current school or college of pharmacy;
7. Additional documents or letters of recommendation as determined necessary by the director of admissions or dean of the School of Pharmacy.

The office of admissions will collect and forward the student's portfolio to the office of the dean, School of Pharmacy for review. If the review is positive, the dean or her designee will invite the transferring student for an interview. If the transferring student is admitted and requests advanced standing, the dean's office will forward the student's request to the appropriate faculty. No advanced standing credit will be awarded for professional pharmacy coursework completed at a foreign college or school of pharmacy.

### **Admission Affiliation Agreements**

The School of Pharmacy offers an accelerated 3 + 4-year undergraduate - professional school option leading to the Baccalaureate in Biology or Chemistry and the Doctor of Pharmacy (Pharm.D.) degrees for students attending Notre Dame of Maryland University, Carroll College, Millersville University, University of San Grado Corazon, and the University of Hartford. In addition, a 4 + 4 agreement exists with Loyola University Maryland, St. Edward's University, St. Peter's University, and the School of Pharmacy leading to a Baccalaureate in Biology, Chemistry, Biology-Chemistry Interdisciplinary degree or other appropriate majors and a Doctor of Pharmacy degree. Please refer to each university's/college's catalog for more information.

### **Matriculation Process**

The matriculation process begins after a student receives notification of his/her acceptance. The student must return his/her signed matriculation agreement. The student must also do the following:

1. Submit deposit monies by the dates designated in his/her matriculation agreement. The entire amount is applied toward the student's first semester's tuition.
2. Submit official final transcripts from all colleges and universities attended post-high school by the deadline of two weeks (14 calendar days) prior to the first day of orientation. For students who are accepted to the School less than one month prior to the first day of classes, they will have 30 calendar days from the date of their acceptance to submit all official transcripts to the office of admissions. Any special circumstances or requests for exceptions to this policy must be made by the office of the dean of the School. If students fail to submit all official final transcripts by the stated deadline, then their acceptance or continued enrollment in the School may be jeopardized.  
***Note:* PharmCAS does not forward transcripts to the School of Pharmacy.**
3. Complete a medical file as requested by the office of the dean.



4. Submit proof of medical and disability insurance coverage. The student may select either a plan offered by a university approved outside carrier or a comparable plan offered by an outside carrier of the student's choice.
5. Non-U.S. citizens/non-permanent residents must provide documentation verifying that sufficient funds have been deposited in a U.S. bank to cover all expenses while attending School of Pharmacy at Notre Dame of Maryland University (for non-U.S. citizens/temporary residents who hold a student visa only).
6. Sign an authorization form allowing a criminal background check.
7. Sign a Notre Dame of Maryland University Drug Free Policy statement.
8. Complete a physical exam and submit the appropriate form.
9. Provide documentation that any additional coursework or service requirements stipulated by the admissions committee have been completed.
10. Submit additional documents as requested by the office of admissions.
11. Satisfy Technical Standards for the Program and sign acknowledgment for receipt of these requirements.
12. Sign authorization for use of academic information for quality improvement purposes.
13. Sign authorization for access to national board examination scores for purposes of programmatic assessment.

If a student either fails to satisfy the above matriculation requirements or omits/falsifies information required on any official admissions documents, the student automatically forfeits his/her seat at the School of Pharmacy. The student receives no further notification from School of Pharmacy relative to this forfeiture.

### **Criminal Background Check Policy**

National concerns regarding the suitability of health care providers have caused many hospitals and other institutions that provide health care services to require disclosure of an individual's criminal history. As of 2004, the Joint Commission, an organization that accredits healthcare organizations in the United States, requires criminal background checks for security purposes for all employees, staff and volunteers who supervise care, render treatment and provide services. Many state statutes also require disclosure of an individual's criminal history in order to apply for certain health care licenses/permits/certificates/registrations. Additionally, existence of a criminal history may subject an individual to denial of initial licensure, permit, registrations, revocation or suspension of existing licenses or denial of access to training sites used by the School of Pharmacy.

The primary role of the pharmacist is to provide safe and effective health care to the patients served. Patient safety must be considered in the selection and education of student pharmacists. The School also has a responsibility to maintain as safe an environment as possible for its students and the practice settings in which they receive education. Therefore, to promote safety and the highest level of integrity in the profession of pharmacy, the School of Pharmacy requires matriculating students to submit to a criminal history background check.

1. All applicants and matriculating students are to submit to a criminal background check prior to matriculation. In addition, students who remain enrolled must submit to a criminal background check annually to remain eligible for continued matriculation. Some students

may be required to undergo fingerprinting as part of the criminal background check process as part of applicable state law. The initial and annual criminal background check will be conducted by the Certiphi, Inc. or another School of Pharmacy approved vendor.

2. Additional criminal background checks may be required by health care facilities at which the student will be participating in educational activities as a component of the curriculum or state agencies relevant to the education of the student.
3. Students must disclose all criminal convictions (felony and misdemeanor) regardless of whether or not the felony conviction was subsequently reduced to a misdemeanor. Failure to disclose a conviction, or material misrepresentation of information, is deemed to be falsification of the application and will result in denial of matriculation and/or dismissal from the School and University.
4. Failure to comply with the request to undergo a criminal background check within the stipulated timeline will result in dismissal from the School or revocation of the offer of admission.
5. Students with a positive criminal background history are individually responsible for checking the licensing requirements of any state other than the state of Maryland where the student is interested in participating in clinical rotations to determine whether or not their conviction may be a barrier to participation.
6. The School of Pharmacy does not guarantee clinical rotations or any other off campus activity for students who have a history of felony or misdemeanor convictions. In such cases, the School will confidentially share information about the student's positive criminal background history with potential preceptors and practice site representatives as necessary and on a need-to-know basis and gives the preceptor and site representatives an opportunity to decide whether the student is acceptable to the site. Therefore, scheduling and completion of clinical rotations and graduation may be delayed. In some instances, it will not be possible to arrange for clinical rotations at specific sites.
7. Students are required to disclose to the dean any arrests, criminal charges or convictions against them during their entire period of enrollment as a student at the School of Pharmacy. Such arrests, criminal charges, or convictions may negatively impact a student's ability to obtain and/or complete program requirements.
8. All costs are the responsibility of the student.

### **Procedure**

1. All applicants and matriculating students will be required to undergo a criminal background check by the School of Pharmacy approved vendor, Certiphi, Inc. Newly admitted students will be given a copy of the School's Criminal Background Check Policy.
2. Certiphi, Inc. will contact the student directly to obtain the necessary information to initiate the search. Students will receive an email from [studentedition@certiphi.com](mailto:studentedition@certiphi.com).

3. Upon completion of the search, results will be released to the student who can view the information securely online. The student will have the opportunity to view the information and to resolve any disputes directly with the vendor. After 10 calendar days, the report will be automatically released to the School.
4. The office of admissions will review all criminal history reports and if a history of a felony or misdemeanor conviction exists, the director of admissions in consultation with the dean or her designee, will determine whether or not the student should be disqualified from matriculation or continued enrollment. Criminal convictions will not automatically disqualify a student from enrollment or continued enrollment. The School will consider such factors, but not limited to, the nature of the crime, the age of the individual at the time the crime was committed, length of time since the conviction, relevance of the conviction to health care. In determining the impact and relevance of the conviction, the following information, but not limited to, may be requested:
  - a. Additional detailed information about the positive criminal background check report.
  - b. Consultation with state licensing agencies about the impact of the misdemeanor or felony conviction on the student's ability to undertake/resume clinical activities.
  - c. Collection of additional data, e.g., Federal Bureau of Investigation fingerprints and report, concerning the positive criminal background check.
  - d. Court charging documents or other official records pertaining to the charge and/or conviction.
5. If a positive criminal history is known by the School prior to or after the student's matriculation, the dean or her designee will meet with the student to discuss the consequences of the positive criminal background investigation on the student's ability to enter or complete the program and graduate so that appropriate action can be taken.
6. Continuing students' annual criminal background check will be reviewed by the assistant dean for student affairs and if criminal charges or convictions are noted, the assistant dean in consultation with the dean will determine if continued enrollment as noted in 4 above.
7. Printed records concerning a student's positive criminal background check are stored in a locked confidential file in the office of the dean.

## ACADEMICS

### School of Pharmacy Curriculum

*NDMU School of Pharmacy reserves the right to revise the curriculum at any time when deemed necessary and to apply such revisions to registered and accepted students, and to new admissions.*

Year	Fall Semester - (17.5 credits)	Credits	Spring Semester - (19.5 credits)	Credits
P-1	PHRD 315: Leadership & Pharmacy Practice	2	PHRD 306: Pharmacist Care Lab II	2
	PHRD 301: Pharmaceutical Calculations	2	PHRD 309: Immunology	3
	PHRD 303: Pharmaceutics I & Lab	4	PHRD 310: Care of Diverse Populations	3
	PHRD 304: Pharmacist Care Lab I	2	PHRD 311: Pharmaceutics II & Lab	4
	PHRD 305: Biochemistry	4	PHRD 312: Pharmacy Practice Management	3
	PHRD 307: Applied Biomedical Sciences Workshop	3	PHRD 313: Pharmacotherapeutics I: Principles of Medicinal Chemistry & Pharmacology*	2
	PHRD 800: Career Development E-portfolio	0.5	PHRD 314: Pharmacotherapeutics II: Principles of Pharmacotherapeutics	2
			PHRD 800: Career Development E-portfolio	0.5
	<b>Fall Semester - (18.5-20.5 Credits)</b>	<b>Credits</b>	<b>Spring Semester- (17 credits)**</b>	<b>Credits</b>
P-2	PHRD 400: Biopharmaceutics & Clinical Pharmacokinetics	3	PHRD 405: Women's Health Issues	2

	PHRD 401: Clinical Research Design	3	PHRD 406: Pharmacist Care Lab IV	1
	PHRD 404: Pharmacist Care Lab III	1	PHRD 408: Pharmacy Law & Ethics	3
	PHRD 412: Introductory Pharmacy Practice Experiences II	3	PHRD 410: Introductory Pharmacy Practice Experiences I	3
	PHRD 416: Pharmacotherapeutics III: Self-Care & Dermatology	3	PHRD 418: Pharmacotherapeutics V: Gastrointestinal Disorders	2
	PHRD 417: Pharmacotherapeutics IV: Infectious Diseases	4	PHRD 420: Pharmacotherapeutics VI: Immunologic, Hematologic, Rheumatologic, & Neoplastic Disorders	4
	PHRD 800: Career Development E-portfolio	0.5	PHRD 421: Pharmacotherapeutics VII: Pulmonary Disorders	2
	Professional Elective***	1-3		
	<b>Fall Semester - (20-21 credits)**</b>	<b>Credits</b>	<b>Spring Semester-(16.5-18.5 credits)</b>	<b>Credits</b>
<b>P-3</b>	PHRD 410: Introductory Pharmacy Practice Experiences I	3	PHRD 506: Pharmacists Care Lab VI	1
	PHRD504: Pharmacists Care Lab V	1	PHRD 508: Complementary Medicine & Human Nutrition	3
	PHRD 505: Human Resources Management	3	PHRD 509: Evidence Based Medicine	2
	PHRD 507: Public Health	3	PHRD 512: Longitudinal Care II	1
	PHRD 510: Longitudinal Care I	1	PHRD 518: Pharmacotherapeutics XI:	4

			Central Nervous System Disorders	
	PHRD 514: Pharmacotherapeutics VIII: Cardiovascular Disorders	4	PHRD 519: Advanced Pharmacotherapeutics	4
	PHRD 515: Pharmacotherapeutics IX: Renal Disorders	2	PHRD 800: Career Development E-portfolio	0.5
	PHRD 516: Pharmacotherapeutics X: Endocrine Disorders & Women's Health	2	Professional Elective***	1-3
	Professional Elective***	1-2		
<b>P-4</b>	<b>Summer/Fall/Spring- (39 credits)****</b>	<b>Credits</b>		
	PHRD 700 Advanced Pharmacy Practice Ambulatory Care	5		
	PHRD 701 Advanced Pharmacy Practice Acute Care General Medicine	5		
	PHRD 702 Advanced Health Systems Pharmacy Practice	5		
	PHRD 703 Advanced Community Pharmacy Practice	5		
	PHRD 704 Advanced Pharmacy Practice Elective I	5		
	PHRD 705 Advanced Pharmacy Practice Elective II	5		



	PHRD 706 Advanced Pharmacy Practice Elective III	5		
	PHRD 707 Advanced Pharmacy Practice & Education Capstone	1		
	PHRD 800 Career Development E-portfolio (Fall/Spring)	0.5 each		
	PHRD 710 (Fall) PHRD 711 (Spring) NAPLEX Review I & II	1 credit each		
			<b>Total Program Credits= 145-150</b>	

*\*All Pharmacotherapeutics courses are taught sequentially within a semester.*

*\*\*Students take PHRD 410 Health System Introductory Pharmacy Practice Experience in either P-2 Spring or P-3 Fall. For the semester that the student is not taking PHRD 410, subtract 3 credits from the total stated for the semester in the chart.*

*\*\*\*Students are required to complete a minimum of 6 to 8 hours of professional electives for graduation, which must be accomplished over a minimum of three (3) courses.*

*\*\*\*All APPE are five weeks in duration except PHRD 707, 710, 711.*

## COURSE DESCRIPTIONS

### Required Courses

#### P-1 Fall

#### **PHRD 301 Pharmaceutical Calculations (2 credits)**

This course is designed to develop the knowledge and skills necessary for the application of basic mathematics and quantitative reasoning to common pharmaceutical calculations. Topics include; medical terminology, Latin abbreviations, systems of measurement, commonly used mathematical formula, medication dispensing calculations, calculation tools and techniques. *Lecture one hour per week with problem-solving workshop one hour per week.*

#### **PHRD 303 Pharmaceutics I (4 credits)**

This is the first of a two-semester course sequence designed to teach students the basic principles and application of physio-chemical principles necessary for the design, development and preparation of pharmaceutical dosage forms. Students will develop the basic skills and techniques necessary for the compounding of pharmaceutical delivery systems, the appropriate evaluation, documentation, and labeling of prescriptions and the mathematical calculations essential to compounding.

*Lecture three hours per week, laboratory three hours per week. Co-requisite: PHRD 301 Pharmaceutical Calculations*

**PHRD 304 Pharmacist Care Lab I (2 credits)**

This is the first of a six-semester sequence designed to integrate material from the curriculum and introduce selected practice related topics. The goal is for students to develop the ability to apply information as well as practice skills that are taught throughout the curriculum. Emphasis is placed on the use of active learning strategies, case studies, role-plays, and presentations in order to engage students in the learning process. Students are expected to synthesize information at increasing levels of complexity as they progress through the course sequence. Early introductory pharmacy practice experiences will also be incorporated into Pharmacist Care Lab I.

*Laboratory three hours per week.*

**PHRD 305 Biochemistry (4 credits)**

This course will provide students with a fundamental understanding of the structure, function and catabolism of biomolecules including carbohydrates, lipids, proteins, and nucleic acids. Topics covered will include; bioenergetics and metabolism, genes and chromosomes, DNA and RNA metabolism, regulation of gene expression and recombinant DNA technology.

*Lecture four hours per week.*

**PHRD 307 Applied Biomedical Sciences Workshop (3 credits)**

This course utilizes a small group, team-based learning approach to teach students the interrelationship between, and application of, basic biomedical sciences principles to disease pathology, pharmacology, pharmacogenetics, and drug therapy.

*Lecture and team-based learning three hours per week.*

**PHRD 315 Leadership & Pharmacy Practice (2 credits)**

The purpose of this course is to provide students with the foundational concepts and skills needed to practice pharmacy in the 21<sup>st</sup> Century as the role of the pharmacist expands and continues to change. In addition to one's knowledge of the scientific basis of practice, the ability to communicate and be an effective team member and leader is critical to the pharmacist's role as an educator, clinician and member of the health care team. As such, the processes of self and group assessment, team development and the use of effective communication strategies will be introduced in this course and reinforced throughout the curriculum. As a health care professional, the pharmacist must be able to take a leadership role within his/her own practice, profession and community at large. This course will provide students with the opportunity for self-exploration, exploration of leadership models, and discussion of the relevance of political advocacy to pharmacy practice.

*Lecture two hours per week.*

**PHRD 800 Career Development E-portfolio (0.5 credit)**

The purpose of this required course is to provide an electronic format where students can develop and achieve career goals through engagement and reflection on educational experiences, ultimately demonstrating professional growth and achievement of learning outcomes over time. Faculty advisors will guide students in the process of developing their e-portfolio as a means of cultivating student self-awareness, leadership skills, creative thinking and planning, and professionalism. Students register for this course during designated

semesters for the duration of the program and must successfully complete this course during designated semesters to meet graduation requirements.

### **P-1 Spring**

#### **PHRD 306 Pharmacist Care Lab II (2 credits)**

This is the second of a six-semester sequence designed to integrate material from the curriculum and introduce selected practice related topics. The goal is for students to develop the ability to apply information as well as practice skills that are taught throughout the curriculum. Emphasis is placed on the use of active learning strategies, case studies, role-plays, and presentations in order to engage students in the learning process. Students are expected to synthesize information at increasing levels of complexity as they progress through the course sequence. Early introductory pharmacy practice experiences will also be incorporated into Pharmacist Care Lab II.

*Laboratory three hours per week. Pre-requisite: PHRD 304 Pharmacist Care Lab I; Co-requisite: PHRD 313 and 314 Pharmacotherapeutics I and II.*

#### **PHRD 309 Immunology (3 credits)**

This course is an introduction to the organization, function and regulation of the immune system including the basic properties of humoral and cell-mediated immune responses, antigen and antibody structure and function, effector mechanisms, complement, major histocompatibility complexes, and cytotoxic responses. The role of these basic immunology principles in immunodeficiencies, auto-immune disorders, hypersensitivity reactions, immunity issues associated with transplantation, cancer and antibody-based drug therapy will also be covered.

*Lecture three hours per week. Co-requisite: PHRD 313 & 314: Pharmacotherapeutics I and II.*

#### **PHRD 310 Care of Diverse Populations (3 credits)**

This first public health course will introduce the socioeconomic, cultural, ethnic, geographic, and other variables, which shape healthcare practice and perception. Students will become versed in common practices, myths, barriers, trends, resources, and care principles of diverse populations. An emphasis will be placed on the development of cultural competence such that students will be able to optimally work with diverse patient populations. Students will be required to participate in community-based experiences that support the course learning goals and objectives.

*Lecture three hours per week.*

#### **PHRD 311 Pharmaceutics II (4 credits)**

This is the second of a two-semester course sequence designed to teach students the basic principles and application of physio-chemical principles necessary for the design, development and preparation of pharmaceutical dosage forms. Students will develop the basic skills and techniques necessary for the compounding of pharmaceutical delivery systems, the appropriate evaluation, documentation, and labeling of prescriptions and the mathematical calculations essential to compounding. This course will build on concepts introduced in Pharmaceutics I.

*Lecture three hours per week, laboratory three hours per week. Pre-requisite: PHRD 303 Pharmaceutics I*

**PHRD 312 Pharmacy Practice Management (3 credits)**

This course provides students with an understanding of financial and operations management as it relates to pharmacy practices in community, hospital and other practice settings. Topics such as inventory control, pricing, marketing, business plan development for new services, and management of innovative changes in pharmacy practice will be included.

*Lecture three hours per week.*

**PHRD 313 Pharmacotherapeutics I – Principles of Medicinal Chemistry & Pharmacology (2 credits)**

Pharmacotherapeutics (PT) is a 5-semester, team-taught, integrated course sequence combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. It is designed to provide students with the opportunity to learn, integrate and apply concepts from the four content areas in order to provide the necessary information for pharmaceutical management of a variety of disease states. In this first of twelve modules, basic principles of pharmacology and medicinal chemistry, as they relate to disease state management, are presented and serve as foundational material for subsequent modules.

*Pre-requisites: PHRD 305 Biochemistry, PHRD 307 Applied Biomedical Sciences Workshop;*

*Co-requisites: PHRD 306: Pharmacist Care Laboratory II, PHRD 309 Immunology,*

**PHRD 314 Pharmacotherapeutics II – Principles of Pharmacotherapeutics (2 credits)**

Pharmacotherapeutics (PT) is 5-semester, team-taught, integrated course sequence combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. It is designed to provide students with the opportunity to learn, integrate and apply concepts from the four content areas in order to provide the necessary information for pharmaceutical management of a variety of disease states. In this second of twelve modules basic principles of: absorption, distribution, metabolism and excretion (ADME), homeostasis, drug interactions, drug induced diseases and clinical lab values are presented and serve as foundational material for subsequent modules. Implications and application across the life span will be incorporated.

*Pre-requisite: PHRD 313 Pharmacotherapeutics I; Co-requisites: PHRD 306: Pharmacist Care Laboratory II, PHRD 309 Immunology*

**PHRD 800 Career Development E-portfolio (0.5 credit)**

The purpose of this required course is to provide an electronic format where students can develop and achieve career goals through engagement and reflection on educational experiences, ultimately demonstrating professional growth and achievement of learning outcomes over time. Faculty advisors will guide students in the process of developing their e-portfolio as a means of cultivating student self-awareness, leadership skills, creative thinking and planning, and professionalism. Students register for this course during designated semesters for the duration of the program and must successfully complete this course during designated semesters to meet graduation requirements.

## P-2 Fall

### **PHRD 400 Biopharmaceutics & Clinical Pharmacokinetics (3 credits)**

Biopharmaceutic and basic pharmacokinetic parameters such as absorption, distribution, metabolism and elimination, the relationship between drug concentration and clinical response, impact of patient characteristics and disease states on pharmacokinetic parameters and pharmacokinetic variations across the lifespan will be discussed. Students will learn how to calculate and interpret pharmacokinetic parameters, discuss and explain pharmacokinetic principles, assess factors that affect drug disposition, design and adjust drug dosage regimens, and predict and explain the mechanism(s) involved in drug interactions.

*Lecture three hours per week. Pre-requisite: P-2 standing*

### **PHRD 401 Clinical Research Design (3 credits)**

This course will introduce the research models and biostatistics that are commonly used in clinical research. Emphasis will be placed on literature evaluation and the application of design models to hypothesis testing in clinical practice. Ethical principles of clinical research and the role of institutional review boards will also be discussed.

*Lecture three hours per week. Pre-requisite: PHRD 306: Pharmacist Care Lab II*

### **PHRD 404 Pharmacist Care Lab III (1 credit)**

This is the third of a six-semester sequence is designed to integrate material from the curriculum and introduce selected practice related topics. The goal is for students to develop the ability to apply information as well as practice skills that are taught throughout the curriculum. Emphasis is placed on the use of active learning strategies, case studies, role-plays, and presentations in order to engage students in the learning process. Students are expected to synthesize information at increasing levels of complexity as they progress through the course sequence.

*Laboratory three hours per week. Pre-requisite: PHRD 306 Pharmacist Care Lab II; Co-requisite: PHRD 416, 417: Pharmacotherapeutics III and IV.*

### **PHRD 412 Introductory Pharmacy Practice Experiences I (3 credits)**

This is the first of a four course sequence designed to introduce students to a variety of practice settings with particular emphasis on community, health system, and clinical pharmacy practice. The experiences are intended to increase in time and complexity as students progress through the curriculum. This course sequence supplements the introductory experiences that are embedded into Pharmacist Care Lab I & II and Longitudinal Care. Students will gain experiences with a variety of issues pertinent to community, health system and clinical practice. Students are placed in community pharmacies in PHRD 412. Communication skills along with the importance of an interdisciplinary approach to patient care will be emphasized throughout the sequence. In this first course, students will be complete 140 hours, full-time, in a health system.

*Pre-requisite: P-2 standing*

### **PHRD 416 Pharmacotherapeutics III – Self-Care & Dermatology (3 credits)**

Pharmacotherapeutics (PT) is a 5-semester, team-taught, integrated course sequence combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this third of twelve modules students will have the opportunity to learn,

integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of fever, eye disorders, cough, cold, allergy, gastrointestinal and dermatologic disorders. Implications and application across the life span will be incorporated. Pre-requisites: PHRD 313, 314 *Pharmacotherapeutics I and II*; Co-requisite: PHRD 404: *Pharmacist Care Lab III*

#### **PHRD 417 Pharmacotherapeutics IV – Infectious Diseases (4 credits)**

Pharmacotherapeutics (PT) is a 5-semester, team taught, integrated course sequence combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this fourth of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of fungal, bacterial and viral diseases. Implications and application across the life span will be incorporated.

Pre-requisites: P-2 standing; PHRD 313, 314 *Pharmacotherapeutics I and II*; Co-requisite: PHRD 404; *Pharmacist Care Lab III*

#### **PHRD 800 Career Development E-portfolio (0.5 credit)**

The purpose of this required course is to provide an electronic format where students can develop and achieve career goals through engagement and reflection on educational experiences, ultimately demonstrating professional growth and achievement of learning outcomes over time. Faculty advisors will guide students in the process of developing their e-portfolio as a means of cultivating student self-awareness, leadership skills, creative thinking and planning, and professionalism. Students register for this course during designated semesters for the duration of the program and must successfully complete this course during designated semesters to meet graduation requirements.

### **P-2 Spring**

#### **PHRD 405 Women’s Health Issues (2 credits)**

This course provides an overview of gender-based medicine and implications of gender-based research on the prevention, diagnosis and treatment of diseases and conditions in women. In addition, health related issues that are unique to women including psychosocial issues that occur during the course of their lifespan will be discussed. Information in this course will supplement information taught in the Pharmacotherapeutics course sequence.

*Lecture two hours per week.*

#### **PHRD 406 Pharmacist Care Lab IV (1 credit)**

This is the fourth of a six-semester sequence designed to integrate material from the curriculum and introduce selected practice related topics. The goal is for students to develop the ability to apply information as well as practice skills that are taught throughout the curriculum. Emphasis is placed on the use of active learning strategies, case studies, role-plays, and presentations in order to engage students in the learning process. Students are expected to synthesize information at increasing levels of complexity as they progress through the course sequence.

*Laboratory three hours per week. Pre-requisite: PHRD 404 *Pharmacist Care Lab III*;*

*Co-requisite: PHRD 418, 420, 421*



**PHRD 408 Pharmacy Law & Ethics (3 credits)**

This course will focus on the study of state and federal statutes, regulations and court decisions which govern the practice of pharmacy and drug distribution. Civil liability and elements of business and contract law will also be addressed. Ethical issues in pharmacy practice facing health care providers, patients and society will also be discussed. Particular emphasis will be placed on examining the integration of pharmacy law and ethics when making patient care decisions.

*Lecture three hours per week.*

**PHRD 410 Introductory Pharmacy Practice Experiences II (3 credits)**

This is the second of a four course sequence designed to introduce students to a variety of practice settings with particular emphasis on community, health system, and clinical pharmacy practice. The experiences are intended to increase in time and complexity as students progress through the curriculum. This course sequence supplements the introductory experiences that are embedded into Pharmacists Care Lab I & II and Longitudinal Care. Students will be challenged with a variety of issues pertinent to community, health system and clinical practice. Students are placed in health-systems in PHRD 410. Communication skills along with the importance of an interdisciplinary approach to patient care will be emphasized throughout the sequence. In this second course, students will be complete 140 hours, full-time, in either a health system. Students will complete this course in either P-2 spring or P-3 fall.

Pre-requisite: P-2 standing

**PHRD 418 Pharmacotherapeutics V - Gastrointestinal Disorders (2 credits)**

Pharmacotherapeutics (PT) is a 5-semester, team-taught, integrated course sequence combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this fifth of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of gastrointestinal disorders. Implications and application across the life span will be incorporated.

Pre-requisites: P-2 standing; PHRD 313, 314 Pharmacotherapeutics I and II;

Co-requisite: PHRD 406: Pharmacist Care Lab IV

**PHRD 420 Pharmacotherapeutics VI - Immunologic, Hematologic, Rheumatologic & Neoplastic Disorders (4 credits)**

Pharmacotherapeutics (PT) is a 5-semester, team-taught, integrated course sequence combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this sixth of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of immunologic, hematological, rheumatologic, and neoplastic disorders. Implications and application across the life span will be incorporated.

Pre-requisites: P-2 standing; PHRD 313, 314 Pharmacotherapeutics I and II;

Co-requisite: PHRD 406: Pharmacist Care Lab IV

**PHRD 421 Pharmacotherapeutics VII - Pulmonary Disorders (2 credits)**

Pharmacotherapeutics (PT) is a 5-semester, team-taught, integrated course sequence combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry,

and therapeutics. In this seventh of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of pulmonary disorders. Implications and application across the life span will be incorporated.

Pre-requisites: P-2 standing; PHRD 313, 314 *Pharmacotherapeutics I and II*;

Co-requisite: PHRD 406: *Pharmacist Care Lab IV*

### **P-3 Fall**

#### **PHRD 410 Introductory Pharmacy Practice Experiences II (3 credits)**

This is the second of a four course sequence designed to introduce students to a variety of practice settings with particular emphasis on community, health system, and clinical pharmacy practice. The experiences are intended to increase in time and complexity as students progress through the curriculum. This course sequence supplements the introductory experiences that are embedded into Pharmacists Care Lab I & II and Longitudinal Care. Students will be challenged with a variety of issues pertinent to community, health system and clinical practice. Students are placed in health-systems in PHRD 410. Communication skills along with the importance of an interdisciplinary approach to patient care will be emphasized throughout the sequence. In this second course, students will be complete 140 hours, full-time, in either a health system. Students will complete this course in either P-2 spring or P-3 fall.

Pre-requisite: P-2 standing

#### **PHRD 504 Pharmacist Care Lab V (1 credit)**

This is the fifth of a six-semester sequence is designed to integrate material from the curriculum and introduce selected practice related topics. The goal is for students to develop the ability to apply information as well as practice skills that are taught throughout the curriculum. Emphasis is placed on the use of active learning strategies, case studies, role-plays, and presentations in order to engage students in the learning process. Students are expected to synthesize information at increasing levels of complexity as they progress through the course sequence.

*Laboratory three hours per week. Pre-requisite:* PHRD 406 *Pharmacist Care Lab IV*;

Co-requisite: PHRD 514, 515, and 516

#### **PHRD 505 Human Resource Management (3 credits)**

This course will focus on personnel management as it relates to pharmacy practice. Topics such as performance management, effective hiring and recruitment strategies, retaining, motivating, developing and rewarding of employees will be discussed. Information in this course will provide the necessary foundation for students to develop the supervisory skills needed for practice. *Lecture three hours per week. Pre-requisite:* 312 *Pharmacy Practice Management*

#### **PHRD 507 Public Health (3 credits)**

This is the second public health course and will build on the materials content from Care of Diverse Populations and early experiential activities. This course focuses on population based health care and the role of pharmacists in public health. The impact of health care disparities, generational differences and health promotion and prevention strategies on population-based care will be discussed. Project and community based experiences will be utilized throughout the curriculum so that students can apply or further explore concepts discussed in this course.

*Lecture three hours per week. Pre-requisite:* PHRD 310 *Care of Diverse Populations*

**PHRD 510 Introductory Pharmacy Practice Experiences III--Longitudinal Care I (1 credit)**

This is the third of a four course sequence designed to introduce students to a variety of practice settings. This service-learning course is designed to provide students with opportunities to deliver pharmaceutical care to an ambulatory patient population on a continuing basis and to develop an understanding of patient-specific and social issues surrounding an individual's ability to be adherent with health-related instructions. Additionally, this course will provide students with a "caring" foundational experience as part of the professionalization process that inculcates the values and ethics of treating people as both humans and individuals. Students will be assigned to a resident in the community for the duration of the semester. Each student will make arrangements to visit his/her assigned resident on a regular basis for at least one hour and will be required to attend weekly or bi-weekly on-campus discussion groups. Students are required to write reflections of their resident experiences and document resident interactions through SOAP notes. This course will not only provide students with an opportunity to apply didactic knowledge to real life residents, but will also meet the needs of individuals within the community. Interprofessional experiences are also incorporated into the course. Pre-requisites: P-3 standing, PHRD 313, 314: *Pharmacotherapeutics I & II.*

**PHRD 514 Pharmacotherapeutics VIII - Cardiovascular Disorders (4 credits)**

Pharmacotherapeutics (PT) is a 5-semester, team-taught, integrated course sequence combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this eighth of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of cardiovascular disorders. Implications and application across the life span will be incorporated.

Pre-requisites: P-2 standing; PHRD 313, 314 *Pharmacotherapeutics I & II;*

Co-requisite: PHRD 504: *Pharmacist Care Lab V*

**PHRD 515 Pharmacotherapeutics IX - Renal Disorders (2 credits)**

Pharmacotherapeutics (PT) is a 5-semester, team-taught, integrated course sequence combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this ninth of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of renal disorders. Implications and application across the life span will be incorporated.

Pre-requisites: P-2 standing; PHRD 313, 314 *Pharmacotherapeutics I & II;*

Co-requisite: PHRD 504: *Pharmacist Care Lab V*

**PHRD 516 Pharmacotherapeutics X - Endocrine Disorders (2 credits)**

Pharmacotherapeutics (PT) is a 5-semester, team-taught, integrated course sequence combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this tenth of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of endocrine disorders. Implications and application across the life span will be incorporated.

Pre-requisites: P-2 standing; PHRD 313, 314 *Pharmacotherapeutics I and II;*

Co-requisite: PHRD 504: *Pharmacist Care Lab V*

### P-3 Spring

#### **PHRD 506 Pharmacist Care Lab VI (1 credit)**

This is the sixth of a six-semester sequence is designed to integrate material from the curriculum and introduce selected practice related topics. The goal is for students to develop the ability to apply information as well as practice skills that are taught throughout the curriculum. Emphasis is placed on the use of active learning strategies, case studies, role-plays, and presentations in order to engage students in the learning process. Students are expected to synthesize information at increasing levels of complexity as they progress through the course sequence.

*Laboratory three hours per week. Pre-requisite: PHRD 504 Pharmacist Care Lab V;  
Co-requisite: PHRD 518, 519*

#### **PHRD 508 Complementary Medicine & Nutrition (3 credits)**

This course is designed to introduce students to complementary forms of medicine such as herbal therapy, homeopathy, chiropractic, acupuncture/acupressure, body massage, ayurvedic, and shamanic practices. Emphasis is placed on the student's ability to retrieve and evaluate these forms of complementary medicine with the intent of providing appropriate patient recommendations. This course will also provide students with an overview of nutritional concepts and use of parenteral and enteral nutrition.

*Lecture three hours per week. Pre-requisite: PHRD 401 Clinical Research Design;  
Co-requisite: PHRD 509 Evidence Based Practice*

#### **PHRD 509 Evidence Based Practice (2 credits)**

This course is designed to teach students how to identify, analyze and apply current evidence to clinical practice. Through case examples and drug information questions, students will find, analyze, and apply evidence to solve medication-related problems. This course will build upon principles discussed in Clinical Research Design. Application and clinical use of biostatistics will be emphasized.

*Lecture two hours per week. Pre-requisite: PHRD 401 Clinical Research Design; P3 Standing;  
Co-requisite: PHRD 508 Complementary Medicine & Nutrition*

#### **PHRD 512 Introductory Pharmacy Practice Experiences IV-Longitudinal Care II (1 credit)**

This is the fourth of a four course sequence is designed to introduce students to a variety of practice settings. This service-learning course is designed to provide students with opportunities to deliver pharmaceutical care to an ambulatory patient population on a continuing basis and to develop an understanding of patient-specific and social issues surrounding an individual's ability to be adherent with health-related instructions. Additionally, this course will provide students with a "caring" foundational experience as part of the professionalization process that inculcates the values and ethics of treating people as both humans and individuals. Students will be assigned to a resident in the community for the duration of the semester. Each student will make arrangements to visit his/her assigned resident on a regular basis for at least one hour and will be required to attend weekly or bi-weekly on-campus discussion groups. Students are required to write reflections of their resident experiences and document resident interactions through SOAP notes. This course will not only provide students with an opportunity to apply didactic knowledge to real life

residents, but will also meet the needs of individuals within the community. Interprofessional experiences are also incorporated into the course.

*Pre-requisites: P-3 standing, PHRD 313, 314 Pharmacotherapeutics I & II*

### **PHRD 518 Pharmacotherapeutics XI – Central Nervous System Disorders (4 credits)**

Pharmacotherapeutics (PT) is a 5-semester, team-taught, integrated course sequence combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this eleventh of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of central nervous system disorders. Implications and application across the life span will be incorporated.

*Pre-requisites: P-2 standing; PHRD 313, 314 Pharmacotherapeutics I & II Pharmacotherapeutics I and II; Co-requisite: PHRD 506: Pharmacist Care Lab VI*

### **PHRD 519 Advanced Pharmacotherapeutics (4 credits)**

Pharmacotherapeutics (PT) is a 5-semester, team taught, integrated course sequence combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. It is designed to provide students with the opportunity to learn, integrate and apply concepts from the four content areas in order to provide the necessary information for pharmacotherapy management of a variety of disease states. In this course, students will master the necessary skills and knowledge for the pharmacotherapy management of complex patients with multiple disease states.

*Pre-requisites: P-3 standing; Pharmacotherapeutics modules I-VII*

### **PHRD 800 Career Development E-portfolio (0.5 credit)**

The purpose of this required course is to provide an electronic format where students can develop and achieve career goals through engagement and reflection on educational experiences, ultimately demonstrating professional growth and achievement of learning outcomes over time. Faculty advisors will guide students in the process of developing their e-portfolio as a means of cultivating student self-awareness, leadership skills, creative thinking and planning, and professionalism. Students register for this course during designated semesters for the duration of the program and must successfully complete this course during designated semesters to meet graduation requirements.

## **P-4 Summer, Fall & Spring**

### **Advanced Pharmacy Practice Experiences (APPE)**

*Students must successfully complete all didactic coursework and IPPE prior to participation in APPE. Duration of each APPE is five weeks except for PHRD 707.*

### **PHRD 700 Ambulatory Care (5 credits)**

This rotation is a structured, full-time, 5-week patient care experience in ambulatory care. It is designed to provide the student with the opportunity to develop and refine the skills necessary to deliver pharmaceutical care, with an emphasis on rational drug therapy and outcomes, to an ambulatory care patient population. Students will have the opportunity to apply their didactic knowledge to various therapeutic issues and disease states encountered in clinical practice. Emphasis will be placed on problem-solving, critical thinking, and basic clinical skills such as



patient counseling, obtaining medication histories, drug information retrieval and evaluation, and drug therapy monitoring. Interaction and communication with other health care professionals for the promotion of optimal drug therapy are stressed to help the student develop a sound professional approach to the practice of pharmacy. In addition, students are encouraged to broaden their existing competencies and incorporate their professional and personal goals into this rotation.

*Pre-requisites: completion of all P-1-P3 coursework*

#### **PHRD 701 Acute Care General Medicine (5 credits)**

This rotation is a structured, full-time 5-week patient care experience in adult internal medicine in an institutional acute care setting. It is designed to provide the student with the opportunity to develop and refine the skills necessary to deliver pharmaceutical care, with an emphasis on rational drug therapy and patient outcomes, to an inpatient population. This will be accomplished by participation in the daily activities of work rounds with the internal medicine team and through consultation with other health care providers involved in the care of patients. Students will have the opportunity to apply their didactic knowledge to various therapeutic issues and disease states encountered in clinical practice. Interaction and communication with other health care professionals for the promotion of optimal drug therapy are stressed to help the student develop a sound professional approach to the practice of pharmacy. In addition, students are encouraged to broaden their existing competencies and incorporate their professional and personal goals into this rotation.

*Pre-requisites: completion of all P-1-P3 coursework*

#### **PHRD 702 Advanced Health Systems Pharmacy Practice (5 credits)**

This rotation is a structured, full-time, 5 -week pharmacy practice experience in health-system pharmacy. It is designed to provide the student with the opportunity to develop understanding and competence within all aspects of health-system pharmacy. The students will accomplish this through participation in a hospital pharmacy department which provides a variety of services that may include, but not limited to, medication reconciliation, therapeutic pathways, antibiotic surveillance, patient counseling, pharmacokinetic monitoring, parenteral nutrition consults, and interdisciplinary educational sessions. The student will also gain experience in managing the procurement, ordering, dispensing, monitoring, and administration of medication products. Students will also have the opportunity to learn administrative skills through activities such as management of technical staff and supportive personnel, compliance with relevant laws and standards, financial analysis, and health-system policy and procedures. In addition, students are encouraged to broaden their existing competencies and incorporate their professional and personal goals into this rotation.

*Pre-requisites: completion of all P-1-P3 coursework*

#### **PHRD 703 Advanced Community Pharmacy Practice (5 credits)**

This rotation is a structured, full-time, 5-week patient care experience in community practice. It is designed to provide the student with the opportunity to develop and refine the skills necessary to deliver pharmaceutical care, with an emphasis on rational drug therapy and outcomes. Students will have the opportunity to apply their didactic knowledge to various therapeutic issues and disease states encountered in clinical practice. Emphasis will be placed on problem-solving, critical thinking, patient counseling, application of clinical skills, and providing medication therapy management services to patients whenever possible.



Opportunities for further development in the use of OTC, alternative therapies, and home diagnostic tests and monitoring systems and durable medical equipment will be provided. Issues related to reimbursement by third parties will be discussed. Skill development in the dispensing process, extemporaneous compounding (depending on the site) is an additional facet of the rotation. In addition, students are encouraged to broaden their existing competencies and incorporate their professional and personal goals into this rotation.

Pre-requisites: completion of all P-1-P3 coursework

**PHRD 704, 705, 706 APPE Elective (5 credits each)**

Each elective advanced pharmacy practice experience (APPE) site will provide opportunities for students to develop the advanced pharmacy practice experience program outcomes in areas such as, but not limited to, community, health-system, clinical, industry, and administrative pharmacy practice. These experiences will further develop a student's knowledge and skills in the areas of their practice choice. Interaction with other health care professionals, professionalism, and strong communication skills are strongly emphasized. Students are encouraged to broaden their existing competencies and incorporate their professional and personal goals into these rotations.

Pre-requisites: completion of all P-1-P3 coursework

**PHRD 707 Advanced Pharmacy Practice & Education Capstone (1 credit)**

This one-week capstone experience will be completed after successful completion of PHRD 700 through PHRD 706. This course will integrate campus based patient care discussions, project poster sessions and community based health promotion & prevention activities. These activities will be developed and led by students under the direct supervision of a faculty member.

Pre-requisites: PHRD 700-706

**PHRD 708 and 709 Advanced Pharmacy Practice Elective (5 credits each)**

These courses are APPE electives intended to further develop student experiential learning. Each site will provide opportunities for students to develop the advanced pharmacy practice experience program outcomes in areas such as, but not limited to, community, health-system, clinical, industry, and administrative pharmacy practice. These experiences will further develop a student's knowledge and skills in the areas of their practice choice. Interaction with other health care professionals, professionalism, and strong communication skills are strongly emphasized. Students are encouraged to broaden their existing competencies and incorporate their professional and personal goals into these rotations.

Pre-requisite: Office of Experiential Education permission required

**PHRD 710 NAPLEX Review I (1 credit)**

This course provides students with an opportunity to review major concepts and material learned throughout pharmacy school in order to be prepared to take the NAPLEX exam upon graduation and successfully pass on their first attempt. The RxPrep course materials/exams are well matched to the NAPLEX blueprint. A survey of 250 RxPrep questions revealed: 65.2% vs. 67% standard for Ensure Safe and Effective Pharmacotherapy and Health Outcomes and 34.8% vs. 33% standard for Safe and Accurate Preparation, Compounding, Dispensing, & Administration of Medications and Provision of Health Care Products.

Pre-requisite: P-4 Standing

### **PHRD 711 NAPLEX Review II (1 credit)**

This course provides students with an opportunity to review major concepts and material learned throughout pharmacy school in order to be prepared to take the NAPLEX exam upon graduation and successfully pass on their first attempt. The RxPrep course materials/exams are well matched to the NAPLEX blueprint. A survey of 250 RxPrep questions revealed: 65.2% vs. 67% standard for Ensure Safe and Effective Pharmacotherapy and Health Outcomes and 34.8% vs. 33% standard for Safe and Accurate Preparation, Compounding, Dispensing, & Administration of Medications and Provision of Health Care Products.

*Pre-requisite: P-4 Standing*

### **PHRD 800 Career Development E-portfolio (0.5 credit each semester – Fall & Spring)**

The purpose of this required course is to provide an electronic format where students can develop and achieve career goals through engagement and reflection on educational experiences, ultimately demonstrating professional growth and achievement of learning outcomes over time. Faculty advisors will guide students in the process of developing their e-portfolio as a means of cultivating student self-awareness, leadership skills, creative thinking and planning, and professionalism. Students register for this course each semester for the duration of the program and must successfully complete this course each semester to meet graduation requirements.

## **Elective Courses**

### **PHRD 599: Health Education Elective Courses for Transfer Credit**

- **Mercer University, Community Pharmacy Ownership (2 credits)**

This course is designed to provide the student with the information necessary to become a community pharmacy owner either through the establishment of a new pharmacy or the purchase of an existing pharmacy practice. The knowledge necessary for efficient and profitable management in layout and design, location analysis, evaluation of third party plans, and promotion are emphasized as well as the financial aspects of the development and implementation of innovative clinical services in the community setting.

- **University of Florida, Veterinary Pharmacy (2 credits)**

The goal of this course is to assist students in developing new skills and a knowledge base in veterinary pharmacy so they can confidently provide care for animal patients. This web-based course provides up-to-date information and training in veterinary and human labeled drugs, animal disease states, regulatory issues and public health topics. Upon completing this course, students will have obtained knowledge and skills that can positively impact educational, veterinary and economic outcomes by applying their drug knowledge resources to veterinary situations.

- **University of New Mexico, Introduction to Nuclear Pharmacy (2 credits)**

The purpose of this course is to provide an overview of nuclear pharmacy as a practice specialty. Participants will examine the basic scientific principles applicable to nuclear pharmacy and nuclear medicine; review the tasks routinely performed by a nuclear pharmacist and the regulatory requirements under which they operate; examine the contributions of the nuclear pharmacist and nuclear pharmacy to nuclear medicine professionals in the diagnosis and treatment of disease; and study the application of radioactive tracer techniques used in the diagnosis and treatment of patients.

**PHRD 600: History of Pharmacy and Drug Discovery (2 credits)**

The History of Pharmacy and Drug Discovery is an elective course designed to provide the student with a general understanding of the development of the profession of pharmacy and its interrelationship with the discovery of critical therapeutic agents. This course will consider the contributions of the ancient Mesopotamian, Egyptian, Chinese, Greek and Roman cultures to the development of Pharmacy. The student will also be exposed to events that lead to the rise of professional pharmacy in Europe during the Renaissance period. The course will focus on the development and rise of professional pharmacy within the United States from the 15<sup>th</sup> century to modern times. An important aspect of this course will be discussions concerning the development of critical therapeutic agents that revolutionized the treatment of disease and how these discoveries affected the pharmacy profession. Aspects of the scientific process and how it has contributed to these discoveries will also be discussed.

**PHRD 602: Independent Research Elective I (1 credit)**

This course will provide students with an opportunity to develop an appreciation of the scientific method through active participation in a research project. The focus of these discussions will be in the area of pharmaceutical sciences or clinical research, depending upon the expertise of the faculty member. The research project and activities will be decided upon jointly by the faculty member and the student.

**PHRD 603: Introduction to Medical Spanish (3 credits)**

Medical Spanish is a course designed to provide students, without prior knowledge of Spanish, functional Spanish language skills that can be used in the pharmacy setting. Emphasis will be placed on developing language skills that facilitate successful patient-pharmacist interactions such as, basic pharmacy terminology regarding the dosage and administration of medications, gathering patient health information, expressing privacy issues and assisting patients with nonprescription needs. Cross-cultural issues and their impact on patient counseling will be discussed.

**PHRD 604: Independent Research Elective II (1 credit)**

This course will provide students with an opportunity to develop an appreciation of the scientific method through active participation in a research project. The focus of these discussions will be in the area of pharmaceutical sciences or clinical research, depending upon the expertise of the faculty member. The research project and activities will be decided upon jointly by the faculty member and the student

**PHRD 606: Independent Research Elective III (1 credit)**

This course will provide students with an opportunity to develop an appreciation of the scientific method through active participation in a research project. The focus of these discussions will be in the area of pharmaceutical sciences or clinical research, depending upon the expertise of the faculty member. The research project and activities will be decided upon jointly by the faculty member and the student.

**PHRD 608: Essentials of Formal Presentations** (1 credit)

Poster, podium, and round table presentations are several methods for research dissemination that are used by many health professionals. Guiding principles for the effective development of these presentations will be discussed. Students will develop each of these presentations and be evaluated based on criteria that is generally used at national pharmacy meetings. In addition, students will develop one poster and submit it for presentation at a local, state or national professional organization conference.

**PHRD 609: Tropical Parasitic Diseases** (2 credits)

This course is an overview of the etiology, epidemiology, and medications used against the most common tropical parasitic infections, according to guidelines from the Centers for Disease Control and Prevention (CDC) and World Health Organization (W.H.O.). The course will review the historical developments in medication therapy and the mechanisms of action of those agents used to treat such diseases. The course provides an opportunity for students to understand the global burden of tropical diseases, and the need for awareness by the American pharmacist of their existence and general signs and symptoms. It will explore the research and development of new medications to treat tropical diseases and the concept of neglected diseases.

Pre-requisite: P-2 standing

**PHRD 610: Pharmaceutical Sciences Research I** (2 credits)

The Pharmaceutical Sciences Research elective is designed to provide students with the opportunity to engage in and learn about the process of scientific investigation. Students will work one-on-one with an investigator on a specific research project, providing them with the opportunity to read, evaluate and discuss primary literature pertinent to a specific research project, learn basic laboratory skills and protocols directed at addressing a specific research hypothesis/question and demonstrate their knowledge of background information about their project, data collected (if applicable) and the analysis of that data in both a written and oral format.

**PHRD 611: Introduction to Regulatory Affairs** (3 credits)

This course provides an overview of the U.S. Food and Drug Administration regulatory pathways for drug, biologics, and medical devices. Good laboratory, clinical, and manufacturing practices is defined in the course. Additionally, it provides an overview of other product regulations such as cosmetics, veterinary, and food products.

**PHRD 612: Pharmaceutical Sciences Research II** (2 credits)

The Pharmaceutical Sciences Research elective is designed to provide students with the opportunity to engage in and learn about the process of scientific investigation. Students will work one-on-one with an investigator on a specific research project, providing them with the opportunity to read, evaluate and discuss primary literature pertinent to a specific research project, learn basic laboratory skills and protocols directed at addressing a specific research hypothesis/question and demonstrate their knowledge of background information about their project, data collected (if applicable) and the analysis of that data in both a written and oral format.

**PHRD 613: Advanced Interprofessional Education I (2 credits)**

This course will provide pharmacy, nursing, and medical students an overview of a multitude of health care professions while teaching them to perform as a team. Seminar topics include a comparison of the similarities and differences in nursing, pharmacy and medical education, as well as the importance of interprofessional collaboration. Students will learn about the distinct roles of nurses, pharmacists, doctors, and other professional members of the health care team. Students will learn to appreciate how these roles contribute to delivery of care through a variety of learning modalities, including discussions, role play, and case studies within the classroom. Nursing, pharmacy, and medical students will be required to visit a patient in the community as a member of an interprofessional team. As a final project for this course, students will be required to conduct a health fair at a local agency within the community based upon a needs assessment that will be performed during the semester.

*Pre-requisite: P-3 Standing*

**PHRD 614: Pharmaceutical Sciences Research III (2 credits)**

The Pharmaceutical Sciences Research elective is designed to provide students with the opportunity to engage in and learn about the process of scientific investigation. Students will work one-on-one with an investigator on a specific research project, providing them with the opportunity to read, evaluate and discuss primary literature pertinent to a specific research project, learn basic laboratory skills and protocols directed at addressing a specific research hypothesis/question and demonstrate their knowledge of background information about their project, data collected (if applicable) and the analysis of that data in both a written and oral format.

**PHRD 615: Advanced Medical Spanish (3 credits)**

This course is designed to provide intermediate to advanced professional Spanish communication skills for the pharmacist. As a continuation of the introductory course it will provide students with more in depth study of Spanish grammar, while adding more vocabulary related to various health-related themes.

**PHRD 616: Strategies for Academic Success (2 credits)**

This course is a skills-based program for pharmacy students that incorporate instruction in foundational strategies for improving study skills, time management, and test performance.

*Pre-requisite: Office of the Dean Permission required*

**PHRD 617: Issues in Health Systems Pharmacy (2 credits)**

This course will familiarize students with a major specialty within pharmacy--health-system pharmacy. The course will review its composition and those elements that are similar to or dissimilar to other pharmacy practice specialties. Students will learn about the background and substance of the issues that surround health-system pharmacy and conventional or unconventional approaches to improve, mitigate, or resolve them. Areas covered will include the organization of institutional and departmental entities, organizational culture, medication use safety, communications, drug distribution, ambulatory care, clinical practice, automation/technology, leadership/management, and quality of services, all within the framework of institutional practice. Didactic and workshop/case study experiences; site visits to explore systems, technology, and medication/patient safety initiatives.



**PHRD 618: Advanced Interprofessional Education II (2 credits)**

This is the second of two courses in the interprofessional education series. This course will provide additional opportunities for pharmacy, nursing, and medical students to work collaboratively as a healthcare team. Students will continue to learn about the distinct roles of nurses, pharmacists, doctors and other professional members of the health care team through discussions, simulation scenarios, case studies, and direct patient care.

Pre-requisite: PHRD 613

**PHRD 620: Topics in Drugs of Abuse (2 credits)**

This course will explore the science behind drug abuse and addiction, as well as other areas involved in the neurobiology of addiction. It will explore the behavioral and neurobiological mechanism of action for the major classes of drugs of abuse, including: opiates, sedative - hypnotics (alcohol, barbiturates, chloral hydrate), anxiolytics (benzodiazepines), psychostimulants (amphetamine, cocaine), marijuana, nicotine and caffeine. Finally, the course will expose students to the harmful consequences of drug use, specifically focusing on its physiological, psychological, social, and economical impact.

**PHRD 622: Advanced Community Pharmacy Services (2 credits)**

This course is designed to be a sequence to PHRD 312 Pharmacy Practice Management, a general pharmacy management course. This course will concentrate specifically on advanced pharmacy services, reimbursement models, and the unique challenges of developing a service and providing patient care in a community pharmacy setting. Students will complete the American Pharmacists Association (APhA) Medication Therapy Management (MTM) Certificate Program and receive a certificate at the end of the course upon successful completion. Successful completion of the certificate program will require a direct patient care component. The course may have guest speakers and include outside class assignments, interviews, and tours of different community pharmacies as well as discussions surrounding reimbursement, practicality and feasibility of services within the workflow of the pharmacy dependent on the type of setting resources

Pre-requisite: PHRD 312 Pharmacy Practice Management

**PHRD 625: Performance Enhancing Drugs and Supplements (2 credits)**

This course is an overview of concepts involved in sport and exercise medicine. It will focus on the nutritional and pharmacological elements involved in the practice of sports at diverse levels, such as personal fitness, weight-loss, and drug use and abuse at the highly competitive Olympic and professional sports. Students will discuss the integration of sports care into their practice as pharmacists and be encouraged to be proactive in preventing drug abuse and promoting proper use of nutritional supplements. *Pre-requisite:* PHRD 413 & 414

Pre-requisite: P-2 Standing;

Co-requisite: PHRD 400 Biopharmaceutics & Clinical Pharmacokinetics

**PHRD 626: Fundamentals of Financial Management (3 credits)**

This elective course is one of six courses needed to fulfill requirements for the certificate in entrepreneurship program in the School of Pharmacy. The course will introduce students to foundational concepts in accounting and finance, while providing an opportunity to engage with financial tools useful in investment and financial decision making. Concepts of venture



capital and approaches to obtaining financial support for a new initiative, with a particular emphasis on healthcare, will be covered.

*Co-requisite: PHRD 505 Human Resources Management*

**PHRD 627: Entrepreneurship: The Lean Start-Up (3 credits)**

This course provides students with a fundamental understanding of the Lean Start-Up methodology in entrepreneurship as it relates to pharmacy practices in community, hospital and other practice settings; as well as any start-up business or service program. The course is a mandatory component to earn a certificate in the Lean Start-Up Entrepreneurship Program. It will be based on the foundational areas of identification and characteristics of entrepreneurs as described in Gerber's *The E Myth*. Comparisons between the typical business plan and the LEAN method, key factors of the healthcare landscape that influence potential workplace and health care delivery, using the LEAN Start-up for "intrapreneurship" within an organization, the customer discovery process, the Business Model Canvas concept, and evaluating a business opportunity and its feasibility or impracticality will be made. Combined with the financial foundation elective, this course will provide the necessary components in any start-up business.

**PHRD 628: Neoplastic Disorders (2 credits)** This Neoplastic Disorder Elective builds upon the PHRD 420 Pharmacotherapeutics VI - Immunologic, Hematologic, Rheumatologic & Neoplastic Disorders. Neoplastic disorders (oncology) encompass hundreds of various cancer types such that the PHRD420 is actually an introduction to neoplastic disorders covering only four of the major cancers. The PHRD 420 provides the necessary foundation for this course and introduces all students to the field of oncology. For pharmacy students intending to work in an acute care hospital setting and especially those with an interest in specializing in oncology, this elective will set a solid foundation for such a practice by covering additional major cancer types and focusing on the management of complications of cancers and chemo-biotherapy side effects. As with the PHRD 420 Pharmacotherapeutics VI, this elective course combines material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, but with a major focus on therapeutics. This elective course is designed to provide students with the opportunity to learn, integrate and apply concepts from the four content areas in order to provide the necessary information for pharmaceutical management of neoplastic disease states and the complications thereof.

*Pre-requisite: PHRD 420 Pharmacotherapeutics VI: Immunologic, Hematologic, Rheumatologic & Neoplastic Disorders.*

**PHRD 629 Introduction to Psychiatric Pharmacotherapy (2 credits)**

This elective covers select psychiatric disorders per Diagnostic and Statistical Manual of Mental Disorders (DSM-5), which are not taught in PHRD 518 Pharmacotherapeutics XII: Central Nervous System Disorders. This will include reviewing the DSM-5 diagnostic criteria, clinical presentation, prognosis, and potential treatment options (e.g. which group of medications have been studied, types of non-pharmacologic therapy). This course will provide an opportunity for students to learn about the behavioral, psychosocial, cultural, and legal factors that affect care for this patient population.

*Pre-requisite: P-2 standing*

## CO-CURRICULAR REQUIREMENTS

In order to maximize opportunities for application of concepts, skills and knowledge learned in the didactic component of the curriculum and to inculcate the values and behavior of a professional, all students are required to complete co-curricular service learning requirements in professional years one through three of the curriculum. Ideally, the activities that student pharmacists engage in will increase in complexity and/or focus on patient care as they develop their skill set and expand their knowledge base. Although the School will strive to provide opportunities to meet this requirement, students must also identify and/or create opportunities for earning co-curricular hours.

*As a requirement for graduation, each student must complete 10 co-curricular hours each semester of which seven (7) hours are derived from their participation in the longitudinal AdvoCaring project. The remaining three (3) hours are to be earned through participation in activities that are not associated with a course by which course credit is earned. Students are exempt from the three (3) hours in the P-1 Fall semester only. Activities not associated with a course must receive approval prior to student participation. Students may also be required to attend select co-curricular activities. For additional information regarding specific co-curricular requirements, please refer to the SOP website.*

## INTERPROFESSIONAL EDUCATION REQUIREMENTS

Learning to effectively engage and communicate with other health disciplines, as well as distinguishing one's professional role in the healthcare team, is important in providing comprehensive patient care. Student pharmacists learn these principles through interprofessional education activities and simulations within several courses and extra scheduled activities throughout the program. *Each student must successfully complete all interprofessional education requirements of the doctor of pharmacy program to graduate.*

## ACADEMIC POLICIES

### Grades

The following grade scale will be used in the School:

Course Grade Scale	Course Grade	Corresponding Grade Points
93 - 100	A	4.0
87 - 92	B+	3.5
80 - 86	B	3.0
75 - 79	C+	2.5
70 - 74	C	2.0
60 - 69	D*	1.0
< 59	F*	0
Pass	P*	0
	W**	0
	I***	0

*\*D this is not a grade option for any advanced pharmacy practice experiences and the Pharmacotherapeutics course sequence.*

*A "P" grade for a course is not computed in the student's grade point average, but the credits earned are counted as credits toward graduation.*

*A "F" grade for a course is included in a student's grade point average.*

*\*\*W = Withdrawal with written official permission of the faculty by the stated University deadline.*

*After the 8<sup>th</sup> week of the semester, students can only withdraw for medical reasons, supported by written documentation from a physician or other extremely serious circumstances as determined by the dean of the School of Pharmacy in consultation with the course instructor. Students who do not officially withdraw from a course and stops attending class will receive a grade of F.*

*\*\*\*I = Incomplete grade is granted only for reasons clearly beyond the student's control and under the following circumstances: a) a serious illness or emergency is preventing the student from completing the work for the course; b) the student must submit all required work to the course instructor by the instructor stipulated deadline or no later than the third week of the following semester. No extensions will be granted. Failure to submit the required work will result in an automatic F grade. The final determination of the I grade is the responsibility of the course instructor.*

### **Grade Point Average**

Multiplication of the credits for a course by the numeric value for the grade awarded gives the number of quality points earned for a course. Dividing the total number of quality points earned in courses by the total number of credits in these courses gives the grade point average. Transfer credits are not including in the calculation of the grade point average.

### **Repeating a Course**

A student must repeat any required course that s/he fails. A course may be repeated only once. Only the higher grade will be counted in the student's cumulative GPA, and only the credits for the most recent attempt for the course will be counted toward the credits needed for graduation. However, both grades will appear on the student's official transcript. The repeated course must be taken at Notre Dame.

### **Transfer Credits**

Matriculated students in the School of Pharmacy may transfer credit(s) for course(s) approved by the SOP Curriculum Committee that satisfy elective course requirements. A minimum grade of 'C' (not C minus) must be earned to receive credit at Notre Dame of Maryland University.

### **Dean's List**

Following each semester, the School recognizes students for the Dean's List who have distinguished themselves by achieving a GPA of 3.50 or better for the semester. This applies to full-time didactic coursework only. Only students currently assuming a normal academic course load are eligible for the Dean's List. Students who are on academic or disciplinary probation and/or an academic improvement contract are not eligible for the Dean's List.

## Academic Progression

A student must maintain an annual grade point average of 2.00 in the professional program to be considered in good academic standing. Grades earned for courses taken at another institution while the student is enrolled in the School of Pharmacy is not included in the calculation of the annual GPA. A student will be placed on academic probation for any one of the following reasons:

- A student earns an annual grade point average below 2.00 at the end of any semester
- A student earns a grade of F in one or more courses within an academic year.

A student may be placed on academic probation for the following reason:

- A student earns a grade of D in two or more courses within an academic year.

Academic probation represents notice that continued inadequate academic performance may result in dismissal from the School. At the completion of each academic semester, the student promotion committee will meet to review students' academic progress and performance in relation to School academic policies. Students who are placed on academic probation may be placed on an academic improvement contract in which the student must repeat all courses in which a grade of D or F was earned (courses in which a student receives a grade of C or higher cannot be repeated). In addition, students may be required to take a course to improve their strategies for academic success, which must be approved by the Office of the Dean prior to registration. This will usually result in extension of the time needed to complete the program. Students are allowed to be placed on an academic improvement contract only once and/or repeat a course(s) only once. Placement of a student on an academic improvement contract does not modify or limit the Committee's action for dismissal. Thus, a student may be dismissed for academic reasons while on an academic improvement contract. To be returned to good academic standing, while on an academic improvement contract, the student must earn an annual grade point average of 2.00 or above and complete any additional requirements as stated in their letter of probation. A re-entering student (one who is no longer on probation) who earns a grade of F in any course or D in two or more courses in an academic year or an annual grade point average of less than 2.00 may be dismissed from the School.

To achieve the status of a second year student (P-2), students must have successfully completed all requisite first year courses and earned an annual didactic GPA of 2.00. To achieve the status of a third year student (P-3), students must have successfully completed all requisite second year courses and earned an annual didactic GPA of 2.00. To achieve the status of a fourth year student (P-4), students must have successfully completed all requisite third year courses and earned an annual didactic GPA of 2.00.

## Pharmacotherapeutics Course Sequence Progression Policy

- A. Criteria for Stopping Progression in the Pharmacotherapeutics Sequence:
1. Failing more than one module during a semester.
  2. Failing 2 or more modules over a two consecutive semester time frame, even if one module is successfully remediated.

**\*\* Any student failing a Pharmacotherapeutics Module will be referred to the Student Promotion & Graduation Committee for review. Progression in other courses may be affected by a halt in PT progression based on pre-and co-requisite requirements.\*\***

B. Remediation of Pharmacotherapeutics Modules

1. PHRD 313 and 314 are pre-requisites for all other Pharmacotherapeutics modules. Students must earn a passing grade in these modules in order to progress in the Pharmacotherapeutics sequence.
2. Students who fail one Pharmacotherapeutics module may be granted, with approval of the Student Promotion & Graduation Committee, an opportunity to remediate that module with an equivalent faculty-approved course. Remediation is a process whereby a student repeats a course that is delivered in a non-standard format. Students must complete the remediated course prior to the start of the next academic year. If no appropriate equivalent course can be identified, the student will be required to repeat the failed module the next time it is offered at the SOP. The highest grade that will be awarded for any course completed through the remediation process is a grade of C.
3. In order for the student to receive credit for a Pharmacotherapeutics course through the remediation process as outlined in (1) above, the student must successfully meet the following criteria:
  - a. Students must achieve a grade of 70% or better in the approved course.
  - b. If the faculty approved course does not include appropriate instruction and assessment in pathophysiology, pharmacology, medicinal chemistry and/or therapeutics, the student may, at the discretion of the instructional team, be required to:
    - complete additional coursework outside of the approved course
    - pass separate assessments (oral or written) on the deficient material.
  - c. If a student does not meet the above criteria, they must repeat the module at the SOP, the next time it is offered in alignment with the SOP academic progression policies.
  - d. Exam and final course grades of a remediated module cannot be appealed.
4. Students may only remediate one module within a two consecutive -semester time frame. If a second module is failed during this time period, the student's progression in the Pharmacotherapeutics sequence will be stopped, and they will have to repeat the second failed module at the SOP when it is offered again.

## **Academic Progression and Standards for Pharmacy Practice Experiences**

To proceed to Pharmacy Practice Experiences, a student must have earned a passing grade in all didactic courses with an annual didactic grade point average of  $\geq 2.00$  and have P-2, P-3 or P-4 standing. Eligibility for Introductory Pharmacy Practice Experiences I and II (P-2 year) is determined by the P-1 annual didactic grade point average. Eligibility for Longitudinal Care I and II (P-3) is determined by the P-2 annual didactic grade point average and successful completion of Introductory Practice Experiences I and II. Eligibility for Advanced Pharmacy Practice Experiences (P-4) is determined by the P-3 annual didactic grade point average and successful completion of Introductory Pharmacy Practice Experiences I and II, and Longitudinal Care I and II.

Introductory Pharmacy Practice Experiences (IPPE) I & II are graded on a P/F scale. Students must earn a grade of C or better on advanced pharmacy practice experiences (APPE). If a student fails to earn a grade of C or better, the student promotion committee will require the student to re-take a rotation with additional requirements which may include, but not limited to any one or combination of, completing additional coursework to correct knowledge deficiencies, undergo a period of directed independent study to correct knowledge deficiencies or wait a defined period before repeating a rotation. The time of the re-take will be as early as possible once the student satisfies the Committee's requirements and is subject to availability of sites as determined by the office of experiential education. The retake if granted, must be repeated within 12 calendar months of the receipt of the Committee's decision by the student. Students are only allowed one retake of Introductory Pharmacy Practice Experience and one retake of Advanced Pharmacy Practice Experience. Failure to earn a grade of C or better on a repeat rotation will result in a recommendation for dismissal. Students must achieve an advanced pharmacy practice experience cumulative GPA of 2.00 or above.

## **Health Standards for Pharmacy Practice Experiences and/or Co-Curricular Activities**

All student pharmacists are required to receive an annual influenza vaccination. Prior to participation in any pharmacy practice experience or co-curricular activity, it is the responsibility of the student to provide documentation of vaccination to the Office of the Dean by the deadline indicated. Students are required to comply with all physical and immunization standards as stipulated by the Office of Experiential Education.

## **Final Course Grade and Student Promotion & Graduation Committee Actions Appeal Policy I. Appeal of Final Course Grades**

It is the right and responsibility of the faculty to determine student grades. Only upon clear and convincing evidence presented by the student will a final course grade appeal be granted. Only final course grades can be appealed. Individual assignment grades (exams, quizzes, projects etc.) should be discussed with the instructor throughout the semester.

Prior to entering a formal appeals process, a student who questions a final course grade should discuss the issue with the course instructor. If the matter is unresolved after this discussion, the student may appeal the grade to the instructor. If the instructor denies the appeal, the student can appeal to the department chair. If the matter remains unresolved, the student can appeal to



the student promotion committee. Should the course instructor be the Department chair, the appeal will go directly to the student promotion & graduation committee. A final appeal can be made to the dean if the matter remains unresolved after it has been addressed by the student promotion & graduation committee.

Grade appeals will only be granted if the student presents clear and convincing evidence of one or more of the following:

1. Procedural or clerical error in calculating the final grade.
2. Bias on the part of the instructor that had a negative impact on the student's grade.
3. The grade was not given in accordance with the provision set forth in the course syllabus or in the announced course modifications or descriptions for particular projects and assignments.

### **Final Course Grade Appeal Procedure**

1. The student must first attempt to resolve the issue with the course instructor / coordinator.
2. A student seeking a formal appeal is advised to seek guidance from the associate dean for academics and continuous quality improvement. The principle of seeking a reasonable, fair and speedy resolution prevails throughout the process.
3. All formal appeals must be submitted in writing electronically or by hard copy to the appropriate individual (instructor/coordinator, department chair, chair of the student promotion committee, Dean). It is the student's responsibility to assure the receipt of the appeal by the appropriate individuals. If the instructor/coordinator is no longer employed by the School, the student must submit the appeal to the department chair.
4. If the student formally appeals the final course grade, s/he must submit a written appeal, to include rationale/justification for the appeal, to the course instructor/course coordinator within 4 business days from the last date of final exams as provided by the registrar's office.
5. The instructor should notify the student upon receipt of the appeal, but the student is responsible for assuring receipt of the appeal. If the instructor cannot be contacted, the student should notify the department chair of his/her appeal and request assistance for contacting the instructor.
6. The instructor will e-mail a written decision to the student within 3 business days of receiving the appeal. If an instructor fails to provide a decision within 3 business days, the student should notify the department chair to intervene in obtaining the decision or furthering the appeal.
7. After receiving the instructor's decision, the student has 3 business days to appeal the final grade, in writing, to the department chair. It is the student's responsibility to provide evidence to support the appeal. The chair will investigate the appeal. The investigation will include discussing the matter with the instructor, requesting the instructor to support the accuracy and fairness of his/her grading and/or any information that is relevant to the appeal.
8. The department chair has 3 business days from the date of receiving the appeal to render a decision and provide a written decision to all parties.

9. If the chair's decision is to deny the appeal, the student has 3 business days to appeal the grade, in writing, to the Student promotion committee. The Committee will provide a written decision to all parties.
10. If the Committee's decision is to deny the appeal, the student has 3 business days to appeal, in writing, to the dean. The dean will provide a final decision to all parties within 3 business days of receiving the appeal.
11. At any step of the appeals process, the student may be asked to meet with the individual or Committee involved in the determining the resolution of the appeal or the student can request to speak with the instructor/coordinator, department chair, student promotion committee or the dean at the appropriate point in the process.

## **II. Appeal of Probation, Academic Improvement Contract Actions**

Following notification of a decision for placement on an academic improvement contract, a student may appeal, in writing, the decision within three business days to the dean. It is the responsibility of the student to assure receipt of the appeal. The dean makes the final decision on all appeals. The dean may grant an appeal only if a student can demonstrate one of the following: 1) material information not available to the Committee at the time of its initial decision; 2) procedural error; 3) bias of one or Committee members. Following receipt of the appeal, the dean will provide a decision to all parties within 3 business days.

## **III. Appeal of Academic Dismissal Actions**

Following notification of a decision for dismissal, a student may appeal, in writing, the decision within three business days to the dean. The dean may grant an appeal only if a student can demonstrate one of the following: 1) material information not available to the Committee at the time of its initial decision; 2) procedural error; 3) bias of one or Committee members. The dean makes the final decision on all appeals within the School of Pharmacy. A student that has been dismissed from the School of Pharmacy may request to remain at the University to pursue another major. Whether a student will be accepted into another University program is determined by that program director.

**Note:** *Generally, all timelines for appeals are to be adhered to. However, at the discretion of the School, timelines may be extended if necessary evidence or individuals are not available.*

## **Graduation Requirements**

To qualify for graduation, a student must have satisfied the following requirements:

1. Successfully completed a minimum of 72 semester credit hours of pre-requisite courses, as stipulated, for full admission to the School;
2. Successfully completed the program of professional and experiential coursework approved by the School of Pharmacy;
3. Achieved a cumulative didactic grade point average of 2.00 or greater for all requisite professional coursework;

4. Achieved a cumulative grade point average of 2.00 or greater for all advanced pharmacy practice experiences;
5. Achieved a passing grade for all introductory pharmacy practice experiences;
6. Repeated, upon approval, and earned a passing grade for any required professional courses for which a grade of F was issued;
7. Successfully completed, at a minimum, the last 4 didactic semesters and all pharmacy practice experiences at the School of Pharmacy;
8. Successfully complete all co-curricular and e-portfolio requirements
9. Successfully complete all interprofessional education (IPE) experience requirements approved by the School of Pharmacy
10. Been recommended for the degree by a majority vote of the Student Promotion & Graduation Committee;
11. Settled all financial accounts with the University;
12. Complete all graduation clearance requirements as instructed by the School and Office of the Registrar

### **Graduation Honors**

Graduation honors are awarded to candidates for the Doctor of Pharmacy degree who have distinguished themselves by virtue of high academic achievement while enrolled in the professional program of the School. Only grades for didactic courses taken at the School will be included for determining graduation honors. Degrees with distinction are awarded based on the level of academic achievement as follows:

<b>Didactic Course Grade Point Average</b>	<b>Graduation Honor</b>
≥ 3.90	Summa Cum Laude
3.75 - 3.89	Magna Cum Laude
3.50 - 3.74	Cum Laude

### **Graduation Awards**

*Award availability is dependent on funding and may vary each year.*

#### **Clinical & Administrative Sciences Experiential Excellence Award**

This award is presented to the student who demonstrates outstanding professionalism during the APPE year, as determined by their preceptors.

#### **Dean's Advisory Council Award**

This award is presented to a student whose service to the School and community goes above and beyond what is required in the program. The student demonstrates a willingness to take initiative and a commitment to supporting the School beyond graduation. The student has enhanced student life in the SOP, and exhibits a high degree of integrity.

#### **Excellence in Acute Care Practice Award**

This award is presented to a student who demonstrates excellence in acute care practice.

**Excellence in Pharmaceutical Sciences Award**

This award is presented to the student who achieves the highest GPA in all pharmaceutical sciences components of the curriculum.

**Excellence in Clinical Communication Award**

Sponsored by Facts & Comparisons & Lexicomp, leading brands of Wolters Kluwer Health. The recipient of this award must be in the top 25% of the graduating class and have demonstrated superior verbal and written communication skills.

**Ambulatory Care Excellence Award**

Sponsored by Eli Lilly & company in recognition of demonstrated excellence in ambulatory care practice.

**MPhA Outstanding Student Pharmacist Achievement Award**

This award recognizes a student, a resident of Maryland, who is in good standing of MPhA and have served on an MPhA Committee, demonstrated academic achievement with a minimum cumulative GPA of 3.0, demonstrated leadership in the community with the potential of having a career in community pharmacy practice.

**MSHP Student Achievement Award**

Scholarship criteria is determined by School of Pharmacy SSHP.

**Mylan Excellence in Pharmacy Award**

This award is given to the student who demonstrates high personal motivation and possesses a unique ability to communicate drug information. The student must be in the top 25% of the graduating class and intend to enter practice upon graduation.

**Pharmacist's Pharmacist Award**

This award is an optional class-sponsored award. Criteria may vary as it is determined by each sponsoring class.

**Phi Lambda Sigma Delta-Beta Chapter Graduate Leadership Award**

This award recognizes a graduating student member who has exemplified leadership qualities in support of the pharmacy profession throughout his/her time in the School of Pharmacy. The recipient must have a proven record of accomplishment of servant leadership in education, community service, professional practice and mentoring.

**Phi Lambda Sigma Graduate Leadership Award**

This award recognizes a member of the graduating class who has exemplified leadership qualities in support of the pharmacy profession throughout his/her time in the School of Pharmacy. The recipient must have a proven record of accomplishment of servant leadership in education, community service, professional practice and mentoring.

**Professionalism Award**

This award is presented to the student who demonstrates professional behavior, a commitment to the profession of pharmacy through involvement in professional organizations, a high level of service to the profession and community, pride in the profession, an understanding of the pharmacist-patient relationship, and the qualities of

honesty, ethical behavior and accountability. The student serves as a role model and has earned a cumulative GPA of at least 3.0.

**Servant Leadership Award**

The recipient of this award is presented to the student who led through service during the entire pharmacy program.

**St. Catherine Medal - Kappa Gamma Pi**

Recipient must represent the high ideals of a Catholic education and have demonstrated excellence in leadership and service to the University, School or community.

**Professionalism**

Professionalism is defined as the active demonstration of the attributes of a professional. These attributes include but are not limited to: commitment to self-improvement of skills and knowledge, pride in the profession, consciousness and trustworthiness, and building relationships with patients, caregivers, and other health care professionals. Professional socialization is the process by which an individual develops the attitudes, values and beliefs of a professional. The goal of professional socialization is to develop professionalism as described below and this process must begin at the beginning of an individual’s professional education. Therefore, as consistent with expectations of the practice environment, professional behavior and attitudes are expected for all students enrolled in the School.

Emotional intelligence (EQ) is a set of emotional and social skills that collectively establish how well we perceive and express ourselves, develop and maintain social relationships, cope with challenges, and use emotional information in an effective and meaningful way. It is proven that emotional intelligence accounts for leadership success more than cognitive intelligence. The expected professionalism attributes are linked to emotional intelligence elements below. (EQ-i 2.0)

Emotional Intelligence Elements per EQ-I 2.0	Professionalism Assessment Area
<p style="text-align: center;"><b>Self-Actualization</b></p> <p>The ability and tendency to want to grow, to stretch and to strive – to see your full potential, set meaningful goals and work toward your betterment and fulfillment.</p>	<ul style="list-style-type: none"> <li>• <b>Student is self-motivated</b> (is an active learner – seeks knowledge; asks questions, searches for information, takes responsibility for own learning)</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Student accepts constructive criticism and modifies behavior if necessary</b></li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Student demonstrates a desire to exceed expectations</b> (goes “above and beyond the call of duty”, attempts to exceed minimal standards and requirements for tasks/assignments/responsibilities)</li> </ul>

Emotional Intelligence Elements per EQ-I 2.0	Professionalism Assessment Area
<p style="text-align: center;"><b>Self-Regard</b></p> <p>The ability and the tendency for you – in light of both your positive and negative qualities – to both like and have confidence in yourself.</p>	<ul style="list-style-type: none"> <li>• <b>Student demonstrates confidence</b> (acts and communicates in a self-assured manner, yet with modesty and humility)</li> <li>• <b>Student maintains good hygiene and grooming habits</b> (refer to dress code policy)</li> </ul>
<p style="text-align: center;"><b>Independence</b></p> <p>Your ability and tendency to be self-directed in your thinking, feeling, and actions – to go at it alone when needed.</p>	<ul style="list-style-type: none"> <li>• <b>Student utilizes time efficiently</b> (allocates and utilizes appropriate amounts of time to fulfill responsibilities; utilizes others’ time wisely)</li> <li>• <b>Student is punctual</b> (arrives to class/practice setting and meetings on time, meets deadlines, etc)</li> <li>• <b>Student takes responsibilities for one’s own actions</b> (does not try to blame others for insufficient or untimely work)</li> <li>• <b>Student is reliable, dependable and follows through with responsibilities</b> (can be counted on; if task is left incomplete or problem is left unresolved, student seeks aid)</li> </ul>
<p style="text-align: center;"><b>Interpersonal Relationships</b></p> <p>Your ability and tendency to give and receive trust and compassion, and to establish and maintain satisfying personal relationships.</p>	<ul style="list-style-type: none"> <li>• <b>Student is respectful</b> (demonstrates regard for patients, peers, superiors, other personnel and property)</li> <li>• <b>Student is cooperative</b> (non-argumentative; willing and helpful)</li> <li>• <b>Student displays honesty and integrity in all interactions with patients and other health care professionals</b> (truthful and straightforward; behaves in an ethical manner)</li> </ul>
<p style="text-align: center;"><b>Empathy</b></p> <p>Your ability and willingness to take notice of and be sensitive to other people’s needs and feelings.</p>	<ul style="list-style-type: none"> <li>• <b>Student is non-judgmental</b> (demonstrates an attitude of open-mindedness towards others and situations; does not “stereotype” others or prejudge situations)</li> <li>• <b>Student is compassionate and empathetic</b> (demonstrates appreciation of others’ positions; attempts to identify with others’ perspectives; demonstrates consideration towards patients and others)</li> </ul>
<p style="text-align: center;"><b>Social Responsibility</b></p> <p>Your ability and tendency to cooperate and contribute to the welfare of a larger social system, to have and act in accordance with a social conscience and to</p>	<ul style="list-style-type: none"> <li>• <b>Social awareness and responsibility</b> (takes responsibility for adapting and providing quality patient care to diverse patient populations)</li> </ul>



Emotional Intelligence Elements per EQ-I 2.0	Professionalism Assessment Area
show concern for the greater community.	
<p><b>Impulse Control</b> The ability to resist or delay a drive or temptation to do or say something or to decide too quickly or rashly.</p>	<ul style="list-style-type: none"> <li>• <b>Student is diplomatic</b> (fair and tactful in all dealings with patients, superiors, peers, and other personnel; Avoids inappropriate comments and gestures)</li> <li>• <b>Student displays self-control</b> (thinks through thoughts before speaking; control emotional responses)</li> </ul>
<p><b>Stress Tolerance</b> Your ability and tendency to live your life effectively in the face of stress.</p>	<ul style="list-style-type: none"> <li>• <b>Student appropriately handles stress</b> (remains calm, levelheaded, composed in critical or difficult situations)</li> </ul>
<p><b>Optimism</b> Your ability and tendency to look at the brighter side of life and to maintain a positive attitude even in the face of adversity. You are hope and are enabled to see the future as a positive, inviting place.</p>	<ul style="list-style-type: none"> <li>• <b>Student leads the profession to promote safe medication use and to improve health care; Student maintains professional competence</b> (advocates for the profession; promotes life-long learning)</li> </ul>

Students who violate any part of the professionalism policy as determined by the session /course instructor will incur a **1.0-point deduction from the final course grade for each occurrence within a course**. Faculty member have the prerogative of including additional penalties. All violations of the professionalism policy that incurs a penalty will also be filed in the Office of the Dean.

In addition, any violations of behavioral standards (as stated in the School of Pharmacy Handbook) that occur while the student is matriculated in the School of Pharmacy is also a violation of the professionalism policy. Such violations can result in disciplinary action by the School of Pharmacy.

**School Dress Code for Classes, External Events Sponsored by the School, School Functions and Experiential Education**

All student pharmacists represent the School and the profession’s future practitioners. Therefore, your appearance should be that of a professional student. Professional attire is required at all times (8:00 AM – 6:00 PM or later if class ends later). Dress requirements for experiential rotations are delineated in the experiential education manual. The dress code policy is in effect even when participation is via technology. Faculty members and preceptors have the

prerogative to require students in their class, lab or rotation to meet stricter dress requirements than those stated in the dress code. The following is considered professional attire:

- a) men: slacks, collared shirt, dress shoes and socks. A suit coat or sports coat is recommended but not required. Lab coats may be required for courses; students should refer to the course syllabus. **Students will be notified when ties are required.**
- b) women: slacks, skirts, dresses, dress shoes
- c) body piercings should have limited visibility and tattoos should be covered.
- d) Color of clothing should be suitable for a work environment

Miniskirts, jeans, sneakers, low-cut dresses, tee shirts, torn clothing, baseball caps, etc. are **NOT** professional dress.

The following types of clothing are not allowed at any time:

- Hats, caps or other headgear are not to be worn indoors. Head covers that are required for religious purposes or to honor cultural tradition are permitted.
- Tank tops, tube tops, halter tops, spaghetti string or off the shoulder tops
- Clothes that are sheer, low cut, revealing or tops that do not cover to the waist; slacks, skirts or pants that expose skin below the waist
- Short shorts, miniskirts, pajama bottoms, 'jeggings'
- Skin-tight clothing
- Flip flops, thong sandals, shower shoes
- Hosiery with designs
- Neon -colored clothing or colors that are unsuitable for the work environment and inconsistent with a professional image
- Jeans of any color
- Clothing with obscene or lewd text or pictures, depictions of alcohol, drugs or other smoking materials

No policy can be all inclusive; it is expected student pharmacists will abide by the spirit of this policy. Violations of the behavioral standards of the University as well as any of the above policies is considered to be a violation of the professionalism policy and sanctions will be enforced.

## **Administrative Policies**

### **Absence Reporting Procedure**

In the event of serious illness, personal emergency, personal incapacitation, or other exceptional problem of a serious nature that causes a student to be absent from a session requiring mandatory attendance or class, a student must notify one of the following in the School of pharmacy: assistant dean for student affairs, School of Pharmacy department chair, or course coordinator. To be excused from a rotation, the student must notify his/her preceptor and the Office of experiential education. Failure to notify the Office of Experiential Education will result in an unexcused absence and policies detailed in the Experiential Education Manual will apply. Assuming that there is a legitimate reason for a student's absence, the School's Office of the

Dean will contact by e-mail or telephone the coordinators of courses in which the student will miss an examination, quiz, or graded assignment, or will send a letter to all appropriate course coordinators that confirms in writing that the student will be absent, the reason for the absence, the courses from which the student will be absent, and the date(s) of the student's absence. This will be done as soon as possible (within 24 hours) after the student has called in. It is the student's responsibility to contact the course coordinator immediately upon his/her return for instructions regarding how the missed session can be made up. If a student fails to follow this procedure, the student is held responsible for the policies stated in course syllabi regarding unexcused absences. Unexcused absences may result in course failure.

### **Absence (Excused) for Personal/Professional Reasons**

The School recognizes that a student may need to be excused from class or rotations for non-illness, nonemergency- related reasons. An Absence Request Form must be completed at least 2 weeks prior to the day the student wishes to be excused. Forms are available on the School of Pharmacy Web site. Completion of the form by the student does not imply the student is excused from classes until the faculty of the affected courses approves the request.

### **Advanced Standing**

All requests for advanced standing by transfer students (students transferring credits from another accredited school of pharmacy to NDMU SOP) are processed on a course-by course basis by the Office of the Dean. To request such consideration, a student must submit a letter of request and the request form to the Office of the Dean in which the student lists a course(s) previously taken, which might be similar in content to a professional course(s) that he/she is scheduled to take. The student must also provide an official course description(s) and a syllabus (syllabi) of the course(s) previously taken. All requests must be submitted at least 4 weeks prior to the start of the course being considered. Advanced standing will be considered for coursework taken in which a letter grade of C or better has been earned. A C- letter grade is not acceptable for advanced standing consideration. Such course grades are not used in the calculation of the GPA.

### **Accessibility, Accommodation, and Health Promotion**

The University's statement on accessibility, accommodation and health promotion is available on the website (<https://www.ndm.edu/student-life/accessibility/syllabus-accessibility-statement>). Please note for School of Pharmacy Students, the letter stating approval for accommodations must be given to the course coordinator and not the professor who is teaching a particular class session. An updated letter must be provided at the beginning of each semester to the course coordinator. Please read the information included in the above link carefully so that you fully understand your responsibility in insuring that you receive the accommodations you may need. The University also recognizes that students who are experiencing temporary medical conditions may also require accommodations. Students who are pregnant, nursing, or those with other temporary medical conditions should also contact the Office of Accessibility and Health Promotion to discuss any accommodations requests.

## **Appropriate Use of Technology in the Classroom**

The School of Pharmacy embraces appropriate technology use as a means to facilitate student learning and recognizes that it is the responsibility of faculty and preceptors to set and enforce expectations regarding the use of technology in their class, laboratory or experiential site. As a general rule, students may use computers, smart phones, and similar devices in the classroom and on pharmacy practice experiences only if they support teaching and learning activities. Other activities that distract students and prohibit them from fully participating in classroom learning and group work such as accessing social media sites, “surfing” the web, shopping, entertainment, text messaging, e-mailing, gaming and similar off-task behaviors are not permitted. In addition, all electronic devices must be in the “silent mode” and cell phones, pagers, and text messages should not be answered during class time.

Students should be aware that expectations for appropriate technology use can change based on the unique needs of specific teaching and learning experiences and that they should seek clarification from course instructors if there is any confusion. Violation of the School of Pharmacy Classroom Technology Use policy is a violation of the School of Pharmacy professionalism and honor code policies. Ensuring compliance with these policies is ultimately a shared responsibility between students, faculty members, and preceptors.

## **Attendance and Student Employment**

Upon acceptance to the School of Pharmacy, students are expected to devote their entire effort to the academic curriculum. The School actively discourages employment that will conflict with a student's ability to perform successfully while courses/rotations are in session and will not take outside employment or activities into consideration when scheduling classes, examinations, reviews, field trips, individual course, rotation or School functions. Required activities, as well as team project meetings, can be scheduled outside of class time, including weekends, and students are expected to attend these activities/meetings. Class attendance is mandatory for all students during experiential rotations. Refer to student experiential education manual for specific details regarding this policy. Instructors may include additional class attendance policies in course syllabi.

## **Audio Recording in Classrooms**

Notre Dame of Maryland University School of Pharmacy students may use audio recording devices in the classroom for educational purposes only. Students are required to notify faculty that they are audio recording at each class period through the use of their audience response card. Instructor permission is not required when an accommodation notification from Disability Services has been received by the instructor, which identifies a student that requires the use of a recording device. However, an instructor may prohibit the use of any recording device when it would inhibit free discussion and free exchange of ideas in the classroom. Recording or distribution of any type to websites (i.e., social media, file-sharing, etc.) is strictly prohibited. Use of material is restricted to NDMU School of Pharmacy students. Additional restrictions of audio recording may apply for guest speakers.

## **Classroom Food/Drink Policy**

Only drinks in closed containers are allowed in all School of Pharmacy facilities or any room in which School of Pharmacy activities are conducted. Only bottled water is allowed in laboratories. Additional stipulations may be stated in course syllabi or posted in instructional spaces. No food or drink (other than bottled water) is allowed in Knott auditorium.

## **Eligibility for Participation in Activities**

Students who are on academic or disciplinary probation or suspension from the School will have restrictions regarding participation in activities during the academic year. In order for students to be academically eligible to attend professional meetings during the academic year, serve as a class officer, student representative on the Curriculum Committee or the Continuous Quality Improvement Committee, or student organization officer, a student must have a **cumulative** professional GPA of 2.5 or greater and no courses in which a student has received a grade of F that has not been repeated. Additionally, the student must be in good disciplinary standing.

## **E-mail Communication**

All students are required to check their University e-mail account on a **daily** basis. Official, "in writing" School communications are sent to students over e-mail. Students are responsible for information that is transmitted through this electronic medium. The student School e-mail account is the only electronic mailing address recognized by the School. The School and its employees are not responsible for forwarding e-mail to students at personal e-mail accounts that are not held by the University. Students are not to send campus-wide e-mails without the prior approval of the dean or the assistant dean for student affairs.

## **Faculty Advisor Program**

School of Pharmacy assigns a faculty advisor to students in each entering class. In addition to these faculty advisors, the School of Pharmacy dean, associate dean and assistant dean as well as other faculty members and professional staff, are also available to assist students with academic advising, counseling and enrichment. Students are placed into teams upon entry into the School. Each team of students is assigned a faculty advisor who will mentor them throughout the program. School faculty advisors act as liaisons between the faculty and students. Their responsibilities include:

1. Serving as the student's advisor and academic/professional counselor;
2. Overseeing and monitoring the academic progress and professional growth of the student;
3. Assisting the student in seeking academic and personal counseling services provided by the University;
4. Serving as an advocate for the student; and
5. Counseling the student during his/her selection of a career within the pharmacy profession.

## **Licensure Requirements**

Laws in all states, including the District of Columbia and Puerto Rico, require applicants for licensure to: 1) be of good moral character; 2) be 21 years of age; 3) have graduated from an ACPE-accredited first professional degree program of a University or school of pharmacy; and 4) have passed an examination given by the board of pharmacy. All states, the District of Columbia, Puerto Rico and the Virgin Islands use the North American Pharmacy Licensure Examination (NAPLEX). All jurisdictions require candidates for licensure to have a record of practical experience or internship training acquired under the supervision and instruction of a licensed practitioner. Some states, including Maryland, accept the training completed during a formal academic program. Publications concerning the NAPLEX licensure examination and internship experience are available from NABP (<https://nabp.pharmacy/>). For further information regarding licensure, please contact the Maryland Board of Pharmacy (<https://health.maryland.gov/pharmacy/Pages/index.aspx>).

## **Transportation and Housing for Experiential Education & Off-Campus Experiences/Activities**

It is the student's responsibility to assure that he/she has appropriate arrangements for transportation to/from rotation sites throughout the curriculum. Rotations begin in the first semester of the professional program. Transportation is not provided by the School. Students are not considered an agent or an employee of the University and are not insured for any accidents or mishaps that may occur during any traveling that is done as part of the student's professional program. The School does not guarantee that all required rotations will take place in the Maryland metropolitan area and students may be required to complete rotations in other cities in Maryland or states. Transportation and housing costs are the student's responsibility.



## Tips for Avoiding Plagiarism

Students can avoid plagiarizing by carefully organizing and documenting materials gathered during the research process. Notes attached to these materials, whether in the form of informal notes, photocopied articles, or printouts of electronic sources, should carefully identify the origin of the information. Such attention to detail at every stage of the process will ensure an accurate bibliography that documents all the outside sources consulted and used. Students should follow these general principles when incorporating the ideas and words of others into their writing:

1. The exact language of another person (whether a single distinctive word, phrase, sentence, or paragraph) must be identified as a direct quotation and must be provided with a specific acknowledgment of the source of the quoted matter.
2. Paraphrases and summaries of the language and ideas of another person must be clearly restated in the author's own words, not those of the original source, and must be provided with a specific acknowledgment of the source of the paraphrased or summarized matter.
3. All visual media, including graphs, tables, illustrations, raw data, audio and digital material, are covered by the notion of intellectual property and, like print sources, must be provided with a specific acknowledgment of the source.
4. Sources must be acknowledged using the systematic documentation method required by the instructor for specific assignments and courses.
5. As a general rule, when in doubt, provide acknowledgment for all borrowed material.
6. Guidelines for referencing style in pharmacy academic work can be found on the Loyola Notre Dame Library Web site.
7. Personal communication such as interviews etc. must be referenced.

## Faculty and Administration

Payal Agarwal, Ph.D. *associate professor, pharmaceutical sciences (appointed 2009)* B.S. (pharmacy), M.S. (pharmaceutics) Dr. H. S. Gour University, Sagar, India Ph.D. (industrial pharmacy) St. John's University, NY

Jennifer Bailey, Pharm.D., BCPS, *assistant professor, clinical and administrative sciences (appointed 2012)* B.S. (biology) Stevenson University, MD, Pharm.D., University of Maryland at Baltimore, MD

Régine Béliard, Pharm.D., BCACP, TTS, *assistant professor, clinical and administrative sciences (appointed 2013)* Pharm.D., University of Pittsburgh, PA

Jazmin Black, Pharm.D., *assistant professor, clinical and administrative sciences (appointed 2017)* Pharm.D., Rutgers University, NJ

James Culhane, Ph.D., *professor and assistant dean for student academic success (appointed 2008)* B.A. (chemistry) Washington & Jefferson University; Ph.D. (pharmacology and toxicology) West Virginia University, WV

Nicole Culhane, Pharm.D., BCPS, FCCP, *professor, clinical and administrative sciences; assistant dean for experiential education (appointed 2008)* B.S. (pharmacy) Rutgers University, NJ; Pharm.D., Medical University of South Carolina, SC

Asish Dutta, Ph.D., *associate professor & chair, pharmaceutical sciences (appointed 2009)* B.S. (pharmacy), Jadavpur University, Calcutta, India; Ph.D., University of Mississippi, MS

Heather Folz, Pharm.D., *assistant professor, clinical and administrative sciences (appointed 2016)* Pharm.D., Campbell University, NC

Bethany Ford, Pharm.D., BCPS, *assistant professor, clinical and administrative sciences (appointed 2017)* B.S. (biological sciences), University of Pittsburgh; Pharm.D., University of Maryland at Baltimore, MD

Andrea Gauld, Pharm.D., BCACP, BCPS, *associate professor, clinical and administrative sciences (appointed 2011)* Pharm.D., Mercer University, GA

Lauren Haggerty, Pharm.D., *assistant professor, clinical and administrative sciences (appointed 2018)* B.S. (biochemistry), University of Maryland at College Park, MD, Pharm.D., University of Maryland Baltimore, MD

Amie Hall, Pharm.D., *assistant professor, clinical and administrative sciences (appointed 2019)* AS, Alpena Community College, MI, Pharm.D., Ferris State University, MI.

Sarah (Katie) Holman, Pharm.D., BCPS, *assistant professor, clinical and administrative sciences (appointed 2015)* B.S. (physiology & neurobiology), University of Maryland at College Park; Pharm.D., University of Maryland at Baltimore, MD

Anne Lin, Pharm.D., FNAP, *dean and professor, clinical and administrative sciences (appointed 2008)*  
B.S. (pharmacy), Pharm.D. St. John's University, NY

Christina Miele, Pharm.D., *assistant professor, clinical and administrative sciences (appointed 2018)*  
Pharm.D., Notre Dame of Maryland University, MD

Ashley Moody, Pharm.D., AE-C, BCACP, *assistant professor, clinical and administrative sciences (appointed 2012)*  
B.S. (Pharmaceutical Sciences), The Ohio State University, OH  
Pharm.D., University of Maryland at Baltimore, MD

Sherry Moore, B.S. Pharm., R.Ph., *instructor, clinical and administrative sciences; assistant director for experiential education (appointed 2017)*  
B.S. (Pharmacy), Howard University, Washington, D.C.

Monique Mounce, Pharm.D., BCPS, *assistant professor, clinical and administrative sciences (appointed 2015)*  
B.S. (biochemistry & biology), Texas State University; Pharm.D., University of Maryland at Baltimore, MD

Mamta Parikh, Pharm.D., BCPS, BCPP, *assistant professor, clinical and administrative sciences (appointed 2015)*  
Pharm.D., Rutgers, The State University of New Jersey, NJ

Sharon Park, Pharm.D., M.Ed., BCPS, *associate professor, clinical and administrative sciences (appointed 2010)*  
Pharm.D., University of Maryland, Baltimore, MD; M.Ed. (health professions), Johns Hopkins University, MD

Christine Skibinski, Ph.D., *assistant professor, pharmaceutical sciences (appointed 2018)*  
B.S. (biochemistry and molecular biology), Richard Stockton University, NJ, Ph.D. (biochemistry and molecular biology), The Pennsylvania State University College of Medicine, PA.

Jonathan Thigpen, Pharm.D., *associate professor, clinical and administrative sciences (appointed 2014)*  
Pharm.D., Samford University, AL

Paul Vitale, Pharm.D., *associate professor & chair, clinical and administrative sciences (appointed 2012)*  
B.S. (Physical Education), University of Maryland at College Park, MD  
PharmD, University of Maryland at Baltimore, MD

Raymond Weber, Pharm.D., BCOP, BCPS, *associate professor, clinical and administrative sciences (appointed 2015)*  
B.S. (pharmacy), Pharm.D., University of Maryland at Baltimore, MD

Simone Weiner, Ph.D., *assistant professor, pharmaceutical sciences (appointed 2010)*  
B.S. (pharmacy), M.S. (Pharmacology), Ph.D. (Physiology/Pharmacology), Federal University of Rio de Janeiro, Brazil

Stacey Williams, Ph.D., *associate professor, pharmaceutical sciences (appointed 2010)*  
B.A. (chemistry), University of Maryland, Baltimore County, MD  
Ph.D. (pharmaceutical sciences) University of Maryland at Baltimore, MD

Erica Wilson, Pharm.D, BCPS, *assistant professor, clinical and administrative sciences (appointed 2019)* B.S. (Bioengineering), Pharm.D., University of Pittsburgh, PA.