

Western University of Health Sciences

## College of Pharmacy

**Doctor of Pharmacy (PharmD)  
PharmD International Pathway (PIP) Program  
2022/2023 Catalog**

## COVID-19 Impact

The contents of this 2022-2023 catalog reflect standard operating conditions for the academic year. However, the global COVID-19 pandemic has resulted in a rapidly changing environment for higher education, and Western University of Health Sciences will respond to those changes in the interest of the health and well-being of all our students, faculty, staff, and administration. Changes to COVID-19 Vaccine policy, procedure and practice may be necessary from time to time, and these changes will be published using typical communication channels, including mail, email, publication to the [university web site](#), press releases, and other channels as deemed appropriate. These changes may supplement and supersede any inconsistent provisions found in this Catalog.

## Table of Contents

COVID-19 Impact.....	2
College of Pharmacy .....	6
Accreditation.....	6
Accreditation Council for Pharmacy Education (ACPE) Policy on Complaints .....	6
General Information .....	6
Vision.....	6
Mission.....	6
The Degree.....	6
The Doctor of Pharmacy Curriculum.....	6
Personal Competencies for Admission and Matriculation .....	9
Observation Skills.....	9
Communication Skills.....	9
Motor Skills .....	9
Interpretative, Conceptual and Quantitative Skills.....	9
Behavioral and Social Skills .....	10
Programmatic Outcomes.....	10
Admissions Policies and Procedures.....	12
Non-Discrimination Policy.....	12
Reasonable Accommodation for Disabilities .....	12
Application Requirements .....	12
Application Procedures and Deadlines.....	15
PharmD International Pathway (PIP) Program .....	17
Registration.....	19
Registration Late Fee Appeals.....	19
Student Health Insurance Requirement .....	19
New Student Orientation/Welcome Week.....	19
Student Initiated Changes in Enrollment Status.....	19
Full-Time/Part-Time Status .....	20
Time Limits.....	20
Tuition and Fees.....	21
Other Fees and Expenses.....	21

Modified Curriculum/Repeated Coursework Tuition Rates .....	21
Computer Technology.....	21
Financial Assistance .....	22
General Academic Policies and Procedures.....	23
Academic Advisement.....	23
Course Participation and Attendance .....	23
Elective Coursework.....	24
Independent Study.....	24
Research Activities .....	24
Annual Health Clearance Requirements.....	24
Pharmacy Intern License Requirement.....	24
Protocol for Input on Matters of Student Concern .....	26
Drug-Free Workplace Policy.....	27
Standards of Academic Integrity, Professionalism and Student Conduct .....	27
College of Pharmacy Honor Code .....	27
Academic Honesty .....	27
Professional Conduct .....	29
Professional Standards.....	29
Reporting Violations.....	31
Academic Misconduct.....	31
Professional Misconduct.....	31
Conduct Suspension.....	34
Appeal Process .....	34
Standards of Academic Progress.....	35
Student Performance Committee.....	35
Academic Progression in the Didactic Curriculum .....	35
Early Intervention Program.....	35
Tutorial Assistance Program .....	35
Eligibility to Participate in Advanced Pharmacy Practice Experiences (APPEs) .....	36
Progression to the Fourth Professional Year .....	36
Graduation .....	36
Adverse Actions .....	36

Evaluation and Grading.....	42
Grading Scales.....	42
Administrative Grades .....	42
Audit.....	43
Missing Grades.....	43
Incomplete grade, “I”.....	43
Grade Reports.....	44
Course Grade Appeals.....	44
Credit Hour Calculation.....	45
Curriculum Organization.....	46
Year 1 .....	46
Year 2, Year 3 – Fall Semester.....	46
Year 3 – Spring Semester, Year 4.....	48
COVID-19 Contingency for the advanced experiential curriculum.....	48
Curriculum Organization (PIP Track).....	50
Year 1 .....	50
Year 2 .....	50
COVID-19 Contingency for the advanced experiential curriculum.....	50
COVID-19 Contingency for the advanced experiential curriculum.....	51
Year 3 .....	51
Course Descriptions .....	53
Honors and Awards.....	71
Academic Calendar .....	72

## **College of Pharmacy**

### ***Doctor of Pharmacy Program***

#### **Accreditation**

The College of Pharmacy is accredited by the Accreditation Council for Pharmacy Education (ACPE) located at 190 S. LaSalle Street, Suite 2850 Chicago, Illinois 60603-3410. Phone: (312) 664-3575; Fax: (866) 228-2631 Website: [www.acpe-accredit.org](http://www.acpe-accredit.org).

#### **Accreditation Council for Pharmacy Education (ACPE) Policy on Complaints**

Student pharmacists have a right to file a complaint with the Accreditation Council for Pharmacy Education (ACPE) if they feel the College of Pharmacy and/or any College of Pharmacy personnel is in violation of the accreditation standards or policies established by ACPE.

For further information, please see the following link:

<http://www.acpe-accredit.org/students/complaints.asp>.

#### **General Information**

##### **Vision**

Develop leaders in pharmaceutical care and research who will advance global health outcomes through innovative pharmacy practice, interprofessional collaboration, scholarship and service.

##### **Mission**

- To provide innovative educational experiences that produce humanistic, caring and competent team-ready health professionals and scientists
- To support and stimulate scholarship, teaching and service to improve the human condition
- To engage local, national and international partners to maximize the impact of the College

##### **The Degree**

The Doctor of Pharmacy (PharmD) degree is awarded in recognition of the highest level of professional education in pharmacy in the United States. To earn the PharmD degree, student pharmacists complete four years of professional study following a minimum of two years of pre-professional education at an accredited college or university.

Student pharmacists who complete this program are eligible to take state and national pharmacy licensing examinations provided they have satisfied other licensure requirements such as 1500 hours of internship experience. After passing this examination, graduates are licensed to perform all the duties and responsibilities of a practicing pharmacist.

##### **The Doctor of Pharmacy Curriculum**

To obtain the PharmD degree student pharmacists will complete a curriculum made up of four components: (1) the didactic curriculum, (2) experiential education curriculum, (3) the interprofessional curriculum, and (4) the professionalism curriculum.

### ***The Didactic Curriculum Component***

In the core didactic component of the program, student pharmacists will learn about biological systems and about drugs and their effect on the body. They will take courses in areas such as therapeutics, health care administration, pharmacology, immunology, pharmaceuticals, pharmacogenomics and pharmacokinetics and learn how to apply this knowledge to pharmacy practice. Their studies will include communication skills, patient counseling, pharmacy practice laws and regulations, health care systems, physical assessment and evaluation of the medical literature.

### ***The Experiential Education Curriculum Component***

The pharmacy practice experiential education curriculum begins with the Introductory Pharmacy Practice Experiential (IPPE-1) course (PHRM 5997) and exposes student pharmacists to community pharmacy practice. It is a four-week (40 hours/week) experience (160 experiential hours, 4 credit hours), during the summer of the first year. Every student pharmacist will complete the course by the start of the second year. For student pharmacists enrolled in the PharmD International Pathway (PIP) Program, the IPPE-1 course (PHRM 6300) will run for four weeks (experiential and credit hours are the same as 5997), at the beginning of the summer between the P-2 and P-3 years.

The IPPE-2 course (PHRM 6999) is scheduled during the summer between the second and third years. It consists of a four-week (40 hours/week) experience [(160 experiential hours, 4 credit hours)] that exposes student pharmacists to institutional/inpatient pharmacy practice.

In several different patient-centered training sessions, particularly during the third and fourth years, the student pharmacist will be given an opportunity to put into practice what they have learned in the classroom. Under the supervision of a staff pharmacist, clinical pharmacist and/or faculty member, they will assess and counsel patients, monitor their drug therapies and be involved in most aspects of pharmacy practice. They will spend a total of 36 weeks in these training sessions, called advanced pharmacy practice experiences (APPE) (36 credit hours). Such pharmacy practice experiences will take place in hospitals as well as in clinics, community pharmacies and other settings where pharmacists practice. A student pharmacist may withdraw from an APPE within the first 2 weeks of the experience without receiving a grade of NCR. After the two-week period, withdrawal from an APPE will result in a grade of NCR. If a student pharmacist withdraws from an APPE, they will be required to complete an appropriate replacement APPE during their "Off" rotation, or after their Advanced Elective, as appropriate. NCR grades due to withdrawal from an APPE after the first two weeks will be handled in accordance with the policies discussed later in this document.

After the APPE's are completed, student pharmacists undergo the 16-week Advanced Elective (AE) (16 credit hours). This 4-month experience (e.g., rotation/research experience, specialized training, business administration and ownership, etc.) allows student pharmacists to develop more skills and insight in a specific practice area. By the start of the student's last year, individuals should identify an area of professional interest as described below. The 16-week AE program is designed to provide a capstone experience in the student pharmacist's chosen area of interest (e.g., administration, various clinical settings, pediatrics, infectious disease, internal medicine, cardiology, renal, oncology, ICU, ambulatory care, community practice, compounding, pharmacoconomics, managed care, psychiatry, teaching, pharmaceutical industry, pharmacy informatics, digital health, administration and pharmacy ownership, etc.).

The clinical training component comprises of 60 credit hours, which is 36% of the total curricular requirements. Please review the statement in the section on "Curriculum Organization" describing the

contingency plan regarding the impact of the COVID 19 pandemic on APPE and AE availability.

### ***The Interprofessional Curriculum Component***

Student pharmacists in their first and second professional years are required to participate in a series of Interprofessional Education (IPE) courses. These courses prepare health professions students to practice health care services through a team approach. The IPE courses instill non-technical competencies including communication, collaborative practice and scope of practice. Working in small interprofessional teams, student pharmacists apply these competencies as they jointly explore cases or activities presenting common clinical scenarios or conditions with other health professions students. These cases and activities integrate elements common to all professions, including ethical, behavior, social and psychological issues.

### ***The Professional Development Curriculum Component***

The College of Pharmacy values the development of student pharmacists into contributing members of the profession of Pharmacy and expects all graduates to acquire and maintain the highest level of professional attitudes and behaviors. To promulgate this belief, student pharmacists must participate in at least five professional development activities during each of the first two academic years, and five in the last two academic years (combined). These activities are divided into five categories: (1) professional education, (2) patient care service, (3) legislative advocacy, (4) professional service and leadership and (5) healthcare related community service and philanthropy.

In addition, all student pharmacists are required to participate in the longitudinal curriculum, Exploring Leadership and Self-Awareness (ELSA) in order to fulfill the Professional Development Curriculum requirements. ELSA comprises noon-time activities once every quarter overseen by a faculty team advisor. The topics covered include Self-Awareness, Emotional Intelligence, StrengthsFinder, Well-Being, Grit, Resilience and integrating these areas with personal and professional goals.

## **Personal Competencies for Admission and Matriculation**

A candidate for admission to the Doctor of Pharmacy program must possess, or be able to achieve through a reasonable accommodation, certain intellectual, emotional, and physical abilities, that would enable the individual to acquire the knowledge, technical and clinical skills needed to complete, successfully, the curriculum in order to pursue a career in pharmacy practice. Upon matriculation to the program, the student must continue to possess, or be able to achieve through a reasonable accommodation, the personal competencies outlined below throughout their progression in the Doctor of Pharmacy program. The practice of pharmacy requires the performance of specific functions that fall into five broad skills categories, including, but not limited to the areas outlined below.

For candidates or students who require a reasonable accommodation in order to meet the competencies outlined below, please contact the Harris Family Center for Disability and Health Policy (<sup>H</sup>CDHP) at (909) 469-5297.

Under all circumstances, a candidate or student should be able to perform the following in a reasonably independent manner, with or without a reasonable accommodation:

### **Observation Skills**

Candidates must be able to observe lectures, demonstrations and experiments in all types of settings. A candidate must be able to observe a patient's condition and elicit information using appropriate physical assessment techniques in order to evaluate, recommend and initiate therapy. Pharmacy practice requires the ability to visually interpret prescription and medication orders and accurately distinguish one product from another.

### **Communication Skills**

Candidates must be able to communicate effectively in both academic and health care settings. This requires the ability to understand, write and speak fluent English. The candidate must also be able to recognize nonverbal communication cues.

### **Motor Skills**

Candidates must possess both fine and gross motor skills necessary to fulfill all types of medication orders, to utilize diagnostic equipment for patient assessment, and to deliver or administer patient therapies. Patient therapies include, but are not limited to, immunizations and cardiopulmonary resuscitation. Candidates must be able to use pharmacy equipment, technologies and computer-based information systems. Candidates must have sufficient physical stamina to complete the rigorous didactic, laboratory and clinical experiences, which consist of long periods of sitting, standing, or moving.

### **Interpretative, Conceptual and Quantitative Skills**

Candidates must be able to utilize learning techniques that will allow mastery of the pharmacy curriculum when delivered through a variety of modalities including didactic instruction, group-based learning, independent learning, projects, reports, experiential training, and computer assisted learning. Candidates must demonstrate a fundamental and continuing ability to use analytical reasoning independently and in collaboration with others to assimilate knowledge, solve problems, and explain health care situations. The candidate must be able to use information to develop appropriate drug therapy and monitoring plans in a reasonable amount of time.

## Behavioral and Social Skills

Candidates must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment and the prompt completion of all academic and patient care responsibilities. The candidate must demonstrate professional and ethical demeanor appropriate to his/her educational level and the ability to work in an interprofessional environment. Candidates must also be able to adapt to changes, function in the face of uncertainty, display flexibility, and be able to ensure prompt and safe completion of all responsibilities. Compassion, integrity, interpersonal skills, motivation and concern for others are humanistic qualities that will be assessed during the admissions process.

## Programmatic Outcomes

The faculty of the College has defined a set of minimal, concise, program outcomes for the Doctor of Pharmacy Program at Western University of Health Sciences. Graduates from our Doctor of Pharmacy Program are expected to provide pharmaceutical care as entry-level pharmacists. As such, these outcomes reflect the knowledge, skills and attitudes of generalist, entry-level pharmacists who are able to deliver high quality pharmaceutical care.

The program outcomes were developed by a national panel of pharmacy educators and are essential elements of pharmacy education accreditation. The outcomes are well aligned with the vision of the WesternU College of Pharmacy: ***“Develop leaders in pharmaceutical care and research who will advance global health outcomes through innovative pharmacy practice, interprofessional collaboration, scholarship and service”.***

The program outcomes delineate the knowledge, skills and attitudes that student pharmacists must develop in order to practice competent pharmaceutical care. They provide the minimal set of abilities that a student should master during his/her education and training within our Program. These outcomes are consistent with current accreditation standards and other professional standards, guidelines and codes. They provide the basis upon which the Doctor of Pharmacy curriculum and student competency will be assessed.

Program Outcomes	
<b>1..1</b>	<b>Learner (Learner)</b> Develop, integrate and apply knowledge from the foundational sciences (i.e., pharmaceutical, social/behavioral/administrative and clinical sciences) to evaluate the scientific literature, explain drug action, solve therapeutic problems and advance population health and patient centered care.
<b>2.1</b>	<b>Patient-centered care (Caregiver)</b> Provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans and document activities).
<b>2.2</b>	<b>Medication use systems management (Manager)</b> Manage patient healthcare needs using human, financial, technological and physical resources to optimize the safety and efficacy of medication use systems.
<b>2.3</b>	<b>Health and wellness (Promoter)</b> Design prevention, intervention and educational strategies for individuals and communities to manage chronic disease and improve health and wellness.
<b>2.4</b>	<b>Population-based care (Provider)</b> Describe how population-based care influences patient centered care and influences the development of practice guidelines and evidence-based best practices.

<b>3.1</b>	<b>Problem Solving (Problem Solver)</b> Identify problems, explore and prioritize potential strategies and design, implement and evaluate a viable solution.
<b>3.2</b>	<b>Educator (Educator)</b> Educate all audiences by determining the most effective and enduring ways to impart information and assess understanding.
<b>3.3</b>	<b>Patient Advocacy (Advocate)</b> Assure that patients' best interests are represented.
<b>3.4</b>	<b>Interprofessional collaboration (Collaborator)</b> Actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding and values to meet patient care needs.
<b>3.5</b>	<b>Cultural sensitivity (Includer)</b> Recognize social determinants of health to diminish disparities and inequities in access to quality care.
<b>3.6</b>	<b>Communication (Communicator)</b> Effectively communicate verbally and nonverbally when interacting with an individual, group or organization.
<b>4.1</b>	<b>Self-awareness (Self-aware)</b> Examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation and emotions that could enhance or limit personal and professional growth.
<b>4.2</b>	<b>Leadership (Leader)</b> Demonstrate responsibility for creating and achieving shared goals, regardless of position.
<b>4.3</b>	<b>Innovation and Entrepreneurship (Innovator)</b> Engage in innovative activities by using creative thinking to envision better ways of accomplishing professional goals.
<b>4.4</b>	<b>Professionalism (Professional)</b> Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers and society.

## **Admissions Policies and Procedures**

Admission to the College of Pharmacy is on a highly competitive basis. Each year we receive many more applications than we can accommodate in our program. At WesternU, we retain smaller class sizes, offering accepted student pharmacists a closer relationship with their faculty and fellow student pharmacists. The College of Pharmacy is looking for individuals who add to the diversity of our student body, have excellent communication skills, demonstrate compassion, are dependable, display good judgment and critical thinking abilities, and exhibit dedication towards advancing the profession.

### **Non-Discrimination Policy**

In accordance with all applicable federal, state, and local laws, Western University of Health Sciences (WesternU) is committed to ensuring a campus community free from unlawful discrimination. Accordingly, WesternU prohibits unlawful discrimination on the basis of race, color, national origin ancestry, citizenship, ethnicity, creed, religion or religious creed, sex or gender (including gender identity), marital status, sexual orientation, disability (both physical and mental) including HIV and AIDS, medical conditions (cancer and genetic characteristics), pregnancy (which includes childbirth, breastfeeding and medical conditions related to pregnancy, childbirth or breastfeeding), age, genetic information, military and veteran status, or any other characteristic protected under applicable law, in the administration of its programs or activities. WesternU also prohibits unlawful harassment, including Sexual Harassment. Lastly, WesternU is committed to providing equal access to and equal opportunities to all members of its campus community in accordance with all applicable laws.

This non-discrimination policy applies to applicants, students and alumni. Additional nondiscrimination information can be found in the Nondiscrimination, Anti-Harassment and Anti-Retaliation Policy, located in the University Catalog.

### **Reasonable Accommodation for Disabilities**

Candidates and students must be able to perform all the essential functions of the program with or without reasonable accommodation. A student who discloses a disability and requests accommodation will be referred to the Harris Family Center for Disability and Health Policy (<sup>HF</sup>CDHP). The student will be asked to provide documentation of the disability for the purposes of determining appropriate accommodations. The College of Pharmacy will provide reasonable accommodations but is not required to make modifications that would substantially alter the nature or requirements of the program. A student with questions regarding reasonable accommodation can contact the <sup>HF</sup>CDHP office.

### **Application Requirements**

The application requirements shown in this catalog apply to applicants who are seeking entry for the 2020/2021 academic year. Current admission and application requirements for the PharmD program, including prerequisite coursework requirements, can be located on the [Prospective Student website](#).

The College of Pharmacy Admissions Committee will consider applicants with a minimum of two years of college (60 academic semester hours or 90-quarter hours) of pre-pharmacy study at an accredited college or university. The minimum preferred overall pre-pharmacy and science grade point average is a 2.75. Grades of "C-" or lower in any of the prerequisite courses are not accepted. Prerequisite courses are subject to review each year. Exception: Due to significant educational challenges applicants may have encountered during the COVID-19 pandemic, "pass" grades for prerequisites will be approved on a case by cases basis. Pre-requisite laboratory courses that were canceled by undergraduate institutions due to COVID-19 will be waived.

Applicants who have received a baccalaureate degree or higher will be considered more favorably than applicants who have fulfilled only the minimum requirements.

### ***Prerequisite Courses***

<b>Prerequisites</b>	<b>Duration</b>	
College English*	1 Semester	<p>* Non-science prerequisites and electives will be waived for students who have a confirmed baccalaureate degree at the time of <u>matriculation</u> (does not include calculus).</p> <p>#Elective 1 (one course must be completed from this category): Economics, Anatomy, Statistics, Physics, or other Upper Science Division courses.</p> <p>#Elective 2 (one course must be completed from this category): Public Speaking or Social Sciences courses</p>
English Composition*	1 Semester	
Speech Communication*	1 Semester	
General Chemistry (w/ Lab)	2 Semesters	
Organic Chemistry (w/ Lab)	2 Semesters	
Human Physiology	1 Semester	
Microbiology (Medical Microbiology is preferred)	1 Semester	
Biochemistry/Molecular Biology/Cell Biology	1 Semester	
General Biology	1 Semester	
Calculus	1 Semester	
Electives*#	2 Semesters	

- All advanced placement (AP) credit test scores that were previously accepted by the applicant's undergraduate institution are acceptable (time limit of 10 years).
- Introductory level courses in the sciences are not accepted.
- Physiology must be taken from the physiology, anatomy and physiology, biology, or zoology departments.
- We do not accept substitutions or waive any of the prerequisite courses.
- English as a Second Language (ESL) courses are not accepted for the English requirement. English courses must be taken from the English department.
- All prerequisite course work in progress must be completed no later than the spring semester or quarter immediately preceding matriculation.
- Summer session courses taken immediately prior to matriculation at WesternU are not accepted.
- Transfer of Credit, CLEP or Credit for Experiential learning is not recognized by the program.

### ***Standardized Examinations***

- Pharmacy College Admissions Test (PCAT) is not required.
- Test of English as a Foreign Language (TOEFL)

TOEFL is required for all applicants submitting course work from foreign schools. A minimum preferred score of 213 for the Computer Based test or 79 for the Internet Based TOEFL (IBT) test must be submitted by March 1

prior to matriculation. TOEFL scores are valid for two years. For more information regarding the TOEFL test, please visit their website at <http://www.ets.org/toefl>.

**Exception:** The TOEFL exam will be waived for permanent and temporary residents of the United States who have completed the English and Speech prerequisites of the College from an accredited institution in the United States.

English courses taken from foreign countries whose native language is English will be accepted (e.g., Canada, Australia, Great Britain, New Zealand, and the British West Indies).

### ***Recommendations***

Two letters of recommendation are required as part of the admissions application, however three are preferred. Recommendation forms are available via PharmCAS (see below). The recommendations should state the nature and extent to which the recommender knows the candidate and should elaborate on the applicant's attributes and abilities including communication skills, ethics, interpersonal skills and motivation toward the profession.

### **Application Procedures and Deadlines**

The Pharmacy College Application Services (PharmCAS) is the centralized application service for WesternU's College of Pharmacy. PharmCAS offers a web-based application service that allows applicants to use a single application and one set of materials to apply to multiple PharmD programs.

WesternU's application deadline to apply to PharmCAS is April 1<sup>st</sup>. Application materials must be complete and submitted to PharmCAS by the deadline. It may take approximately 4-5 weeks for PharmCAS to process application materials and forward them to Western University of Health Sciences. To apply to PharmCAS, or to request an application, visit their website at <http://www.pharmcas.org>.

All application materials can be located on our website at <http://prospective.westernu.edu/pharmacy-pharmd/apply-13/>. Applicants who do not submit all application materials by the deadline may not be eligible to continue in the admissions process. The minimum preferred GPA for consideration is a 2.75 (overall) and a 2.75 (sciences). WesternU is not responsible for delays in mail delivery. We strongly encourage candidates to apply early.

Faculty in the College of Pharmacy will screen each applicant's admissions file to determine whether an applicant will be granted an interview. Candidates selected for an interview will be required to participate in an assessment of written and verbal communication skills, as well as a critical thinking component. Interview sessions are conducted during the weekends (Saturdays) and, only under special circumstances, during the weekday. Depending on the situation with the COVID-19 pandemic, parts or all of the interview day process may occur virtually. Decisions of the Admissions Committee regarding the admission of applicants to the Doctor of Pharmacy program are final.

Applicants admitted to the College of Pharmacy are required to pay an initial \$200.00 enrollment deposit and an additional \$300.00 after March 1st. Upon enrollment, this deposit is applied toward the tuition for the academic year. Persons who fail to enroll forfeit the entire deposit.

### ***Applicants with Foreign Coursework***

Applicants who wish to use coursework completed outside the United States must submit their transcripts for evaluation to a [Western University of Health Sciences Approved Service](#) at the candidate's expense. A course-by-course evaluation is required, and all coursework must be designated as undergraduate, graduate or professional. Western University only honors evaluations from one of the approved services. The official evaluation must be included with the supplemental application packet.

### ***International Students***

International students and any other applicants who are not U.S. citizens and who are living in the U.S. should be prepared to provide proof of legal U.S. residency at the time of interview. Proof of legal U.S. residency is required prior to any offer of acceptance. For more detailed information, please visit the web page for [International Students](#).

### ***Transfers from Other Schools***

A transfer applicant is a student currently enrolled in a Doctor of Pharmacy (PharmD) program at an ACPE-accredited School/College of Pharmacy, and is applying to the WesternU COP PharmD program. The applicant must be in good academic standing. Applicants who have been asked to leave their original PharmD program due to academic deficiencies, and/or professional misconduct, are not eligible to apply. The applicant must submit all of the following materials by June 1<sup>st</sup> of the academic year they wish to transfer:

1. A written request for transfer
  - ° The letter must state the reason for the transfer request, address their current academic status, and their plan for success in the WesternU COP PharmD program.
2. Official, unopened transcripts must be submitted directly from the following:
  - ° Original PharmD program
  - ° All undergraduate institutions where pre-pharmacy coursework was completed. An undergraduate GPA of 2.75 or higher is preferred.
  - ° All post-baccalaureate institutions (if applicable)
3. Syllabi of all courses completed at their original PharmD program.
4. Two letters of recommendation
  - ° One from a faculty member, preferably an administrator (e.g. Academic or Student Affairs) at their original PharmD program.
  - ° One from an external practicing pharmacist.
5. Copy of the applicant's valid pharmacy intern license.
6. Transfer application form.

Materials should be mailed to: Director of University Admissions, Western University of Health Sciences, 309 E. Second Street, Pomona, CA 91766.

Qualified applicants will be invited to participate in an on-site admission interview. Due to differences in professional pharmacy curricula, if an applicant is approved for transfer into our PharmD program, there is no guarantee that they will be granted the same year of standing as in the original PharmD program. This will be determined by the College of Pharmacy following careful evaluation of the completed transfer application.

## PharmD International Pathway (PIP) Program

### *Description of the PIP Program*

The PIP Program was formerly known as the International Post-Baccalaureate PharmD (IPBP) Program prior to the 2021-2022 application cycle. The WesternU College of Pharmacy offers a unique opportunity for American and/or foreign trained pharmacists or other healthcare-related disciplines with a bachelor's degree (B.S. or equivalent) who wish to progress to the Doctor of Pharmacy (PharmD) degree. Applicants are admitted with advanced standing into the second year of our traditional PharmD curriculum, thereby bypassing the first year. The Doctor of Pharmacy degree awarded to the student pharmacist in the international program is the same as those awarded to our student pharmacists in the traditional PharmD program. Please refer to the PharmD section of the catalog for additional information on academic and student conduct policies and procedures.

### *Application Procedure*

1. Original Admission Application Form (completed and signed).
2. Application Deadline: All application materials must be received or postmarked by **March 1**, for admission in the following academic year.
3. Application Processing Fee: Non-refundable application fee for \$65 payable to Western University of Health Sciences.
4. International Student Application (ISA): International applicants, applicants who are not U.S. citizens and who are living in the U.S. and applicants who have applied for permanent residency but have not been approved at the time of application must complete the International Student Application (ISA). The ISA must be included in the candidate's Supplemental Application. There is no fee for the ISA.
5. Resume/Curriculum Vitae: Please provide a current resume or curriculum vitae, if available.
6. Bachelor of Science (or equivalent) in Pharmacy or other healthcare-related discipline: Candidates should provide a copy of their degree certificate and enclose it with their application.
7. Official Transcripts: Submit official transcripts from all schools attended in the United States and/or an evaluation of a candidate's credentials from each college or university attended in a foreign country. Please see the list of foreign credentials evaluation services. Transcript evaluation must come directly from the evaluation service. Photocopies are not acceptable. The minimum GPA requirement for admission into the program is 2.50 on a 4.00 scale.
8. Personal Questionnaire: Candidates should complete the questionnaire and enclose it with their application. The questionnaire can be downloaded from the PIP website.
9. TOEFL (Test of English as a Foreign Language): TOEFL, including essay, is required for all applicants submitting course work from foreign schools and for all permanent or temporary residents of the United States. Exception: The TOEFL exam will be waived for applicants who have graduated with a confirmed baccalaureate or higher degree from a United States institution. A minimum preferred score of 213 for the Computer Based test or 79 for the Internet Based TOEFL test must be submitted by June of the year of matriculation. TOEFL scores are valid for two (2) years. TOEFL scores will not be waived for pending baccalaureate and/or higher degrees or pending naturalization appointments. Official scores must be sent directly from the Education Testing Services (ETS). Photocopies are not acceptable. For more information regarding the TOEFL test, please visit their website at <http://toefl.org>
10. FPGEE (Foreign Pharmacy Graduate Equivalency Examination): FPGEE scores are not required for entry into the PIP program.
11. Internal Assessment (IA): The Internal Assessment (IA) exam will be considered for admission into

the program if administered during the admission cycle.

12. References: Three satisfactory recommendations (forms provided) from qualified individuals (not related to the candidate) capable of evaluating their overall personality, professional enthusiasm, and integrity. Each recommendation must be submitted in a sealed envelope that is signed over the seal by the recommender.
13. Verification of Employment (Optional): Letter(s) from current employer(s) verifying employment status. If self-employed, provide supporting documentation.

### ***Interview Guidelines***

Upon successful completion of the above requirements, candidates may be invited for an interview session on or off-campus, based on satisfactory preliminary file evaluation.

### ***IA Examination***

This exam, if administered, may serve as an entrance exam for admissions into the PIP program.

#### ***Oral Communication Skills***

These skills will be evaluated during a personal interview session conducted by members of the admissions committee. Each interview session will be approximately 30 minutes in duration. The purpose of this exercise will be to determine the candidate's command of the English language as well as interpersonal skills.

#### ***Written Communication Skills***

All candidates will be required to take a written essay test wherein a topic of general interest will be presented. Time allowed for this activity is approximately 45 minutes. The purpose of this exercise will be to assess the candidate's overall ability and effectiveness in reading, writing and comprehension of the English language.

#### ***Critical Thinking Skills Assessment***

All candidates will be required to take a critical thinking assessment known as the Health Sciences Reasoning Test (HSRT) on interview day. This 50-minute duration, multiple-choice exam requires no prior preparation and questions are based on situations dealing with general health related issues. The purpose of this exercise is to evaluate the candidate's logical and critical thought process when encountered with unique life situations.

#### ***Course Waiver Policy***

Applicants accepted to the PIP Program may be granted course waivers for all first-year coursework in the PharmD program. The maximum number of credit hours that will be waived is 44.50 credit hours. Only credit hours relevant to the bachelor's degree in pharmacy granted by the applicant's institution may be used to waive first year PharmD course requirements.

## **Registration**

All WesternU students are required to register by the registration deadlines specified by the University Registrar. Registration dates are posted on the [Registrar's Office](#) website. Failure to register by the deadline may be grounds for administrative withdrawal. All students registering after the posted deadline will be assessed a \$30.00 per business day late fee.

Full tuition and fees and all prior debts must be paid in full on or by posted deadlines each academic year. Matriculation is subject to the satisfactory completion of all academic requirements and payment of all outstanding debts to the University. The receipt of the final transcript(s) from all colleges/universities attended and a physical examination with documentation of required immunizations (if applicable) prior to registration are additional requirements for incoming students.

### **Registration Late Fee Appeals**

If you are assessed late fees for a registration period, you may submit an appeal to the Registrar. For additional information on the appeal process, please see the [Registration Late Fees](#) page on the Registrar's Office website.

### **Student Health Insurance Requirement**

All full-time students at Western University of Health Sciences are required to have active health insurance while enrolled. All students are automatically assessed half of the entire year's insurance premium and will be enrolled in the student health insurance plan until they submit proof of coverage that meets the University's requirements. For additional information on student health insurance requirements and/or waiving out of the student health insurance plan, please see the [Student Health Insurance](#) page on the Registrar's Office website.

### **New Student Orientation/Welcome Week**

Attendance at all Orientation is mandatory for all incoming first-year student pharmacists. For additional information on Welcome Week activities for the College of Pharmacy, please visit <http://www.westernu.edu/students/welcome-week/>.

### **Student Initiated Changes in Enrollment Status**

#### ***Leave of Absence***

A student may request a Leave of Absence (LOA) with the occurrence of a medical emergency or illness, personal issues, financial hardship or military service. Students must be in good academic standing to be eligible for a Leave of Absence. For additional information on the University's Leave of Absence policy, please see 'Student Initiated Changes in Enrollment Status' in the University Catalog, General Academic Policies and Procedures section.

#### ***Withdrawal from University/Academic Program***

Matriculation at the University is a privilege granted in consideration of specified levels of performance and of maintaining the established standards of scholarship and personal and professional conduct. The University reserves the right to require withdrawal at any time it deems necessary to safeguard its standards of scholarship, conduct and orderly operation. The student concedes this right by act of matriculation. For additional information on withdrawing from the PharmD or PIP program, please see 'Student Initiated Changes in Enrollment Status' in the University Catalog, General Academic Policies and Procedures section.

**Full-Time/Part-Time Status**

All PharmD/PIP students enrolled in at least one class/rotation are considered full-time students.

**Time Limits**

The Doctor of Pharmacy program is designed to be completed in four (4) years of full-time study. The requirements for the degree must be fulfilled within 6 years from the date of matriculation to the program. Students who are unable to meet the 6-year time limit for the PharmD program may be subject to administrative withdrawal.

The International Post-Baccalaureate PharmD program is designed to be completed in three (3) years of full-time study. The requirements for the degree must be fulfilled within 4 years, 6 months from the date of matriculation to the program. Students who are unable to meet the 4-year, 6-month time limit for the PIP program may be subject to administrative withdrawal.

## Tuition and Fees

In estimating costs for one academic year of study at WesternU College of Pharmacy, student pharmacists should include tuition and fees, laptop computer and printer, books and supplies, room and board and other miscellaneous expenses. By action of the Board of Trustees, Doctor of Pharmacy tuition and fees for the 2022/2023 academic year (subject to change) are as follows:

\$52,560.00	Annual Tuition
\$40.00	Student Body Fee

## Other Fees and Expenses

\$22.88	Top Hat Classroom License Fee (PharmD 2023) (Approximate)
\$30.00	Registration Late Fee (Per Business Day)
\$50.00	Late Payment Fee (per month)
\$350.00	Graduation Fee
\$470.00	Annual Parking Permit (Auto)
\$40.00	Locker Key Replacement Fee
\$10.00	Official Transcript (Each)
\$21.00	Rush Transcript, First Class Mail (Each)
\$25.00	Rush Transcript, Federal Express (Each)
\$10.00	Student ID Replacement Fee
\$150.00	Dosimetry Badge Replacement Fee
\$TBD	Breakage Fee (Replacement Cost)

## Modified Curriculum/Repeated Coursework Tuition Rates

Students enrolled in a modified PharmD curriculum or who are directed to repeat one or more courses but not the entire academic year are charged a per credit hour tuition rate. This rate is calculated by dividing the total credit hours required for a class year by the annual tuition. The per credit hour rates for 2022/2023 are shown below:

\$1,236.71	PharmD Year 1 Modified Curriculum Per Credit Hour Charge
\$1,222.33	PharmD Year 2 Modified Curriculum Per Credit Hour Charge
\$1,781.69	PharmD Year 3 Modified Curriculum Per Credit Hour Charge
\$1,314.00	PharmD Year 4 Modified Curriculum Per Credit Hour Charge
\$1,118.30	PIP Year 1 Modified Curriculum Per Credit Hour Charge
\$1,781.69	PIP Year 2 Modified Curriculum Per Credit Hour Charge
\$1,314.00	PIP Year 3 Modified Curriculum Per Credit Hour Charge

## Computer Technology

The College of Pharmacy requires that each enrolled student pharmacist have a notebook or laptop computer during class, after class hours and while on rotations. Privacy screens/filters are required for all notebook and laptop computers for in-class assessments. Laptop specifications can be found at <https://www.westernu.edu/computing/computing-students/>.

The College of Pharmacy also requires that first, second- and third-year student pharmacists have a

classroom responder, approved by the College. Individual responders must be registered to only one (1) student. Classroom responders are electronic devices that will be used to enhance interactive learning in classrooms. The device will enable faculty to gauge student understanding of concepts, introduce more innovative teaching and assessment methods, improve student involvement in learning and facilitate classroom learning to become more dynamic. The responders will also be used to administer and score assessments. Therefore, student pharmacists are also required to bring responders to each class.

### **Financial Assistance**

All PharmD/PIP student pharmacists are eligible to apply for need-based financial aid provided they meet established criteria. For information, please visit the [Office of Financial Aid website](#).

## General Academic Policies and Procedures

### Academic Advisement

Student pharmacists are assigned a faculty advisor, which provides student pharmacists the opportunity to develop sustained, individual advisement on academic and professional levels. Student pharmacists may request a change of advisor, if needed, through the office of the Assistant Dean of Student Affairs (or his/her designee).

### Course Participation and Attendance

Student pharmacists are expected to be in class during all instruction hours specified in the course schedule.

Student pharmacists are required to participate in all assessed activities (assignments, exams, etc.). When a student pharmacist must be absent, he/she must contact the Course Facilitator prior to the missed class. If unable to reach the Facilitator, the student pharmacist must leave a voice-mail message, an e-mail message or a message with a staff support person or the Assistant Dean of Student Affairs that includes a contact telephone number.

WesternU publishes an annual list of federal holidays observed by the University. A student pharmacist who requests time off for days other than those observed by WesternU must do so by completing the “Excused Absence” form and submitting it to the Course Facilitator a minimum of five (5) school days before the start of the course in which the holiday falls. If the request is approved by the Course Facilitator, the student pharmacist is responsible for any work missed on the date(s) absent. All assignments must be completed by the scheduled time. However, if the student pharmacist fails to notify the Course Facilitator in the time frame noted above, the absence will be considered an unexcused absence, and no make-up assessment will be permitted. The WesternU holiday schedule does not apply to student pharmacists on Introductory Pharmacy Practice Experience – 2, Advanced Pharmacy Practice Experiences, and on off-campus Advanced Electives. Student pharmacists will follow the rotation site schedule on Introductory Pharmacy Practice Experience – 2, Advanced Pharmacy Practice Experiences, and on Advanced Electives.

An absence may be excused by the course facilitator for student pharmacists participating in approved professional development activities, in situations involving illness, or in other emergencies. In all cases when the absence is unplanned, documentation of the reason(s) for the absence must be provided to the course facilitator upon return to class. A copy of this documentation will be forwarded to the Assistant Dean of Student Affairs for inclusion in the student pharmacist’s file. The course facilitator/faculty will determine how the missed materials will be completed. If emergencies arise that require a student pharmacist to miss more than one assessed course activity or more than three (3) days of the class, the student pharmacist may be required to retake the course.

The course facilitator is responsible for determining whether accommodation can be made. The course facilitator’s decision is final.

Examples of situations when accommodating absences may not be possible include (but are not limited to) the following:

1. **Missed team assignments:** An individual student pharmacist may not be able to demonstrate mastery of course material without completing the assignment within the context of a team.

2. **Missed assessments of clinical skills:** An individual student pharmacist may not be able to demonstrate mastery of clinical skills without the specific circumstances arranged within the course.

This policy also applies to student pharmacists on IPPE/APPE/AE. These student pharmacists are also governed by policies contained in the individual IPPE course syllabi or the APPE syllabi and by rotation-specific requirements.

### **Elective Coursework**

Student pharmacists in the PharmD program are required to complete four (4) credits of didactic electives in order to graduate. Student pharmacists in the PIP program are required to complete three (3) credits of didactic electives in order to graduate. Student pharmacists may not retake an elective course previously completed with credit. All didactic elective credits must be completed prior to the start of the APPE rotations. The grading system for didactic elective courses will be determined by course facilitators. The facilitator may assign a letter grade or a credit/no credit grade.

All elective course enrollment for fall term must be finalized during the first week of the term. For spring term, all elective course enrollment must be finalized prior to winter break. After the enrollment, student pharmacists may only add or drop elective courses with consent from faculty facilitator who will evaluate each case independently. All add/drop of elective courses must be completed during the first 2 weeks of the term.

### **Independent Study**

Because of the unique and intensive nature of the College of Pharmacy's curriculum, the collaborative teaching and learning processes among team members and the sequencing of key courses, the Faculty does not believe that independent learning of didactic coursework meets the goals of the Doctor of Pharmacy program. In special cases, e.g. involving illness, reasonable accommodations will be made to permit the student pharmacist to continue in his/her course of study if possible. Additionally, the collaborative learning process among team members is a critical element of the curriculum. Student pharmacists accepted into the program must understand that their grades require successful collaboration with team members. Independent study of courses in the didactic curriculum in the College of Pharmacy is not permitted either in summer or during the academic year.

### **Research Activities**

Student pharmacists in the College of Pharmacy are encouraged to participate in research under the direction of faculty advisor(s). Student pharmacists with appropriate interests and academic preparation may participate in research as part of the elective program.

### **Annual Health Clearance Requirements**

The Annual Health Clearance Requirements can be located in the University Catalog. Students will not be permitted to begin any clinical practice experiences without adherence to the Annual Health Clearance and Pharmacy Intern License requirements described below. This is in addition to what is outlined in the University Catalog. Students are expected to be aware of, and abide by, both University and applicable College policies.

### **Pharmacy Intern License Requirement**

All student pharmacists are required to be licensed interns with the California State Board of Pharmacy

during all phases of the experiential program (IPPE, APPE, AE and all professional development curriculum activities). First year student pharmacists are required to file a copy of their intern license with the Director of Experiential Education by the first Monday in October of their first year in the PharmD program. Student pharmacists unable to obtain a valid pharmacy intern license by the conclusion of the P1 Fall Semester will not be permitted to begin any clinical practice experience and may be subject to a Leave of Absence. Student pharmacists found not eligible for an intern license by the State Board of Pharmacy will be dismissed from the PharmD program. The California State Board of Pharmacy is a body independent of the College of Pharmacy. The College of Pharmacy assumes no liability for decisions made by the Board regarding the status of a student pharmacist's intern license. The Board of Pharmacy requires the College to inform them when a student pharmacist is placed on academic suspension or on a leave of absence. Any student pharmacist who is not

actively enrolled in coursework as a result of being under academic suspension or leave of absence may have their intern license suspended during this time period. The student pharmacist should contact the CA State Board of Pharmacy directly for further information.

### **Protocol for Input on Matters of Student Concern**

When an issue or dispute arises between student pharmacists, the issue/dispute resolution process starts with communication among the involved student pharmacists. If a satisfactory resolution is not arrived at that level, the matter should then be addressed with the course facilitator or the faculty advisor. If the problem is not resolved at the faculty advisor/course facilitator level, the matter should be brought to the Assistant Dean of Student Affairs, followed by the Dean, in that order. If the matter has not been resolved at those levels, the final arbiter is the SVP/Provost.

When an incident arises involving a faculty member, the first step in the issue/dispute resolution process is discussion with the faculty member. If the matter is not satisfactorily resolved at that level, then the matter should be referred to the Department Chair, followed by the Dean, in that order. If the matter has not been resolved at those levels, the final arbiter is the SVP/Provost. Please note that grade appeals cannot be handled under this protocol.

When an incident arises involving a staff member, the dispute resolution process begins with the Department Chair, followed by the Dean. The Office of Human Resources is the final arbiter.

Failure to follow this sequence of steps will only serve to delay the appropriate resolution of the issue or dispute as the matter will only be referred back to the correct level in this chain of responsibility.

If student pharmacists wish to file a complaint with the College of Pharmacy regarding a faculty or staff member or another student pharmacist, they may also do so by completing the “Student Complaint Form” that is located on Blackboard in the Pharmacy Student Services course in the course documents.

## **Drug-Free Workplace Policy**

The Drug-Free Workplace Policy can be located in the University Catalog. Students will be required to complete a drug screening along with a background check on an annual basis to be permitted to begin any clinical practice experiences. This is in addition to what is outlined in the University Catalog. Students are expected to be aware of, and abide by, both University and applicable College policies.

## **Standards of Academic Integrity, Professionalism and Student Conduct**

The University Standards of Academic Integrity, Professionalism and Student Conduct can be located in the University Catalog. The standards outlined below are in addition to those outlined in the University Catalog. Students are expected to be aware of, and abide by, both University and applicable College policies.

### **College of Pharmacy Honor Code**

Honesty and integrity are among the most valued traits of a pharmacist. Each student pharmacist is expected to assume personal responsibility for those traits as part of their professional development. Academic dishonesty includes, but is not limited to, cheating, plagiarism, using unauthorized resources during examination(s), as well as signing another person's name to an attendance or examination document. Matters of academic and/or professional misconduct will be handled consistently with the University and College policies and procedures as outlined in the respective catalogs. Any individual who witnesses or becomes aware of a possible violation of this Honor Code is bound to report the incident to the appropriate College of Pharmacy personnel.

### **Academic Honesty**

Academic honesty includes, but is not limited to, maintaining original assessment answers after the graded examination has been returned, maintaining honesty during assessments, bringing only authorized resources to exams or other assessed exercises, signing only their name on attendance records or team examinations/assignments and giving proper credit when citing another person's work.

Violations of Academic Honesty include all forms of cheating and plagiarism.

### ***Cheating***

Cheating is the unauthorized use of information or study guides in any academic exercise. The methods of cheating are varied and well known. Cheating includes, but is not limited to:

- Copying from others during an assessment
- Sharing answers for a take-home assessment
- Using unauthorized notes during an examination
- Taking an assessment for another student.
- Asking or allowing another student to take an assessment for them.
- Tampering with an assessment after it has been corrected, then returning it for more credit than

deserved.

### ***Plagiarism***

Plagiarism is academic theft. It refers to the use of another's ideas or words without proper attribution or credit. An author's work is his/her property and should be respected by appropriate documentation. Credit must be given:

- For every direct quotation.
- When a work is paraphrased or summarized in whole or in part in their own words.
- For information that is not common knowledge. Information is common knowledge when it appears in several sources about the subject.

There is no distinction between those who violate rules of academic honesty and those who allow it to occur. Work in draft form may also be subject to assessment of plagiarism, so all student pharmacists are encouraged to ensure that their work is free from plagiarism before it is given to a faculty member and/or preceptor for review.

## **Professional Conduct**

Professional conduct includes, but is not limited to, all items as appropriate under the “Professional Standards” section below. All student pharmacists are expected to maintain the highest standards of professionalism at all times.

## **Professional Standards**

### ***Professional Dress and Behavior***

Student pharmacists are expected to dress and act appropriately. Student pharmacists are expected to follow all rules established by faculty and preceptors in the classroom, during clinical skills labs, at practice sites and during College-sponsored events. When requested, student pharmacists should use professional attire, such as wearing their white coats.

### ***Respect***

Student pharmacists should show respect to their fellow classmates, staff, faculty, colleagues and their patients. As future professionals, each student pharmacist must assume personal responsibility for honesty and integrity.

### ***Professionalism***

A more comprehensive description of professionalism expectations for student pharmacists includes:

1. Altruism
  - a. I will place my patients’ best interest above all others.
  - b. I will demonstrate unselfish concern for the welfare of others.
2. Accountability
  - a. I will acknowledge my limitations and seek help from an appropriate source when my knowledge, skills, abilities or judgment is inadequate for the academic or professional circumstance.
  - b. I will assume responsibility for my actions.
3. Excellence
  - a. I will exhibit my best effort in all academic and professional activities and endeavors.
  - b. I will commit to continual self-assessment, development and lifelong learning.
4. Duty
  - a. I will maintain a professional appearance when represented as a student pharmacist.
  - b. I will come prepared and adhere to established times for classes, assessments, laboratories, rotations and meetings.
  - c. I will utilize time efficiently and will adhere to established deadlines for projects and

assignments.

- d. I will acknowledge academic priorities over professional and personal activities.
- e. I will consult with faculty when professional or personal activities conflict with academic responsibilities and give due consideration to their recommendations.
- f. I will be present and will actively contribute in all team activities.
- g. I will formulate constructive evaluation of others' performance and will communicate it in a professional manner.
- h. I will demonstrate respect for patient privacy and maintain strict patient confidentiality.

#### 5. Honor and Integrity

- a. I will honor my commitments to others.
- b. I will act with honesty and integrity at all times.
- c. I will adhere to Western University of Health Sciences' Standards of Academic Integrity, Professionalism and Student Conduct as outlined in the University Catalog.
- d. I will adhere to the profession's code of ethics for pharmacists.
- e. I will perform all projects and assignments in an objective manner and will give credit to others who were actively involved in the development of ideas and outcomes.

#### 6. Respect for Others

- a. I will use professional language at all times when communicating as a student pharmacist.
- b. I will maintain a professional attitude/demeanor at all times when communicating as a student pharmacist.
- c. I will display active listening and show regard in the presence of classmates, faculty, staff, patients and health care professionals.
- d. I will display sensitivity towards other cultures, races, religions, genders and sexual orientations.
- e. I will contribute to an environment conducive to learning.
- f. I will display a positive attitude when receiving constructive feedback.
- g. I will strive to resolve conflict in a respectful manner.
- h. I will exhibit empathy, concern and respect for my patients and their representatives.
- i. I will interact with peers, healthcare professionals and patients with integrity and respect.

## Reporting Violations

### ***Responsibility of the Student Pharmacist***

Because there is no distinction between those who violate rules of academic and professional honesty and those who allow it to occur, student pharmacists have a professional obligation to report violations. Violation of the College of Pharmacy or University Standards of Academic Integrity, Professionalism and Student Conduct should first be reported to those closest to the source of the violation; this may include course faculty, course facilitators, faculty advisors or the Office of the Dean. When appropriate, student pharmacists may report a witnessed violation to the Assistant Dean of Student Affairs, who will maintain the student pharmacist's anonymity.

### ***Responsibility of the Assistant Dean of Student Affairs***

Upon receiving a report of academic or professional misconduct from a student pharmacist, the Assistant Dean of Student Affairs will report this violation to the appropriate person involved, course facilitator or Office of the Dean, while maintaining student anonymity.

## Academic Misconduct

### ***Responsibility of the Faculty***

When faculty observe or are made aware of a violation, they have the authority to handle an incident directly. The following list is meant to be illustrative rather than exhaustive as all faculty reserve the right to impose sanctions based upon their good judgment of the given situation:

- Verbal reprimand and/or moving a student pharmacist during an assessment
- No credit given for the question or assessment
- Assignment of additional work
- Re-examination
- Lowering the course grade.
- Assignment of a "U" grade for the course.

If the faculty member imposes any or all of these remedies, he or she will notify the student pharmacist and submit an "Academic and Professional Misconduct Report Form" to the Office of the Dean. If a student pharmacist receives a "U" grade because of academic misconduct, the student pharmacist is not eligible for course remediation and must repeat the course during the next academic year.

## Professional Misconduct

### ***Responsibility of the Faculty and Staff***

When faculty or staff observe or are made aware of a violation, they are to complete and Academic and Professional Misconduct Report Form. The completed Form is submitted to the Dean.

The following list of sanctions that can be implemented in established cases of Professional Misconduct is meant to be illustrative rather than exhaustive:

- Write a formal letter of apology.
- May not hold office in any College or University organization for one academic year.
- Complete additional professional activities.
- Write a 10-page report on professionalism and professional conduct in the pharmacy/health care environment.
- Be subject to a conduct suspension.

### ***Responsibility of the Dean***

The Dean has the sole authority to adjudicate and impose any sanctions on all academic and professional conduct issues. Once the Dean receives an “Academic and Professional Misconduct Report Form”, the Dean may resolve the matter without convening a hearing before the college’s Student Performance Committee, unless the student requests that a hearing be convened. If the issue is referred to the Student Performance Committee, the Dean will decide and implement any sanctions on the case upon receiving the Committee’s final recommendation. If the Dean resolves the matter without convening a hearing before the Student Performance Committee, the final decision will be reported to the Provost’s Office and included in the student’s file. The student pharmacist may appeal the action of the Dean following policies listed in the General Academic Policies and Procedures section of the University Catalog.

### ***Responsibility of the Student Performance Committee***

Upon preliminary investigation, the Student Performance Committee may request that the issue(s) be referred back to the Dean with a rationale as to why this would be a more appropriate venue to address the issue(s). When the Student Performance Committee believes that a case warrants formal investigation, the Committee will appoint a Student Conduct Subcommittee, which shall consist of at least one member of the Student Performance Committee, who shall serve as Chair, two voting faculty members not on the Committee and the Assistant Dean for Student Affairs who will serve as a non-voting member.

As future professionals, each student pharmacist must assume personal responsibility for honesty and integrity.

When dealing with allegations of student pharmacist violations of professional conduct, the Student Performance Committee follows the following procedure. For a full account of the hearing process, please refer to “Information for Students about Hearings Involving Alleged Violations of the Standards of Student Conduct,” located in University Catalog.

1. The Committee Chair will notify the student pharmacist in writing of the specific charges and the time and date of the hearing where the charges will be considered by the Committee/Subcommittee.
2. The notice shall state whether dismissal from the University may be considered if the charges are found to be true.
3. If a member of the Student Performance Committee/Subcommittee has a conflict of interest

regarding the allegations, the chairperson of the Committee/Subcommittee shall recuse the member and will appoint another faculty member to serve as a member of the Committee/Subcommittee for the purposes of hearing and deliberating on the allegations.

4. Except as noted below, the meeting to consider the charges will be closed to all individuals not directly involved.
5. The Committee/Subcommittee may exclude witnesses except during the time they are testifying.
6. If the notice of the hearing states that dismissal from the University will be considered if the charges are found to be true, or if the circumstances warrant, the student pharmacist may request permission for a mentor to appear at the meeting to assist the student pharmacist.
  - a. The mentor is normally limited to advising the student pharmacist and is not permitted to examine witnesses or otherwise participate directly in the proceedings.
  - b. The student pharmacist shall make any request for a mentor to appear or participate in writing, and the request must identify the mentor the student pharmacist desires and provide any additional information the student pharmacist deems relevant to the request.
  - c. If the allegation involves activities that may result in criminal charges being filed, the student pharmacist's request for a mentor must be granted.
  - d. In other circumstances the Chair of the Committee/Subcommittee will normally inform the student pharmacist within three (3) business days of receipt of the request whether the mentor will be permitted to attend the hearing.
7. If the student pharmacist requests, the specific charges will be read to the student pharmacist by the Chair of the Committee/Subcommittee. If the charges are not read, the charges will be deemed those specified in the notice of the hearing.
8. The student pharmacist will be permitted the opportunity to testify and present evidence and witnesses on his/her behalf.
9. In addition, the student pharmacist, as well as any witnesses, is subject to questioning by members of the Committee/Subcommittee.
10. The student pharmacist will also be provided the opportunity to question witnesses called by the Committee/Subcommittee. If the Subcommittee agrees to consider affidavits, declarations and other written statements and documents as part of its deliberations, the student pharmacist will be provided copies of any such documents at least two (2) days prior to the hearing.
11. If the student pharmacist desires to present any written documents, these documents must be provided to the hearing panel at least two (2) days prior to the hearing. The student pharmacist is responsible for presenting all evidence he/she deems relevant at the scheduled hearing unless such evidence cannot be presented at that time due to circumstances beyond the student pharmacist's control. Should such be the case, the Chair of the Committee/Subcommittee, at

his/her discretion, may grant a continuation of the hearing if warranted.

12. Similarly, if a party or witness called by the Committee/ Subcommittee is unavailable, but whose testimony is considered important to the hearing or due to other circumstances, a continuation of the hearing may also be granted.
13. The Committee/Subcommittee shall determine whether, based on the evidence presented, it is more likely than not that the allegation is in violation of University and/or College conduct policies.
14. As per University catalog, if a violation has been found to have occurred, the Committee will convene a second hearing for the purpose of considering recommended sanctions. The student has the right to present, at this hearing, evidence of any mitigating circumstances that the student believes should be considered. The Committee may consider any prior record of discipline and any other information that is pertinent to recommending sanctions.
15. If a Subcommittee facilitated a Student Conduct hearing, the Student Conduct Subcommittee will forward their recommendation to Student Performance Committee.
16. The Student Performance Committee will review the recommendation and then forward the original recommendation, along with a statement of concurrence or of an alternate recommendation, to the Dean.
17. The Dean will issue the final decision, in writing, to the student.

### ***Maintenance of Records***

Student Professional Conduct records will be maintained by the Office of the Dean of the College of Pharmacy for seven years or until the student pharmacist for whom they pertain graduates, unless the Dean determines there is good reason to retain the records longer. In cases where the result is dismissal, records will be maintained indefinitely.

### **Conduct Suspension**

Conduct suspension may be imposed because of conduct/behaviors that are deemed by the Student Performance Committee to be adversely affecting the student pharmacist's pharmacy school performance and ability to engage the subject material, but the behavior-conduct does not, in the opinion of the Committee, warrant a recommendation for dismissal. The student pharmacist would be recommended for conduct suspension for a period of time deemed appropriate by the Student Performance Committee and/or Dean, but generally would not exceed one academic year or until the conditions that provoked the conduct suspension in the first place are satisfactorily remedied in the opinion of the Student Performance Committee/Dean.

### **Appeal Process**

In accordance with University catalog, the Dean shall have authority to make decisions regarding a student's status in matters of academic progression/promotion, suspension, student conduct, dismissal and graduation. Students may request an appeal of the Dean's decision to the SVP/Provost by following the process defined in the 'Student Appeal Process' section of the University Catalog.

## **Standards of Academic Progress**

Student pharmacists are required to maintain a cumulative 2.00 grade point average (GPA) during the didactic portion of the curriculum. The academic year is divided into two academic terms with the first (fall) term consisting of courses offered between August and December and the second (spring) term consisting of courses offered between January and May.

The student pharmacist's cumulative GPA will be calculated at the end of each academic term. For the first and second years, an academic term is equal to a semester. For the third year, the academic "didactic term" includes courses PHRM 6301-6306, while the "APPE" term includes courses R1-R2.

### **Student Performance Committee**

The College of Pharmacy Student Performance Committee is charged with the following responsibilities: (a) to periodically review the academic achievement and comprehensive evidence of progress of all student pharmacists who are pursuing the PharmD degree (particular attention will be given to student pharmacists in academic difficulty as their grades are made available to the Committee by the Registrar and/or the Associate Dean for Academic and Student Affairs) and (b) to receive reports from the College Dean regarding any student pharmacist whose professional or personal conduct is deemed unsatisfactory. Appropriate professional and personal conduct is defined by the University's and College's codes of professional conduct (refer to Standards of Academic Integrity, Professionalism and Student Conduct section above and/or the University Catalog).

### **Academic Progression in the Didactic Curriculum**

The Student Performance Committee will review each student pharmacist's progress at the end of each academic term. Student pharmacists must complete all courses successfully in a subordinate year of the program before they can progress to the next year in the program. In addition, student pharmacists must complete all didactic courses successfully before they will be allowed to start the Advanced Pharmacy Practice Experience portion of the curriculum.

### **Early Intervention Program**

An early intervention program known as "Supporting Student Success" (SSS) has been implemented to support the academic success of our student pharmacists. This program provides interventions as soon as it is established by the Office of Academic and Student Affairs that a student pharmacist may be in academic distress based on performance in assessments in block courses. Some resources that are made available to the student pharmacists include course facilitator and faculty assistance, peer mentoring, note taking facilities (when available), and counseling on non-academic issues by the Assistant Dean of Student Affairs. Students who meet the criteria for early intervention are highly encouraged to seek support from the various resources made available to them. Additionally, student pharmacists are also directed to use university resources such as the TAP program (see below) to receive immediate assistance. The Student Performance Committee reviews progress of students on a periodic basis.

### **Tutorial Assistance Program**

A Tutorial Assistance Program (TAP) has been established to assist student pharmacists experiencing academic difficulty. Student pharmacists will be recommended for this program by a faculty advisor or professor. Student pharmacists may also self-identify to TAP to receive assistance. The tutors will be chosen on the recommendation of the faculty in each discipline. Group tutoring is the methodology most used by the TAP department. For assistance, contact the Learning Enhancement and Academic Development Office (LEAD).

### **Eligibility to Participate in Advanced Pharmacy Practice Experiences (APPEs)**

Student pharmacists may not start an APPE until the Student Performance Committee has been notified that all courses have been successfully completed. The Student Performance Committee will ensure that student pharmacists are academically eligible to begin APPE's. Student pharmacists with less than a 2.00 cumulative GPA following the third-year didactic term cannot begin the APPE portion of the curriculum and will automatically be placed on academic suspension (see "Academic Suspension", below).

### **Progression to the Fourth Professional Year**

Student pharmacists must have completed at least two APPE's successfully in their P3 year to progress to the fourth year of the program. Exceptions to this policy will be considered on a case-by-case basis.

### **Graduation**

A student pharmacist will be recommended for the Doctor of Pharmacy degree if the student pharmacist meets the following:

1. Is not on probation or suspension and has completed all prescribed academic and clinical requirements with a cumulative grade point average of or above 2.00. In addition, student has no outstanding grade of "I", "NCR" or "U" in coursework required for completion of the PharmD degree. (**Exception:** Student pharmacists entering in fall 2015 and beyond are required to complete four credit hours of elective coursework. Students with a "NCR" or "U" grade in an elective course may still graduate if they have successfully completed the four-credit hour elective requirement.)
2. Has demonstrated no serious deficiencies in ethical, professional or personal conduct, as defined in University Catalog, "General Academic Policies and Procedures" section, which would make it inappropriate to award the degree of Doctor of Pharmacy.
3. Has complied with all legal and financial requirements of the University, as stated in the University Catalog.
4. Has attended in person and participated in the Commencement ceremony at which time the Doctor of Pharmacy degree is conferred. Unless special permission has been granted by the Dean, each student pharmacist must participate in his or her respective commencement ceremony. If the Dean grants special permission for excusal from commencement, the graduate may be required to present himself or herself to the Dean or their designee at another specified date to take their profession's oath before their diploma will be released. Requests for excusal will only be granted for extenuating circumstances, such as a prior military commitment.

Student pharmacists may participate in commencement activities provided they will complete all requirements of the program by December 31 of that calendar year. No student pharmacist will receive his or her degree until all requirements for graduation have been completed. Degrees will be dated as appropriate to completion date.

### **Adverse Actions**

#### ***Academic Probation***

Student pharmacists will be placed on academic probation under the following circumstances (see **University**

***Catalog, General Academic Policies and Procedures section):***

1. A student pharmacist earns a failing (“U”) grade in any didactic course (see section on “Remediation of Courses in the Didactic Curriculum”).
2. A student pharmacist does not achieve the required 2.00 cumulative GPA at the end of the academic year for which they are enrolled. Student pharmacists placed on academic probation for having less than 2.00 at the end of the academic year will be required to remediate or repeat all coursework in which they received a “U” grade for the same academic year for which the student pharmacist’s cumulative GPA was below 2.00 (see section on “Remediation of Courses in the Didactic Curriculum”).
3. The first time a student pharmacist receives a failing grade for IPPE1 and/or IPPE 2 or any APPE rotation (see section regarding Failure to Meet Standards – First APPE Rotation Actions).
4. A student pharmacist receives a failing (“NCR”) grade during the Advanced Elective rotation (see section regarding Failure to Meet Standards – Advanced Elective Rotation Action).

Student pharmacists in Year 2 (P2) of the professional program may be asked to complete the IPPE2 (PHRM 6999) summer rotation requirement even if they have failed the didactic component that would require them to repeat the year.

Student pharmacists successfully completing IPPE-1 5997, IPE-2 6999, IPE 5000, IPE 5100, IPE 6000 and/or IPE 6100 (i.e., received a CR grade) will not have to retake those requirements when repeating courses or returning from a leave of absence.

The action will be communicated with the student pharmacist on behalf of the office of the Dean in writing . When a student pharmacist has been placed on probation, the following apply:

1. The student pharmacist may not hold office in any University or College organization.
2. Within 2 weeks of the date that the student pharmacist receives notification of his/her academic probation, the student pharmacist must meet with:
  - a. The Learning Enhancement and Academic Development (LEAD) office staff to develop an academic action plan. The student pharmacist must obtain a signature from the LEAD office documenting agreement on the action plan.
  - b. The student pharmacist’s faculty advisor to review the student pharmacist’s proposed improvement plan. The student pharmacist must obtain a signature from the faculty advisor documenting agreement on the action plan.
  - c. The Associate Dean for Academic and Student Affairs to provide the required signed documentation.
  - d. The Assistant Dean of Student Affairs, if it is determined that non-academic issues (e.g., illness, family emergency, death or acute or chronic illness of an immediate family member, divorce or other personal family concerns) are impacting academic performance.

In addition, student pharmacists are encouraged to seek regular assistance from any University or College resource deemed necessary to improve his or her academic performance over the duration of probation.

#### ***Financial Aid Warning Policy (Title IV and Title VII)***

If a student pharmacist is not making Satisfactory Academic Progress (SAP) they may be placed on “Financial Aid Warning” status for the next payment period and continue to receive financial aid for that period. Financial Aid is any financial assistance offered to the student pharmacist for paying for their education, such as loans, scholarships, Federal Work-Study, grants and stipends (judged on the criteria of the stipend). Student pharmacists who fail to make SAP by the end of the payment period lose Financial Aid eligibility.

It is the policy of the Financial Aid Office (FAO) that once a student pharmacist has been placed on academic probation for not meeting SAP standards as defined by the college, the FAO will automatically place the student pharmacist in a Financial Aid Warning status. During the next academic term, if the student pharmacist does not meet SAP standards and the college places the student pharmacist on academic suspension, the student pharmacist will no longer be eligible for financial aid. If the student pharmacist appeals the academic suspension and the appeal is approved, financial aid will be reinstated. If the student pharmacist is directed to audit courses, those courses will not be covered by financial aid.

#### ***Remediation for Courses in the Didactic Curriculum***

A student pharmacist who receives a “U” grade in a required didactic course must remediate the course successfully to progress in the curriculum. However, a maximum of only two “U” grades are remediable per academic year (or at the end of the third-year didactic term). A student pharmacist receiving three “U” grades during any academic year of the required didactic courses in the curriculum will be ineligible for remediation and will be required to repeat the year in which the “U” grades were received. As per University guidelines, the student will be automatically placed on academic suspension during this time. This rule will apply regardless of the GPA of the student pharmacist at the time of receiving three “U” grades. Student pharmacists repeating the year will have to retake only those courses for which they received the “U” grades. No remediation is allowed for student pharmacists who receive a “U” grade in a repeated course (see section on “permanent dismissal for academic reasons”). A student pharmacist cannot repeat any given year of the curriculum more than once, under any circumstances.

Remediation is not a substitute for full course participation. To be eligible for remediation, a student pharmacist must have taken all exams, completed all course assignments and participated in all graded activities, unless excused (refer to Course Participation and Attendance section). Student pharmacists who have not completed all course-assessed activities are not eligible for course remediation.

Remediation should include a joint (faculty and student pharmacist) diagnostic evaluation of the student pharmacist’s weaknesses, a self-directed plan for strengthening the student pharmacist’s weaknesses with periodic reviews in consultation with the facilitator, followed by a comprehensive assessment, as recommended by the course facilitator, over the entire course material.

The Student Performance Committee, in consultation with the course facilitators, will set the remediation schedule. First and second year student pharmacists will have their remediation exams scheduled during the month of June. Third year student pharmacists will remediate failed courses prior to beginning the Advanced Pharmacy Practice Experiences (APPE) and will be required to take R-1 as an “off” rotation. Student pharmacists will be informed of the remediation dates via email with at least 72 hours advance notice. Student pharmacists who require remediation but are unable to make themselves available on the

designated examination date will not be allowed to progress in the curriculum and will be placed on academic suspension. They will be required to repeat the course at the next regularly scheduled offering.

Student pharmacists who require remediation are encouraged to share their June/February plans with the appropriate course facilitators prior to the remediation dates being determined. Once the remediation dates are confirmed, there will be no changes made to accommodate student pharmacist requests. There will be no make-up remediation examinations.

Student pharmacists must pass the remediation examination and all other required assignments in order to pass the course.

After completing a remediation examination, the highest grade that a student will be able to achieve for the course will be a "C".

Student pharmacists who fail the remediation exam will not be allowed to progress to the next year and must repeat the course at its next offering.

### ***Remediation for Courses in the Elective Curriculum***

There will be no remediation for the didactic elective courses. Student pharmacists receiving a "U" grade or a "No Credit" grade must fulfill the required credits by retaking the same course or a different elective course.

### ***Academic Suspension***

As per University and College guidelines student pharmacists who are deemed unable to continue in the curriculum due to inadequate performance and are required to repeat a given academic year or portion thereof, will be placed on academic suspension through such time as they can resume their studies by starting the courses the student is required to repeat. Throughout the time the student is on academic suspension, he or she is also on academic probation, and remains on academic probation until all coursework has been satisfactorily remediated.

### ***Permanent Dismissal for Academic Reasons***

A student pharmacist is subject to permanent dismissal from the program if he/she fails to accomplish course-learning objectives and/or fails to achieve academic expectations even after granted the opportunity to repeat coursework. Reasons for academic dismissal are as follows:

1. A student pharmacist earns a failing grade ("U") in any four (4) required courses during the first year of the curriculum (P1). This rule does not apply to incoming PIP students.
2. A student pharmacist earns a failing grade ("U") in any required course that the student pharmacist is repeating.
3. A student pharmacist fails to earn a semester GPA of 2.00 by the end of the first term of repeated coursework.
4. A student pharmacist fails to earn a cumulative GPA of 2.00 at the end of the academic year for which the student pharmacist was placed on probation previously.
5. A student pharmacist earns a failing grade ("U") in a required course after remediation during a

repeat year regardless of GPA.

6. A student pharmacist currently repeating coursework due to sub-standard academic performance is found in violation of the University's or College's Standards of Academic Integrity, Professionalism and Student Conduct at a level that merits course failure or repeating the course.
7. A student pharmacist fails (receives an "NCR" grade) any APPE rotation after the student has been required to re-start the APPE rotation sequence due to failure to meet performance standards for the APPE rotations (see section regarding Failure to Meet Standards – Second APPE Rotation Actions).
8. A student pharmacist fails any IPPE (1 and/or 2) rotation after the student pharmacist has been required to re-start the IPPE rotation sequence due to failure to meet performance standards for the IPPE rotations (see section regarding Failure to Meet Standards – IPPE Rotation Actions).

#### ***Failure to Meet Standards – IPPE Rotation Actions***

When a student pharmacist receives a failing or incomplete (I) grade in a pharmacy practice experience, the Director of Experiential Education or his/her designee will notify the Associate Dean for Academic and Student Affairs in a timely manner upon which the student pharmacist will be placed on Academic Probation.

Student pharmacists must repeat any pharmacy practice experience in which a failing grade is issued. The experience must be repeated with a WesternU-paid, full-time faculty member. If the failing grade is earned in an experience for which no WesternU-paid, full-time faculty member is available to serve as preceptor, the student pharmacist will retake the experience with a preceptor selected by the Director of Experiential Education.

Receipt of a failing grade for any repeat IPPE experience may result in permanent dismissal from the PharmD program.

In the event that an "I" grade is converted into a failing grade, the terms and conditions governing the receipt of a first failing grade in an IPPE rotation will be followed.

#### ***Failure to Meet Standards – First APPE Rotation Actions***

APPE grades are assigned by the Director of Experiential Education and are primarily based upon the evaluations submitted by each student pharmacist's preceptor. In the case of a student pharmacist not reporting to a pharmacy practice experience without an appropriate excused absence, the Director of Experiential Education shall report a grade of "NCR".

When a student pharmacist receives a "NCR" or incomplete (I) grade, the Director of Experiential Education or his/her designee will notify the Associate Dean for Academic and Student Affairs in a timely manner. The student pharmacist will be allowed to continue with their scheduled pharmacy practice experiences but will be placed on Academic Probation by the Associate Dean for Academic and Student Affairs.

Student pharmacists must repeat any pharmacy practice experience in which an "NCR" grade is issued. The experience must be repeated with a WesternU-paid, full-time faculty member. If the "NCR" grade is earned in an experience for which no WesternU-paid, full-time faculty member is available to serve as preceptor, the student pharmacist will retake the experience with a preceptor selected by the Director of

## Experiential Education.

In the event that an “I” grade is converted into a “NCR” grade, the terms and conditions governing the receipt of a first “NCR” grade in an APPE rotation will be followed. Pharmacy practice experiences that need to be repeated should, where possible, be made up during the student pharmacist’s designated “off rotation”. Should a student pharmacist need to make up an experience after a designated “off rotation” has been completed, the experience must be made up after the scheduled Advanced Elective Rotation. No “split” pharmacy practice experiences will be allowed. To monitor the quality of a student pharmacist’s performance on APPEs, all student pharmacists must complete at least one APPE with a preferred experiential site (as defined by the Office of Experiential Education) with preference being given to voting, full-time faculty members of the College. If a student pharmacist fails this required APPE assignment, he/she must complete another APPE successfully with another voting, full-time faculty member.

Receipt of a failing grade for any repeat APPE experience may result in permanent dismissal from the PharmD program.

### ***Failure to Meet Standards – Second APPE Rotation Actions***

In the event that a student pharmacist receives a “NCR” grade for a second APPE, the student pharmacist will be placed on academic suspension and required to repeat the entire APPE sequence (six (6) experiences).

Student pharmacists will be able to re-start/repeat the APPE sequence only once. Thus, student pharmacists repeating the APPE sequence cannot fail any further pharmacy practice experiences. Receipt of an “NCR” grade for any experience after re-starting the APPE sequence may result in permanent dismissal from the PharmD program.

### ***Failure to Meet Standards – Advanced Elective Rotation***

When a student pharmacist receives a “NCR” or an incomplete grade, “I”, in the Advanced Elective (AE) program, the Director of Experiential Education or his/her designee will notify the Associate Dean for Academic and Student Affairs in a timely manner. If a student pharmacist receives a grade of “NCR” for an Advanced Elective, he/she will be placed on academic probation by the Associate Dean for Academic and Student Affairs. The student pharmacist must repeat the AE in which the “NCR” grade was issued with a WesternU paid, full-time faculty member at a time that is mutually agreed upon by the Director of Experiential Education and the preceptor. If this “NCR” grade is earned in an AE for which there is no WesternU full-time, paid faculty member to serve as preceptor, the student pharmacist will complete the AE with a preceptor selected by the Director of Experiential Education at a time that is mutually agreed upon by the Director of Experiential Education and the designated preceptor. Student pharmacists who receive a “NCR” grade for an AE will not be eligible to graduate until the AE is repeated successfully and a grade of “CR” is recorded.

### ***Appeal Process***

In accordance with the University catalog, the Dean shall have authority to make decisions regarding a student’s status in matters of academic progression/promotion, suspension, student conduct, dismissal and graduation. Students may request an appeal of the Dean’s decision to the SVP/Provost by following the process defined in the ‘Student Appeal Process’ section of the University Catalog.

## Evaluation and Grading

Student pharmacists are required to meet a specified set of outcome objectives in each course as described in each course syllabus/block plan. The course facilitator will provide student pharmacists with the learning objectives, instructional methods, assessment strategies, schedules and the grading criteria, in writing, prior to the beginning of each course. Achievement of course learning objectives will be based on performance on individual quizzes, examinations and on any other graded assignments or criteria, including team or independent Pass/No Pass assessments, established by the course facilitator.

### Grading Scales

Course grades, including those for Introductory Pharmacy Practice Experiences (IPPE-1 (PHRM 5997, 6300) and IPPE-2 (PHRM 6999) will be assigned as follows grades are rounded to the nearest percent):

<u>Grade</u>	<u>Equivalent</u>	<u>GPA Points</u>
A	90-100%	4.00
B	80-89%	3.00
C	70-79%	2.00
U	Less than 70%	0.00

Grading criteria for the Introductory Pharmacy Practice Experiences (IPPE-1A, IPPE-1B and IPPE-2) are described in their individual course syllabi. Grading for the Advanced Pharmacy Practice Experiences (APPEs) is described in detail in The Syllabus for Advanced Pharmacy Practice Experiences.

Grades for Advanced Pharmacy Practice Experiences (APPEs) /Advanced Electives (AE) grades will be assigned as follows:

<u>Grade</u>	<u>Equivalent</u>	<u>GPA Points</u>
CR	Credit	N/A
NCR	No Credit	N/A

Grading for the Interprofessional Education (IPE) courses (IPE 5000, IPE 5100, IPE 6000, and IPE 6100) is described in their individual course syllabi. Grades in these courses will be assigned as follows:

<u>Grade</u>	<u>Equivalent</u>	<u>GPA Points</u>
CR	Credit	N/A
NCR	No Credit	N/A

### Administrative Grades

<u>Grade</u>	<u>Equivalent</u>	<u>GPA Points</u>
AU	Audit	N/A
I	Incomplete	N/A
M	Missing	N/A
TR	Transfer	N/A
W	Withdrawal	N/A
WPC	Waived for Prior Credit	N/A

## **Audit**

An “AU” (Audit) is assigned to a student who pays tuition for the course and attends class activities but does not complete examinations and does not receive course credit. However, under certain circumstances, at the discretion of the College Dean, a student who is repeating or undergoing remediation may be required to complete course examinations and/or other required work products while auditing the course for no grade.

## **Missing Grades**

A grade of ‘M’ for Missing will be input by the Office of the Registrar if a student’s grade is not available by the deadline for grade submission. An ‘M’ grade is not included in the GPA calculation and will be replaced by the grade earned in the course once submitted by the course director/instructor. ‘M’ grades should not be used by the program in place of an incomplete, “I”, grade.

## **Incomplete grade, “I”**

A course facilitator has the option of assigning an incomplete grade under the following circumstances:

1. A student pharmacist has a verifiable “Excused Absence” for missing an assessed activity due to a verifiable “Excused Absence” (see Course Participation and Attendance).
2. Course facilitators are responsible for identifying the most appropriate methods(s) for assessing student pharmacists’ mastery of specific skills and/or topics. For some assessed activities, course facilitators may specify within a course block plan that sub-standard performance on specific assessed activities can result in “I” grades. Typically, this will apply to skills for which student pharmacists must demonstrate mastery before proceeding to more advanced topics or skills.

The following describes the process necessary for resolving an incomplete grade.

The student pharmacist is responsible for meeting with the course facilitator to receive direction regarding what is necessary to resolve the incomplete grade. In a meeting between the student pharmacist and the course facilitator issuing the “I” grade, an Incomplete Contract Form must be completed. The form is available from the College of Pharmacy Academic and Student Affairs Office or from the Registrar’s intranet site. The Contract Form stipulates the requirements of the student pharmacist that are needed to remove the incomplete grade. The original form will be kept by the course facilitator. Copies of the form must be sent to the student pharmacist, to the College of Pharmacy Assistant Dean of Student Affairs (for inclusion in the student pharmacist’s file), and to the Registrar’s Office.

The grade of “I” is not to be awarded in place of a failing grade or when the student pharmacist is required to repeat the course. In such a case, a grade other than “I” must be assigned. The incomplete, “I”, grade remains on the transcript. In the event that an “I” grade is carried into a new academic year the Dean may conditionally promote the student pharmacist to the next academic year in the program pending the satisfactory clearance of the incomplete grade.

If a student pharmacist fails to comply with the conditions outlined in the notification, or fails to satisfactorily convert the incomplete grade to a passing grade, the incomplete grade will be converted to a “U” grade (if the “I” grade was issued in a didactic course) or to an “NCR” grade (if the “I” grade was issued in an experience course). The student pharmacist will be placed on academic suspension and will be required to repeat the course at the next regularly scheduled offering.

In the event that the “I” grade is converted to a “U” grade; the student pharmacist’s GPA will be recalculated. If there are any consequences for academic progression, the consequences will be effective the same day the incomplete grade is changed (see Failure to Meet Standards).

### Grade Reports

Official grades are turned in to the Registrar by the faculty of the College of Pharmacy, at which time the Student Portal, [you.westernu.edu](http://you.westernu.edu), is updated. Official grade reports and unofficial transcripts will be available on the Student Portal throughout the academic year.

### Course Grade Appeals

Faculty has the expertise and authority to render judgment regarding the quality of a student pharmacist’s academic work. The course facilitator has final responsibility in assigning grades to activities assessed within a course. A grade appeal shall be confined to charges of unfair action toward an individual student pharmacist and may not involve a challenge of an instructor’s grading standard. In all instances, a student pharmacist who believes that an appropriate grade has not been assigned must first seek to resolve the matter informally with the course facilitator. If the matter cannot be resolved informally, the student pharmacist may then submit an appeal. The Assistant Dean of Student Affairs may counsel the student pharmacist prior to submitting the appeal.

Course Grade Appeals will only be considered when they meet the following required criteria:

1. Only the final grade in a course may be appealed. In the absence of compelling reasons, such as clerical error, prejudice or capriciousness, the grade assigned by the course facilitator is to be considered final. The course facilitator has final decision regarding:
  - a. Any questions or concerns related to grades assigned to specific course assessments.
  - b. Any questions or concerns relating to specific test/exam questions.
  - c. Any questions or concerns related to the interpretation of grading criteria for assessing mastery of course material.
2. In a grade appeal, only arbitrariness, prejudice/bias and/or error will be considered as legitimate grounds for an appeal:
  - a. **Arbitrariness:** The grade awarded is not indicative of the student pharmacist’s academic performance on record and represents such a substantial departure from accepted academic norms as to demonstrate that the facilitator did not follow College policy or the course syllabus.
  - b. **Prejudice/Bias:** The grade awarded was motivated by ill will or preconceived notions of poor student performance by the facilitator/faculty.
  - c. **Error:** The facilitator made a mistake. There was a computation error resulting in an incorrect final grade, but the facilitator refuses to correct the error. This procedure does not cover instances where student pharmacists have been assigned grades based on academic dishonesty, academic misconduct or violation of the assessment day policy.
3. In order for a Grade Appeal to be considered, the student pharmacist must:

- a. Submit the grade appeal in writing to the Assistant Dean of Student Affairs within five business days of the final posting of the grade.
- b. Specify in the written appeal how the Required Criteria (above) apply to the situation.
- c. Provide specific documentation/evidence in support of the applicable Required Criteria.

The appeal shall be submitted to the Assistant Dean of Student Affairs who, upon receipt, will forward a copy of the appeal to the Chair of the Student Performance Committee. If the Student Performance Committee, upon review of the appeal, believes that the case warrants formal investigation, the Committee may decide to investigate the matter or decide that a Grade Appeals Sub-Committee will be appointed. If the Committee elects to investigate the matter, they may request a meeting with the student before deliberating on the appeal at hand.

If a Grade Appeals Sub-Committee is appointed, it shall consist of at least one member of the Student Performance Committee, who shall serve as Chair, two voting faculty members not on the Committee, and one student pharmacist representative. All members of the Grade Appeals Sub-Committee have full voting privileges.

The Grade Appeals Sub-Committee will conduct its own investigation in conjunction with such an appeal following established procedural guidelines for handling student appeals of an academic nature. The student pharmacist making the appeal will be invited to meet with the Grade Appeal Sub-Committee to substantiate his/her appeal. The Grade Appeals Sub-Committee will forward their recommendation to the Student Performance Committee. The Student Performance Committee will review the recommendation and then forward the original recommendation, along with a statement of concurrence or of an alternate recommendation, to the Dean. Should the Student Performance Committee elect to investigate the matter, it will follow the same procedures as the Grade Appeal Sub-Committee and forward the Committee's recommendation to the Dean. The Dean's decision on the grade earned by the student pharmacist is final.

### **Credit Hour Calculation**

The College of Pharmacy calculates credit hours as follows:

- 15 hours of lecture = 1 credit hour
- 30 hours of workshops/discussions/laboratory = 1 credit hour
- For IPPE courses (PHRM 5997 and 6999), 40 contact hours = 1 credit hour
- For APPE (PHRM 7000-level courses) and AE (PHRM 8400), 40 contact hours = 1 credit hour

## Curriculum Organization

### Year 1

The 5000 series is assigned to didactic blocks in the Basic Science Foundations and Professional Practice Foundation blocks for the first-year pharmacy student pharmacists (P1).

<b>Year 1, Fall Semester, PharmD</b>		
<b>Course</b>	<b>Title</b>	<b>Credit Hours</b>
IPE 5000	Patient Centered Cases I	1.00
PHRM 5110	Introduction to Pharmacy and Healthcare Systems	2.00
PHRM 5111	Foundations of Pharmacy Practice and Self Care Therapeutics I	4.00
PHRM 5221	Pharmacological Basis of Therapeutics I	3.50
PHRM 5222	Pharmacological Basis of Therapeutics II	3.00
PHRM 5301	Pharmaceutics/Biopharmaceutics I	3.50
PHRM 5401	Immunology	3.50
PHRM ELEC	Elective Courses	0.00 - 4.00
<b>Semester Total:</b>		<b>20.50 – 24.50</b>
<b>Year 1, Spring Semester, PharmD</b>		
<b>Course</b>	<b>Title</b>	<b>Credit Hours</b>
IPE 5100	Patient Centered Cases II	1.00
PHRM 5112	Foundations of Pharmacy Practice and Self Care Therapeutics II	4.00
PHRM 5113	Research Methods and Biostatistics	1.00
PHRM 5114	Pharmacy Calculations (On-line)	1.00
PHRM 5223	Pharmacological Basis of Therapeutics III	3.00
PHRM 5224	Pharmacological Basis of Therapeutics IV	3.50
PHRM 5302	Pharmacogenomics and Pharmaceutics	3.00
PHRM 5501	Pharmacokinetics	3.50
PHRM 5997	Introductory Pharmacy Practice Experience 1	4.00
PHRM ELEC	Elective Courses	0.00 - 4.00
<b>Semester Total:</b>		<b>24.00 – 28.00</b>
<b>Year 1 Total:</b>		<b>44.50 – 48.50</b>

### Year 2, Year 3 – Fall Semester

The 6200 series describes the didactic curriculum for second-year student pharmacists (P2). The 6300 series denotes the didactic curriculum for the first half of the third year (P3). The series of Pharmacy Practice blocks (6201 – 6306) presents topics and accompanying skills that lay the foundation for the practice of pharmacy. The focus of the pharmacy practice blocks is to teach student pharmacists how to integrate the knowledge, skills and attitudes necessary for patient-centered practice in a variety of areas in pharmacy practice. An introduction to the epidemiology, evidence-based medicine, genomics, literature evaluation, pathophysiology, clinical pharmacokinetics and therapeutics relevant to various disease states and syndromes are covered in these blocks. In addition, a variety of skills and screening tools used to assess and monitor therapeutics effectiveness are expected to be mastered. Emphasis is placed on the principles addressing pharmaceutical care; pharmacoeconomics; pharmacy management; ethical, legal, and professional responsibilities; assessment, evaluation, and dissemination of drug information; written and verbal communication and drug distribution. The overall goal of each block is to

enable student pharmacists to integrate their knowledge of the disease state topic(s) presented in the context of formulating an individualized pharmacotherapeutics plan for a given patient. Emphasis is placed on communication skills that assess a student pharmacist's ability to educate health professionals and patients regarding lifestyle changes and drug therapy for specific diseases in a clear, concise and organized manner. Collaboration with peers (teams) occurs in each block in order to teach student pharmacists how to work with others.

Pharmacy Practice blocks 6205, 6210 and 6306 are designed to allow the student pharmacist an opportunity to strengthen and expand their knowledge and skills in the content areas previously covered while exploring some aspects of disease states in greater depth or breadth. Student pharmacists engage in team discussions that incorporate and integrate aspects of those disease states previously covered. Skills (e.g., counseling, patient education, calculation applications, drug information and drug monitoring activities) relevant to the practice of pharmacy will be practiced during these blocks. The blocks consist of series of assessments to ensure retention and integration of knowledge and skills acquired in previous blocks.

<b>Year 2, Fall Semester, PharmD</b>		
<b>Course</b>	<b>Title</b>	<b>Credit Hours</b>
IPE 6000	Team Training in Healthcare I	1.00
PHRM 6201	Pharmacy Practice I	4.00
PHRM 6202	Pharmacy Practice II	4.00
PHRM 6203	Pharmacy Practice III	4.00
PHRM 6204	Pharmacy Practice IV	4.00
PHRM 6205	Pharmacy Practice V	3.50
PHRM ELEC	Elective Courses	0.00 - 4.00
<b>Semester Total:</b>		<b>20.50 – 24.50</b>
<b>Year 2, Spring Semester, PharmD</b>		
<b>Course</b>	<b>Title</b>	<b>Credit Hours</b>
IPE 6100	Team Training in Healthcare II	1.00
PHRM 6206	Pharmacy Practice VI	4.00
PHRM 6207	Pharmacy Practice VII	4.00
PHRM 6208	Pharmacy Practice VIII	4.00
PHRM 6209	Pharmacy Practice IX	4.00
PHRM 6210	Pharmacy Practice X	3.50
PHRM 6999	Introductory Pharmacy Practice Experience 2	4.00
PHRM ELEC	Elective Courses	0.00 - 4.00
<b>Semester Total:</b>		<b>24.50 – 28.50</b>
<b>Year 2 Total:</b>		<b>45.00 – 49.00</b>
<b>Year 3, Fall Semester, PharmD</b>		
<b>Course</b>	<b>Title</b>	<b>Credit Hours</b>
PHRM 6301	Pharmacy Practice XI	4.00
PHRM 6302	Pharmacy Practice XII	4.00
PHRM 6303	Pharmacy Practice XIII	4.00
PHRM 6304	Pharmacy Practice XIV	4.00
PHRM 6305	Pharmacy Practice XV	3.50
PHRM ELEC	Elective Courses	0.00 - 4.00
<b>Semester Total:</b>		<b>19.50 – 23.50</b>

### Year 3 – Spring Semester, Year 4

The Advanced Pharmacy Practice Experiences (APPEs) provide one year of supervised clinical education. Student pharmacists advance their knowledge in areas such as taking drug histories, providing patient education, interpreting diagnostic data and dispensing and compounding medications. The 7000 series are designated for the APPE rotations. All PharmD and PIP student pharmacists are required to complete PHRM 7110, 7120, 7210, 7220, 7330 and 7340. The 8000 series is designed for elective coursework. The elective program is a capstone experience designed to prepare the student pharmacist for his/her role as an entry-level practitioner. Electives are offered in areas such as research, teaching and advanced clinical practice. A project is required of each student pharmacist. Student pharmacists must complete 16 credit hours of elective coursework in the 8000 series.

### COVID-19 Contingency for the advanced experiential curriculum

In the event that the COVID-19 Pandemic continues to have a temporary and fluctuating impact on the availability of APPE and AE rotation sites, a **possible** modification as outlined below, may need to be put into place to ensure that all students (and their families) stay safe, complete training to become highly qualified pharmacists, and meet the ACPE accreditation standards. Student pharmacists will be notified at the earliest opportunity of any actual impact on their experiential curriculum.

All student pharmacists must complete at least one rotation in each of the following rotation types: General Medicine (PHRM 7220), Ambulatory Care (PHRM 7210), Health System Practice (PHRM 7120), and Advanced Community Practice (PHRM 7110). Additionally, all students will complete at least 2 elective APPE rotations (PHRM 7330 and PHRM 7340). Based on rotations completed and ensuring that requirements are met, student pharmacists will then complete either a 12-16-week Advanced Elective (PHRM 8400) or 2 additional electives (PHRM 7330 and PHRM 7340). This ensures that all student pharmacists meet the accreditation requirements and complete the same number of credit hours as all other student pharmacists.

Year 3, Spring Semester, PharmD		
Course	Title	Credit Hours
PHRM 6306	Pharmacy Practice XVI	4.00
APPE R1*	PHRM 7110, 7120, 7210, 7220, 7330 or 7340	6.00
APPE R2*	PHRM 7110, 7120, 7210, 7220, 7330 or 7340	6.00
<b>Semester Total:</b>		<b>10.00 – 16.00</b>
<b>Year 3 Total:</b>		<b>29.50 - 39.50</b>
Year 4, Fall Semester, PharmD		
Course	Title	Credit Hours
APPE R3*	PHRM 7110, 7120, 7210, 7220, 7330 or 7340	6.00
APPE R4*	PHRM 7110, 7120, 7210, 7220, 7330 or 7340	6.00
APPE R5*	PHRM 7110, 7120, 7210, 7220, 7330 or 7340	6.00
APPE R6*	PHRM 7110, 7120, 7210, 7220, 7330 or 7340	6.00
APPE R7*	PHRM 7110, 7120, 7210, 7220, 7330 or 7340	6.00
<b>Semester Total:</b>		<b>24.00 – 30.00</b>
Year 4, Spring Semester, PharmD		
Course	Title	Credit Hours
PHRM 8400	Advanced Electives	16.00
<b>Semester Total:</b>		<b>16.00</b>

<b>Year 4 Total:</b>	<b>40.00 – 46.00</b>
<b>TOTAL CREDIT HOURS (FOR FOUR YEARS)</b>	<b>169.00</b>

*\*Student pharmacists will take one of the APPE rotations as an "OFF" rotation, and do not earn course credit during this time.*

## Curriculum Organization (PIP Track)

### Year 1

Year 1, Fall Semester, PIP		
Course	Title	Credit Hours
IPE 6000	Team Training in Healthcare I	1.00
PHRM 5601	Overview of Clinical Practice	4.00
PHRM 6201	Pharmacy Practice I	4.00
PHRM 6202	Pharmacy Practice II	4.00
PHRM 6203	Pharmacy Practice III	4.00
PHRM 6204	Pharmacy Practice IV	4.00
PHRM 6205	Pharmacy Practice V	3.50
PHRM ELEC	Elective Courses	0.00 – 3.00
<b>Semester Total:</b>		<b>24.50 – 27.50</b>
Year 1, Spring Semester, PIP		
Course	Title	Credit Hours
IPE 6100	Team Training in Healthcare II	1.00
PHRM 6206	Pharmacy Practice VI	4.00
PHRM 6207	Pharmacy Practice VII	4.00
PHRM 6208	Pharmacy Practice VIII	4.00
PHRM 6209	Pharmacy Practice IX	4.00
PHRM 6210	Pharmacy Practice X	3.50
PHRM 6300 or 6999	Introductory Pharmacy Practice Experience I/II	4.00
PHRM ELEC	Elective Courses	0.00 – 3.00
<b>Semester Total:</b>		<b>24.50 – 27.50</b>
<b>Year 1 Total:</b>		<b>49.00 – 52.00</b>

### Year 2

#### COVID-19 Contingency for the advanced experiential curriculum

In the event that the COVID-19 Pandemic continues to have a temporary and fluctuating impact on the availability of APPE and AE rotation sites, a **possible** modification as outlined below, may need to be put into place to ensure that all students (and their families) stay safe, complete training to become highly qualified pharmacists, and meet the ACPE accreditation standards. Student pharmacists will be notified at the earliest opportunity of any actual impact on their experiential curriculum.

All student pharmacists must complete at least one rotation in each of the following rotation types: General Medicine (PHRM 7220), Ambulatory Care (PHRM 7210), Health System Practice (PHRM 7120), and Advanced Community Practice (PHRM 7110). Additionally, all students will complete at least 2 elective APPE rotations (PHRM 7330 and PHRM 7340). Based on rotations completed and ensuring that requirements are met, student pharmacists will then complete either a 16-week Advanced Elective (PHRM 8400) or 2 additional electives (PHRM 7330 and PHRM 7340). This ensures that all student pharmacists meet the accreditation requirements and complete the same number of credit hours as all other student pharmacists.

Year 2, Fall Semester, PIP		
Course	Title	Credit Hours
PHRM 6300 or 6999	Introductory Pharmacy Practice Experience I/II	4.00
PHRM 6301	Pharmacy Practice XI	4.00
PHRM 6302	Pharmacy Practice XII	4.00
PHRM 6303	Pharmacy Practice XIII	4.00
PHRM 6304	Pharmacy Practice XIV	4.00
PHRM 6305	Pharmacy Practice XV	3.50
PHRM ELEC	Elective Courses	0.00 – 3.00
<b>Semester Total:</b>		<b>23.50 – 26.50</b>

### COVID-19 Contingency for the advanced experiential curriculum

In the event that the COVID-19 Pandemic continues to have a temporary and fluctuating impact on the availability of APPE and AE rotation sites, a **possible** modification as outlined below, may need to be put into place to ensure that all students (and their families) stay safe, complete training to become highly qualified pharmacists, and meet the ACPE accreditation standards. Student pharmacists will be notified at the earliest opportunity of any actual impact on their experiential curriculum.

All student pharmacists must complete at least one rotation in each of the following rotation types: General Medicine (PHRM 7220), Ambulatory Care (PHRM 7210), Health System Practice (PHRM 7120), and Advanced Community Practice (PHRM 7110). Additionally, all students will complete at least 2 elective APPE rotations (PHRM 7330 and PHRM 7340). Based on rotations completed and ensuring that requirements are met, student pharmacists will then complete either a 16-week Advanced Elective (PHRM 8400) or 2 additional electives (PHRM 7330 and PHRM 7340). This ensures that all student pharmacists meet the accreditation requirements and complete the same number of credit hours as all other student pharmacists.

Year 2, Spring Semester, PIP		
Course	Title	Credit Hours
PHRM 6306	Pharmacy Practice XVI	4.00
APPE R1*	PHRM 7110, 7120, 7210, 7220, 7330, or 7340	6.00
APPE R2*	PHRM 7110, 7120, 7210, 7220, 7330, or 7340	6.00
<b>Semester Total:</b>		<b>10.00 - 16.00</b>
<b>Year 2 Total:</b>		<b>33.50 - 42.50</b>

### Year 3

Year 3, Fall Semester, PIP		
Course	Title	Credit Hours
APPE R3*	PHRM 7110, 7120, 7210, 7220, 7330, or 7340	6.00
APPE R4*	PHRM 7110, 7120, 7210, 7220, 7330, or 7340	6.00
APPE R5*	PHRM 7110, 7120, 7210, 7220, 7330, or 7340	6.00
APPE R6*	PHRM 7110, 7120, 7210, 7220, 7330, or 7340	6.00
APPE R7*	PHRM 7110, 7120, 7210, 7220, 7330, or 7340	6.00
<b>Semester Total:</b>		<b>24.00 - 30.00</b>

<b>Year 3, Spring Semester, PIP</b>		
<b>Course</b>	<b>Title</b>	<b>Credit Hours</b>
PHRM 8400	Advanced Electives	16.00
<b>Semester Total:</b>		<b>16.00</b>
<b>Year 3 Total:</b>		<b>40.00 - 46.00</b>
<b>TOTAL CREDIT HOURS (FOR THREE YEARS)</b>		<b>152.00</b>

*\*Student pharmacists will take one of the APPE rotations as an "OFF" rotation, and do not earn course credit during this time.*

## Course Descriptions

Blocks listed in this catalog are subject to change through established academic channels. New blocks and changes in existing blocks are approved by the College of Pharmacy Curriculum Committee and the Faculty.

All courses are awarded letter grades, except when indicated otherwise.

### **IPE 5000 Patient Centered Cases – An Interprofessional Approach I (1.0 credit hour, CR/NCR)**

This course is a required university seminar for all first-year health professional students. This course introduces students to practicing health care services through a team approach. Working in small interprofessional teams, students will explore cases representing conditions across the life span. The cases will integrate elements common to all professionals such as ethical, behavioral, social and psychological issues. This course is a graduate requirement for all health professional programs.

### **IPE 5100 Patient Centered Cases – An Interprofessional Approach II (1.0 credit hour, CR/NCR)**

This course is a required university seminar for all first-year health professional students. This course introduces students to practicing health care services through a team approach. Working in small interprofessional teams, students will explore cases representing conditions across the life span. The cases will integrate elements common to all professionals such as ethical, behavioral, social and psychological issues. This course is a graduation requirement for all health professional programs.

### **IPE 6000 Team Training in Health Care I (1.0 credit hour, CR/NCR)**

IPE 6000 will continue to build upon the knowledge from the IPE 5000 series and will expand upon that knowledge and require the student to learn and apply advanced tools and strategies that are crucial to develop a collaborative health care team. The majority of the course is delivered on-line with students engaging in a large-scale tabletop activity where they apply team tools necessary to solve health care challenges.

### **IPE 6100 Team Training in Health Care II (1.0 credit hour, CR/NCR)**

IPE 6100 is a continuation of IPE 6000; IPE 6100 will continue to build upon the knowledge from IPE 6100 and the IPE 5000 series but will expand upon that knowledge and require the student to learn and apply advanced tools and strategies that are crucial to develop a collaborative healthcare team. The majority of the course is independent study with students engaging in a large-scale tabletop activity where they apply team tools necessary to solve a healthcare dilemma.

### **PHRM 5110 Introduction to Pharmacy and Healthcare Systems (2.0 credits)**

Introduction to Pharmacy and Healthcare Systems (PHRM 5110) will introduce the student pharmacist to the knowledge, skills and attitude necessary for: 1) successful completion of the PharmD curriculum and 2) active participation in elevating pharmacy practice for the public benefit. The course will provide a foundational primer on healthcare systems and the pharmacists' critical role in these systems. Topics include challenges in contemporary pharmacy practice, the role of the pharmacist as a healthcare provider, pharmaceutical care, the role of pharmacist as provider of evidence-based medical information, the US health care system (history, overview, stakeholders, providers, public health policies, and the Food and Drug Administration), health care financing (Medicare, Medicaid, private insurance, and managed care), and an introduction to pharmacy practice (community pharmacy and hospital pharmacy) clerkships (IPPE). Student pharmacist will also be required to participate in Medicare Part D Outreach programs.

**PHRM 5111 Foundations of Pharmacy Practice and Self-Care Therapeutics I (4.0 credits)**

Foundations of Pharmacy Practice/ Self-Care Therapeutics I (PHRM 5111) is designed to introduce the student pharmacist to the knowledge, skills and attitudes necessary for successful completion of the PharmD curriculum, and to begin to develop foundation skills for patient-centered practice. Written and verbal communication skills and team collaboration skills are developed through the use of SOAP notes and simulated patient encounters. General topics include contemporary pharmacy practice issues and the role of the pharmacist as a health care provider, written and verbal communication skills, ethics, law, professionalism, pharmaceutical care, patient counseling skills, selected skills development, the role of the pharmacist in self-care therapeutics, the proper selection and use of nonprescription medications and dietary supplements, patient assessment skills utilizing physical assessment skills, the QuEST/SCHOLAR method, nonprescription and dietary supplement product counseling, and an introduction to pharmacy practice (community pharmacy and hospital pharmacy) clerkships (IPPE). Immunization training will also be included and covers the clinical preparation of the common vaccines and the administration of the vaccines. The completion of this training will result in your certification to provide immunizations. Student pharmacists will also be required to participate in Medicare Part D Outreach programs.

**PHRM 5112 Foundations of Pharmacy Practice and Self-Care Therapeutics II (4.0 credits)**

This course reinforces the knowledge, skills, and attitudes introduced in PHRM 5111. Written and verbal communication skills and team collaboration skills are further developed through the use of SOAP notes and simulated patient encounters. General topics include the factors that lead patients to self-diagnose and self-treat their medical conditions, the role of the pharmacist in self-care therapeutics, the proper selection and use of nonprescription medications and dietary supplements, patient assessment skills utilizing the QuEST/SCHOLAR method, nonprescription and dietary supplement product counseling, and contemporary pharmacy practice issues, laws, and regulations. Prerequisite: PHRM 5111.

**PHRM 5113 Research Methods and Biostatistics (1.0 credit)**

This block focuses on an introduction to research methodology and biostatistics. Students are expected to use the tools in this block to critically review and evaluate current research in clinical studies. They will also be able to build on the foundation learned in this block for future application in research and clinical settings.

**PHRM 5114 Pharmacy Calculations (1.0 credit)**

Pharmaceutical Calculations is an essential skill to all practicing pharmacists. Therefore, it is taught in PHRM 5114 but tested for retention throughout the curriculum in the P2 and P3 years. This will be a self-paced course using online lectures and online assessments, in addition to class meetings for reviews and 2 examinations (midterm and final exam). The lecture series will consist of problems dealing with aliquots, concentration, dosing patients, alligation, dilution of solutions, isotonicity, IV rates of flow, milliequivalents, milliosmoles, among other basic pharmacy calculation concepts. The objectives of this course are to apply the fundamentals of calculations and measurement to mathematical problems associated with pharmacy, to accurately use formulas, approximate equivalents, and nomograms to calculate doses, to memorize specific nomenclature (metric, apothecary and avoirdupois systems, Latin abbreviations) needed to interpret a prescription order, to accurately utilize dimensional analysis, ratio-proportion, and other methods of measurement to convert between units.

**PHRM 5221 Pharmacological Basis of Therapeutics I (3.5 credits)**

PHRM 5221 begins a series of four courses (PHRM 5221-5224) that integrate pharmacology, pathophysiology, medicinal chemistry and toxicology. Taken in their entirety they are referred to as the Pharmacological Basis of Therapeutics (PBT) block. These courses build on the principles acquired in biochemistry, anatomy, microbiology and physiology. The objective of these courses is to present the principles of drug-receptor selectivity, mechanisms of action of drugs and the rationale for their therapeutic use. The series of courses focus on pharmacodynamics (how the drug affects the body's functions) and pharmacokinetics (how the body handles the drug) and provides an integrated, scientific basis for understanding desired effects (therapeutic uses) and undesired side effects (adverse effects or drug-induced toxicity). The series focuses on the human system and provides the organizational knowledge and background relevant to the pharmacy practice sequence of courses presented in the second and third years. Principles addressing cellular, tissue and organ physiology provide a conceptual framework to introduce pharmacology by emphasizing commonalities of drug mechanism with drug classification. Prototype drugs in each pharmacological class are provided for comparing and contrasting with other agents in the same class and/or for other drugs used therapeutically but with different mechanisms of action. Fundamental principles are emphasized with the intent of providing their relevance for prevention and treatment of disease using therapeutic agents, most of which can be considered as modification of intrinsic, biological compounds.

PHRM 5221 begins with an introduction to pharmacology, including drug-receptor interactions, pharmacokinetics and pharmacodynamics. Parasympathetic and sympathetic agents that affect the autonomic nervous system will also be covered, as well as drugs used in the treatment of asthma. The course consists of four team assignments and three examinations, with the final exam being cumulative.

**PHRM 5222 Pharmacological Basis of Therapeutics II (3.0 credits)**

PHRM 5222 is part of the series of courses (PHRM 5221, 5222, 5223, and 5224) that integrates pharmacology, physiology & pathophysiology, and medicinal chemistry building on the principles acquired in PHRM 5221 and prerequisite courses of biochemistry, anatomy, and physiology. The objective of PHRM 5222 is to present the principles of drug-receptor selectivity, mechanisms of action of drugs, and the rationale for their therapeutic use based on the pathophysiology of disease. PHRM 5222 focuses on pharmacodynamics (how the drug affects the body's functions) and briefly covers pharmacokinetics (how the body handles the drug) of select drugs. Additionally, PHRM 5222 provides an integrated, scientific basis for understanding desired effects (therapeutic uses) and undesired side effects (adverse effects or drug-induced toxicity). PHRM 5222 focuses on the adult human system and provides the organizational knowledge and background relevant to the pharmacy practice sequence of courses presented in the second and third years. Principles addressing cellular, tissue, and organ physiology provide a conceptual framework to introduce pharmacology by emphasizing commonalities of drug mechanism with drug classification. Common and prototype drugs in each pharmacological class are discussed; specifically to compare and contrast with other agents in the same class and/or for other drugs used therapeutically but with different mechanisms of action. Fundamental principles are emphasized with the intent of providing their relevance for prevention and treatment of disease using therapeutic agents, most of which can be considered as modifications of intrinsic, biological processes.

### **PHRM 5223 Pharmacological Basis of Therapeutics III (3.0 credits)**

PHRM 5223, which is a continuation of PHRM 5221 and PHRM 5222, will mainly focus on the central nervous system. In this course, student pharmacists will discuss central nervous system anatomy, physiology, pharmacology, and medicinal chemistry. The medicinal chemistry portion builds on the students' background in organic (functional group) chemistry and its relevance in diagnosing and treating disease, as well as developing therapeutic agents. Physiology is reviewed with an eye toward introducing the organization of biological systems (homeostasis) then demonstrating how the breakdown of organization (pathology) leads to disease and the modulation (interference or enhancement) of cellular function, which provides the basis for therapeutic intervention. The intent is to introduce an integration of relevant biochemistry, molecular biology, physiology, and pathophysiology. Further, pharmacology focuses not only on the effect of the drug on the body, like medicinal chemistry, but also addresses how the drug works on the body. Principles addressing basic anatomy, cellular and tissue physiology provide a conceptual framework to introduce pharmacology by emphasizing commonalities of drug mechanism with drug classification. Fundamental principles are emphasized with the intent of providing their relevance for prevention and treatment of disease using therapeutic agents. Clinically relevant conditions will include a series of neurological and psychiatric disorder, as well as pain systems and their relevant pharmacotherapies. This class also introduces endocrine hormonal signaling and how defects in these pathways are treated with pharmacotherapy. The concept of hormone replacement therapy will be introduced. Fundamental information will be introduced in lectures, reinforced during team assignment and assessed during quizzes and exams.

### **PHRM 5224 Pharmacological Basis of Therapeutics IV (3.5 credits)**

PHRM 5224 is the last in the series of courses (PHRM 5221, 5222, 5223 and 5224) that integrates pharmacology, pathophysiology, medicinal chemistry and toxicology building on the principles acquired in biochemistry, anatomy, and physiology. As described under Block Description of PHRM 5221, the objective of these courses is to present the principles of drug-receptor selectivity, mechanisms of action of drugs, and the rationale for their therapeutic use. The series of courses focuses on Pharmacodynamics (how the drug affects the body's functions) and Pharmacokinetics (how the body handles the drug) and provides an integrated, scientific basis for understanding desired effects (therapeutic uses) and undesired side effects (adverse effects or drug-induced toxicity). The series focuses on the human system and provides the organizational knowledge and background relevant to the pharmacy practice sequence of courses presented in the second and third years. Principles addressing cellular, tissue, and organ physiology provide a conceptual framework to introduce pharmacology by emphasizing commonalities of drug mechanism with drug classification. Prototype drugs in each pharmacological class are provided for comparing and contrasting with other agents in the same class and/or for other drugs used therapeutically but with different mechanisms of action. Fundamental principles are emphasized with the intent of providing their relevance for prevention and treatment of disease using therapeutic agents, most of which can be considered as modifications of intrinsic, biological compounds.

PHRM 5224 introduces agents used to treat cancer as well as viral, bacterial, fungal, and parasitic diseases. This subject is then extended into the pharmacology and medicinal chemistry of these agents, including the designation of prototype drugs that are used to treat different pathological conditions. This course also includes an introduction of agents used in the treatment of diseases of the gastrointestinal (GI) system. A review of the pertinent anatomy and physiology of this system is presented, which is then extended into the pharmacology of prototype drugs that are used to treat pathological conditions affecting this organ system. There is also an introduction into toxicology with an emphasis on commonly encountered toxicities and their antidotes.

### **PHRM 5301 Pharmaceutics/Biopharmaceutics (3.5 credits)**

This block introduces the student pharmacists to physicochemical principles governing the pharmaceutical dosage forms. These principles are essential for the understanding of the manufacture, compounding, and proper use of liquid (homogeneous and disperse systems) and solid dosage forms.

How the block relates to the philosophy of pharmaceutical care:

This block examines the manufacture, compounding, and proper use of solid and liquid dosage forms (powders, granules, tablets, capsules, lozenges, solutions, suspensions, emulsions). As the drug product expert of the health care team, pharmacists are expected to solve drug product and dosage problems. Pharmacists are the ONLY members of the health care team with any significant background in the design and formulation of these dosage forms and an understanding of their inactive ingredients. This knowledge is important and useful since the last step in developing a drug therapy plan is selection of the appropriate dosage form for a particular patient. This selection may also involve the modification of a commercial product and/or compounding of a unique product.

### **PHRM 5302 Pharmacogenomics and Pharmaceutics (3.0 credits)**

Personalized prescriptions based on your genes, monoclonal antibodies targeting specific gene product, as well as antisense oligonucleotides: these are some of the new phrases you will hear as we enter the era of genomic and precision medicine. The practice of pharmacy is being transformed by cutting-edge scientific developments and findings that are giving rise to new molecular tools and therapies. The goal of the block is to prepare future pharmacists to utilize and incorporate new technological and scientific developments in genetics/genomics into their daily practice. This course will cover basic genetic principles and clinical application of pharmacogenomics in drug therapy, including the role of genetics in medicine, genetic testing, bioinformatics, in particular, pharmacogenomics in drug metabolism, drug transport and drug targets, and clinical application. Upon completion of this course, student pharmacists should understand the concept that genetic information of patients can be used to maximize the efficacy of drugs and avoid adverse side reactions. The course is a foundation to prepare students for future "Patient Centered Care" with abilities to explain the basic concepts of influence of genetic factors in maintenance of health and development of disease, to identify the most appropriate pharmacogenomic test for patient, and to interpret the results of the testing and make drug therapy recommendations based on the results. This course is aimed at providing the first-year student pharmacist with no or little prior knowledge of medical genetics with knowledge, skills and attitudes established by the National Coalition for Health Professional Education in Genetics (NCHPEG). Elements of pharmaceutical biotechnology, sterile and nonsterile compounding will also be discussed.

How the block relates to the philosophy of pharmaceutical care:

- (1) Pharmacists need a thorough understanding of the genetic component of patient variability to deliver effective pharmaceutical care. Current concepts in drug therapy often attempt drug treatment of large patient populations as groups, irrespective of the potential for individual, genetically based differences in drug response. However, it is well recognized that most medications exhibit wide inter-patient variability in their efficacy and toxicity.
- (2) In recent years, biotechnology drug product including peptides, proteins, monoclonal antibodies, as well as antisense oligonucleotides have gained a share of prescribed pharmaceuticals. The field of pharmaceutical biotechnology has become an increasingly important component in the education of future pharmacists.

**PHRM 5401 Immunology (3.5 credits)**

This course introduces students to the basic principles of immunology including cells, organs and effector systems involved in both innate and adaptive immune responses. Topics include regulatory interactions between different components of the immune system and the deleterious effects of aberrant immune processes. Focus will include understanding of immunopathology of disease states and pharmaceutical intervention as treatment.

**PHRM 5501 Pharmacokinetics (3.5 credits)**

PHRM 5501 is the pharmacokinetics course offered to first-year student pharmacists in the College of Pharmacy. This course is designed to introduce student pharmacists to basic principles and concepts of pharmacokinetics, and to teach student pharmacists how to apply pharmacokinetic principles in clinical situations. Student pharmacists are expected to make rational drug therapy decisions in their future pharmacy practice based on the knowledge learned from this course.

There are two primary sections in this course: basic pharmacokinetics and applied pharmacokinetics. In the early section of the block, student pharmacists learn basic pharmacokinetic concepts such as drug absorption, drug distribution, drug metabolism, and drug excretion and pharmacokinetic parameters, including rate constant, half-life, volume of distribution, and clearance. Student pharmacists learn to obtain pharmacokinetic parameters using compartmental modeling and model-independent analyses. The relevance of pharmacokinetics in drug action and toxicity and the factors influencing pharmacokinetics of drugs are also discussed. The course demonstrates the use of pharmacokinetic principles and essential equations in predicting plasma drug concentrations, as well as the changes in plasma drug concentrations that accrue over time, following a single dose and multiple dose regimens. In the latter part of the block, these principles and concepts are reinforced in clinical situations to allow student pharmacists to learn the importance and process of therapeutic drug monitoring. The effects of age, weight, other drugs, and various disease states on pharmacokinetic parameters are presented.

**PHRM 5601 Overview of Clinical Practice (4.0 credits)**

The PharmD International Pathway (PIP) Program student pharmacists begin their studies during the second year of the traditional PharmD program. Thus, the purpose of this introductory course is to introduce them to the block system of instruction at WesternU College of Pharmacy, to provide them with information to transition successfully into the second year of the traditional PharmD program, and to equip them with a background to enable them to complete their program of study. Topics covered include an Overview of US Healthcare Systems and important topics in US Pharmacy, an introduction to assessments that pharmacists will need in practice, an introduction to pharmacy statistics, calculations and pharmacokinetics, as well as training in immunizations.

**PHRM 5997 Introductory Pharmacy Practice Experience 1 (IPPE-1)(4.0 credits)**

This course marks the beginning of the experiential training (Introductory Pharmacy Practice Experience-1, or IPPE-1) and exposes student pharmacists to community pharmacy practice. It is a four-week (40 hours/week) experience (160 experiential hours, 4 credit hours), during the summer of the first year.

Through IPPE-1, student pharmacists are expected to master foundational competencies in three domains: Communication, Professionalism and the Practice of Pharmacy. These competencies address the basic skills that prepare the student pharmacist for the Advanced Pharmacy Practice Experiences (APPEs) offered through the pharmacy curriculum. As such, they represent an intermediate point in the professional development of a pharmacist. They are applicable across a spectrum of practice and other experiential settings and are expected to build in complexity over time.

Western University of Health Sciences, in conjunction with community pharmacy partners, team up to provide the first-year student pharmacists with a practical knowledge base of successful practice activities that highlight the relevance of didactic course work concurrently being taught and focus the student pharmacist's perspective on the emerging new role of the community pharmacist.

#### **PHRM 6201 Pharmacy Practice I (4.0 credits)**

This block uses a clinical, case-based approach that enables the student pharmacist to develop the fundamental skills of evidence-based clinical practice through teaching how to ask answerable clinical questions, how to conduct effective searches for the best evidence, how to critically appraise the evidence for its validity and importance, and how to integrate patient values and circumstances to formulate an evidence-based decision.

#### **PHRM 6202 Pharmacy Practice II (4.0 credits)**

This block is designed to introduce student pharmacists to the management (evaluation, treatment, monitoring, and follow-up) of patients with kidney, fluids, electrolytes and acid/base disorders and common gastrointestinal disorders. In addition, this block will deal with some special populations, i.e., pediatric and geriatric populations. Student pharmacists will integrate knowledge, attitudes, and skills in a variety of ways to accomplish the block outcomes. This block contains anatomy, biochemistry, physiology, pharmacology, pharmacokinetics, pharmacotherapy, and clinical trial evidence as they relate to nephrology, fluid, electrolytes, acid/base and the gastrointestinal tract. Accordingly, the overall goal of this block is to enable student pharmacists to integrate their knowledge of these disciplines in the context of formulating an individualized pharmacotherapeutic plan for a given patient.

#### **PHRM 6203 Pharmacy Practice III (4.0 credits)**

This block is designed to equip student pharmacists with essential knowledge, skills, and attitude required for providing pharmaceutical care to patients with diabetes, hypertension, or dyslipidemia as an entry-level practitioner. This block will build on the foundations, such as anatomy, biochemistry, physiology, pharmacology, and pharmacokinetics, as well as the pharmacotherapeutics of renal disease to introduce the management of diabetes, hypertension, and dyslipidemia. Throughout the block, there will be emphasis on utilizing up to date evidence-based clinical data to make patient-specific therapeutic decisions. The management of diabetes, hypertension, and dyslipidemia is continuously evolving, and student pharmacists will also obtain skills to stay current with the rapidly changing information.

#### **PHRM 6204 Pharmacy Practice IV (4.0 credits)**

This block is designed to equip students with essential knowledge, skills, and attitude required for providing pharmaceutical care to patients with cardiovascular disorders as an entry-level practitioner. This block will build on the foundations, such as anatomy, biochemistry, physiology, pharmacology, and pharmacokinetics, as well as the pharmacotherapeutics of the basic metabolic syndrome (e.g. hypertension, diabetes, hyperlipidemia) to introduce the management of advanced cardiovascular disorders. Throughout the block, there will be emphasis on utilizing up to date evidence-based clinical data to make patient specific therapeutic decisions for patients with cardiovascular disorders. The management of cardiovascular disorder is continuously evolving. As such, the students will also obtain skills to stay current with the rapidly changing cardiovascular therapeutics.

#### **PHRM 6205 Pharmacy Practice V (3.5 credits)**

Learning to integrate and apply knowledge to complex patient cases with multi-disease states and drug-related problems is essential to successful practice as a pharmacist. This course will integrate the information from PHRM 6201-6204 as well as pharmacy year one didactics. The student pharmacists are required to apply the knowledge and skills to complex multi-disease patient cases using interactive methods.

#### **PHRM 6206 Practice Pharmacy VI (4.0 credits)**

This block is a continuation of the Pharmacy Practice (therapeutics) series of courses. PHRM 6206: Pharmacy Practice VI focuses on providing the student pharmacist with an understanding of the gastrointestinal and hepatobiliary systems. Specific emphasis will be placed on the pharmacologic treatment of various gastrointestinal disorders (gastroesophageal reflux disease, peptic ulcer disease, inflammatory bowel disease, irritable bowel disease, celiac disease), parenteral and enteral nutrition, and liver topics (alcoholic liver disease, drug-induced liver injury, non-alcoholic fatty liver disease, acute liver failure, cirrhosis).

#### **PHRM 6207 Pharmacy Practice VII (4.0 credits)**

This block is designed for the second-year pharmacy student to learn how to solve patient-based pharmacotherapeutic problems in airway diseases, arthritic disorders, and women's health issues. Asthma, COPD, and contraceptive technology, pathophysiology, and treatment are introduced in this course, including national guidelines for diagnosis and treatment. Major concepts of prior block material are reinforced throughout the block. Some lectures require viewing pre-recorded materials.

#### **PHRM 6208 Pharmacy Practice VIII (4.0 credits)**

The purpose of this block is to enable students to integrate the pathophysiology, medicinal chemistry, pharmacology and therapeutic knowledge in the management of specific psychiatric disease states. In addition, the block discusses men's health topics, urinary incontinence, benign prostate hypertrophy, erectile dysfunction, and glaucoma.

Psychotropic medications, defined as psychoactive medications used for the purpose of treating mental illness, are among the most commonly prescribed medications by clinicians and dispensed from pharmacies. They often play a role to minimize symptoms as well as maximize quality of life and functional status of psychiatric patients. In tailoring pharmacologic regimens for these patients, clinicians need to give careful attention to accurate diagnosis, appropriate dosing, adverse effects, drug interactions and pertinent drug pharmacokinetics.

An ongoing evaluation of effectiveness requires reassessment at regular intervals to rethink medication regimens in light of changes in the health, life circumstances, or mental status of psychiatric patients. Pharmacists can play an important role from drug selection and monitoring to patient education and counseling. This course is intended to prepare student pharmacists to play these roles.

#### **PHRM 6209 Pharmacy Practice IX (4.0 credits)**

This block is a continuation of PHRM 6208 and focuses on the epidemiology, pathophysiology, pharmacology and pharmacotherapy relevant to diseases affecting the central nervous system, including epilepsy, headache, pain and pain management, Parkinson's disease, multiple sclerosis, dementia and stroke in addition to a couple of non-neurology clinical topics such as dermatology addressing Accutane and topical steroids. Furthermore, Tobacco cessation training and pharmaceutical law are additional components of this block. The highlighted goals are to provide student pharmacists with the fundamental knowledge, skills and attitudes required to provide optimal pharmaceutical care to patients with various neurological disorders.

#### **PHRM 6210 Pharmacy Practice X (3.5 credits)**

Learning to integrate and apply knowledge to complex patient cases with multi-disease states and drug-related problems is essential to successful practice as a pharmacist. This course will integrate the information from PHRM 6201-6209 as well as pharmacy year one didactics. The student pharmacists are required to apply the knowledge and skills to complex multi-disease patient cases using interactive methods.

#### **PHRM 6300 Introductory Pharmacy Practice Experience 1 - PIP (IPPE-1- PIP) (4.0 credits)**

This course marks the beginning of the experiential training in the community pharmacy setting (Introductory Pharmacy Practice Experience-1 or IPPE-1). The IPPE-1 course (PHRM 6300) will run for four weeks (experiential and credit hour is the same as 5997), at the beginning of the summer between the P-2 and P-3 years. Through IPPE-1, student pharmacists are expected to master foundational competencies in three domains: Communication, Professionalism and the Practice of Pharmacy. These competencies address the basic skills that prepare the student pharmacist for the Advanced Pharmacy Practice Experiences (APPEs) offered through the pharmacy curriculum. As such, they represent an intermediate point in the professional development of a pharmacist. They are applicable across a spectrum of practice and other experiential settings and are expected to build in complexity over time.

Western University of Health Sciences, in conjunction with community pharmacy partners, team up to provide the first-year student pharmacists with a practical knowledge base of successful practice activities that highlight the relevance of didactic course work concurrently being taught and focus the student pharmacist's perspective on the emerging new role of the community pharmacist.

#### **PHRM 6301 Practice Pharmacy XI (4.0 credits)**

This block is an integrated approach to microbiology, antimicrobial pharmacology, and infectious disease syndromes. The initial part of the block consists of identification, laboratory diagnosis, epidemiology, and modes of spread of the medically important pathogens. Pharmacology of the major classes of antimicrobial agents will be discussed. The latter part of the block will focus on the microbiology, epidemiology, pathogenesis, pathophysiology, clinical features, preventive and infection control measures associated with major infectious disease syndromes due to common bacteria.

#### **PHRM 6302 Pharmacy Practice XII (4.0 credits)**

PHRM 6302 is designed to equip student pharmacists with essential knowledge, skills, and attitude required for providing pharmaceutical care to patients with various infectious diseases as an entry-level practitioner. This block is an extension of PHRM 6301 with a focus on special patient populations, opportunistic infections, and infections more common in children. Treatment and counseling of patients with HIV/AIDS are presented. The pharmacology of antiviral and antifungal agents and the application in treating infections are discussed. A portion of the block focuses on the basic pharmacology of immunotherapeutic agents in organ transplantation, travel medicine, and pharmacokinetic applications of vancomycin and aminoglycosides.

#### **PHRM 6303 Pharmacy Practice XIII (4.0 credits)**

Cancer is the second most common cause of death in the United States. The war against cancer is a dynamic and rapidly changing field that requires a multidisciplinary approach. In the past decade, the paradigm for the treatment of cancer has evolved from using toxic, non-specific therapies to using rationally designed, specific therapies to target the molecular basis of disease. The increasing use of complex therapies with substantial toxicities requires the assistance of pharmacists who are knowledgeable about both the pharmacology and common toxicities of cancer therapeutic drugs and who are equipped to manage their side effects. This block is designed to introduce student pharmacists to several common malignancies and complications of both cancer and cancer therapy, which will form a foundation that student pharmacists can

utilize to understand current and evolving strategies in cancer therapy. Throughout the block, student pharmacists will practice critical thinking and clinical decision-making skills using an interactive case study approach.

The contemporary pharmacist's role in hematology and oncology, however, is not limited to the treatment of patients with cancer. As such, student pharmacists will have the opportunity to explore a number of diverse issues during the block, such as hospice and palliative care, cancer prevention, chronic pain management, and the pharmacist's role in medication error prevention. At the conclusion of the block, student pharmacists will gain a better understanding not only of cancer therapeutics, but also the potential scope of the pharmacist's practice.

#### **PHRM 6304 Pharmacy Practice XIV (4.0 credits)**

PHRM 6304 provides student pharmacists an overview of pharmacy practice management in prominent pharmacy settings (community, ambulatory care, hospital and managed care). Student pharmacists are familiarized with the conceptual underpinnings and operations of pharmacy practice management, such as marketing, financial analysis, human resource management, and operations management (purchasing and inventory control). Disease state and Medication Therapy management (DSM/MTM) are emphasized as important components of community/ambulatory care pharmacy practice management. In the hospital setting, the importance of formulary decisions, medication safety, drug information, utilization review, and clinical therapy guidelines and protocols are stressed. Material from this block and the next block are enmeshed for continuity and integration. The course includes a team project and poster presentation on developing a disease management clinic in a community pharmacy setting. The block will also include the first part of the MTM certificate course.

#### **PHRM 6305 Pharmacy Practice XV (3.5 credits)**

This block will emphasize on the field of Health Outcomes and its applications to Pharmacy Practice. The ECHO (Economic, Clinical, and Humanistic Outcomes) model will be used as a framework of measuring program, procedure or product effectiveness. The block will revolve around Pharmacoeconomics, its importance in the current environment and its role in clinical decision making, e.g., by P&T committees that establish formularies. Further, various Patient-Reported Outcomes (PROs) will be introduced that provide a measure of patient preference in treatment plans and program effectiveness. Applications of these skills will be shown in various healthcare settings (health systems, managed care, community pharmacies). Topics covered in the block include an introduction to Pharmacoeconomics, a review of the methodology employed in pharmacoeconomic research, a basic review of modeling techniques such as decision models, the importance of quality-of-life, and how it impacts the delivery of health care today, and the role of Pharmacoeconomics in managed care and formulary and guideline development. Evidence based Medicine (EBM), biostatistical analyses and research methods will also be reviewed as necessary tools to evaluate clinical and pharmacoeconomic literature, and medical informatics will be covered.

#### **PHRM 6306 Pharmacy Practice XVI (4.0 credits)**

This block is designed to prepare the student pharmacist to optimally perform and to successfully complete the APPE rotations. Student pharmacists will learn pharmaceutical law so that they can practice legally and within the societal expectations for a professional pharmacist. Student pharmacists will develop and practice thought processes associated with clinical case discussions by interacting with clinical practice faculty in a similar environment to APPE practice sites. Practice and EBP skills will be assessed through participation in an OSCE exercise and team journal club. Student pharmacists will integrate knowledge, attitudes, and skills in a variety of ways to accomplish the block outcomes. The overall goal of this block is to enable student pharmacists to integrate their knowledge of these disciplines in the context of formulating an individualized

pharmacotherapeutic plan for a given patient. This block starts with a knowledge-based clinical examination that may include questions from any topic in the PharmD curriculum.

**PHRM 6999 Introductory Practice Experience 2 (IPPE-2) (4.0 credits)**

The primary goal of this pharmacy practice experience is for student pharmacists to achieve competency in the technical aspects of health-system pharmacy practice, and an introductory level of competency in the professional aspects. Student pharmacists should become familiar with the day-to-day functions, roles and responsibilities of the pharmacy, pharmacy technicians, and pharmacists within a health-system.

This experience marks the intermediate phase of the experiential training (Introductory Pharmacy Practice Experience-2 or IPPE-2). The IPPE-2 requires student pharmacists to go to their practice site five days per week, eight hours per day for four weeks (160 hours).

Through the IPPE-2, student pharmacists will be exposed to health-systems pharmacy practice and are expected to master foundational competencies in three domains: Communication, Professionalism and the Practice of Pharmacy. These competencies address the basic skills that prepare the student pharmacist for the Advanced Pharmacy Practice Experiences (APPEs) offered through the pharmacy curriculum. As such, they represent an intermediate point in the professional development of a pharmacist. They are applicable across a spectrum of practice and other experiential settings and are expected to build in complexity over time. During this introductory pharmacy practice experience, student pharmacists are expected to gain much of their experiences through observation and shadowing of pharmacy personnel and performing technician (intern) duties. Later, during advanced pharmacy practice experiences, students will be expected to gain much of their experiences through actual practice in more advanced professional activities under the direct supervision of a pharmacist.

WesternU and practicing pharmacy partners in the community team up to provide student pharmacists with a practical knowledge base of professional activities and focus the student pharmacist's perspective on the real-world role of the practicing pharmacist.

No student pharmacist will be allowed to start an (APPE) advanced rotation until the IPPE-2 has been successfully completed.

**PHRM 7110 Advanced Community Practice (CP) (6.0 credits, CR/NCR)**

Supervised advanced patient care experience in a community pharmacy setting under the supervision of a pharmacist preceptor.

**PHRM 7120 Health-Systems Practice (HS) (6.0 credits, CR/NCR)**

Supervised advanced patient care experience in an inpatient pharmacy setting under the supervision of a pharmacist preceptor.

**PHRM 7210 Ambulatory Care (AC) (6.0 credits, CR/NCR)**

Supervised clinical pharmacy experience emphasizing the development of pharmaceutical care skills in an outpatient setting.

**PHRM 7220 General Medicine (GM) (6.0 credits, CR/NCR)**

Supervised clinical pharmacy experience emphasizing the development of pharmaceutical care skills in a hospital or other acute-care institutional setting such as a long-term care facility.

**PHRM 7330 Elective Pharmacy Practice Experience I (6.0 credits, CR/NCR)**

Supervised education in clinical, administrative, or research settings that provide additional experience in

specialty areas such as pediatrics, geriatrics, infectious disease, drug information, oncology, pharmaceutical research, pharmacy administration, etc.

**PHRM 7340 Elective Pharmacy Practice Experience II (6.0 credits, CR/NCR)**

Supervised education in clinical, administrative, or research settings that provide additional experience in specialty areas such as pediatrics, geriatrics, infectious disease, drug information, oncology, pharmaceutical research, pharmacy administration, etc. Prerequisite: PHRM 7330.

**PHRM 8200 Elective Coursework (4.0 credits, CR/NCR)**

Advanced level coursework in an area of special interest beyond that presented as part of the previous didactic coursework of the Doctor of Pharmacy Curriculum. Repeatable to a maximum of 16 credits.

**PHRM 8400 Advanced Electives (12.0 - 16.0 credits, CR/NCR)**

Advanced clinical educational experiences in an area of special interest beyond that provided as part of the previous clinical coursework of the Doctor of Pharmacy curriculum. Student pharmacists choose a track or specialized experience to increase exposure in their area(s) of interest.

The Advance Elective offers student pharmacists a 16-week learning experience. This 4-month rotation (e.g., research experience, specialized training, business administration etc.) allows student pharmacists to develop more skills and insight in a specific practice area. By the start of the student pharmacists' last year, individuals should identify an area of professional interest. The 16-week AE program is designed to provide a capstone experience and in the student pharmacist's chosen area of interest will be made available (e.g., administration, various clinical settings, pediatrics, infectious disease, internal medicine, cardiology, renal, oncology, ICU, ambulatory care, community practice, compounding, pharmacoconomics, managed care, psychiatry, teaching, pharmaceutical industry, pharmacy informatics, digital health, operation and independent pharmacy ownership, etc.).

**Please review the statement in the section on "Curriculum Organization" describing the contingency plan regarding the impact of the COVID pandemic on APPE and AE availability.**

**PHRM 8800 Other Electives (20.0 credits, CR/NCR)**

Individualized, supervised educational experiences in an area of special interest related to pharmacy practice and/or pharmaceutical sciences beyond that provided by previous coursework in the Doctor of Pharmacy curriculum and not eligible for credit within PHRM 8200 or 8400.

**PHRM ELC1 Introduction to Clinical Research (1.0 credit, Letter Grade, Fall)**

Clinical research is defined as the study of a drug, biologic, or device in human subjects with the intent to discover potential beneficial effects and/or determine its safety and efficacy. This elective introduces students to clinical trials and basic clinical research principles for those interested in pursuing residency or a field of clinical research (fellowship, industry, FDA career). Throughout the elective course we will discuss principles of clinical research, experimental design, managing and monitoring clinical trials, data management and analysis, and regulatory affairs with drugs, biologics, and devices. Open to year 1 and year 2 PharmD students. See registration notification for capacity, course dates/times.

**PHRM ELC4 Independent Research (1.0 Credit, CR/NCR, Fall/Spring)**

This block introduces the student pharmacists to independent research experiences under the supervision of a faculty member. The research experience may vary from bench research (pharmaceutical sciences)

to clinical translational research (pharmacy practice). Student pharmacists will be expected to participate in research activities at the rate of 3 hours per week per credit. 30 hours of research must be completed by the end of the semester to earn a grade for the elective course. Schedules for research will be determined by the student pharmacist in consultation with the faculty preceptor. Student pharmacists will only be allowed a maximum of 2 professional elective credits over two semesters (1 credit each). Any additional research elective course while eligible for course credit, will not be counted towards the overall elective degree requirement.

Please note that all faculty members may not be able to offer the research elective course. Thus, the student pharmacist must email the faculty member directly to enquire about any openings for the desired semester (see faculty research and specialty profiles <http://www.westernu.edu/pharmacy/>). If a position is available, the student pharmacist must choose the “independent research” elective course during semester course registration.

Open to year 1, year 2 and year 3 PharmD students. See registration notification for capacity, course dates/times.

**PHRM ELC5 Vaccines: Science and Society (1.0 Credit, CR/NCR, Spring)**

The overall goal for this course is to allow for students to gain further exposure to the scientific and clinical basis of vaccination focusing on issues that are common in discussions with vaccine hesitant individuals. Overview of important vaccines and the scientific basis behind the efficacy and safety of these vaccines are discussed along with aspects of individual vaccines that are often discussed in society with regards to safety issues. The class blends background reading along with in class discussions. Open to year 1 PharmD students. See registration notification for capacity, course dates/times.

**PHRM ELC6A Seminar in Professional Development (1.0 Credit, CR/NCR, Fall)**

This seminar elective provides presentations related to careers, leadership, management, legal and regulatory issues and other topics related to professional and personal development. This seminar course will give 1 credit hour for attending a minimum number of these presentations and writing a minimum number of reflections. Open to years 1, 2 and 3 PharmD students. PHRM ELEC 6A is offered **during the fall term only**. Students who completed PHRM ELEC 6B may enroll in PHRM ELEC 6A. See registration notification for capacity, course dates/times.

**PHRM ELC6B Seminar in Professional Development (1.0 Credit, CR/NCR, Spring)**

This seminar elective provides presentations related to careers, leadership, management, entrepreneurship, informatics, legal and regulatory issues, and other professional and personal development topics. This seminar course will give 1 credit hour of credit for attending a minimum number of these presentations and writing a minimum number of reflections. Open to years 1 and 2 PharmD students. PHRM ELEC 6B is offered **during the Spring term only**. Students who completed PHRM ELEC 6A may enroll in PHRM ELEC 6B. See registration notification for capacity, course dates/times.

**PHRM ELC7 Leadership in Pharmacy (1.0 Credit, CR/NCR, Spring)**

This is an exploratory course for students to find the leader within. There are on-line modules for reading, and self-assessments and projects for defining leadership. Discussion groups and guest speakers discuss leadership styles and roles in various settings. A second domain involves interaction with a leadership mentor. Lastly, students use reflections to define leadership and how they fit into leadership. Open to year 2 PharmD students only. See registration notification for capacity, course dates/times.

**PHRM ELC8 Food and Cooking Basics for Student Pharmacists (1.0 Credits, CR/NCR, Spring)**

It's very difficult to advise a patient on healthy ways to select and prepare ingredients for a healthy lifestyle without first-hand experience. This course provides an introduction to the basics of cooking/preparing healthful and flavorful meals and snacks that fit within the limited time left in your day outside of the PharmD curriculum. It is targeted to those with minimal food shopping, meal-planning, and cooking experience and is perfect for students who have newly moved out on their own. Class sessions will be a mix of online modules, instructional videos, and live cook-along sessions via Zoom. Open to year 2 PharmD students only. See registration notification for capacity, course dates/times.

**PHRM ELC9 Introduction to Decision Analyses in Formulary Management (1.0 Credit, CR/NCR, Spring)**

Formulary management is an integrated patient care process which enables physicians, pharmacists and other health care professionals to work together to promote clinically sound, cost-effective medication therapy and positive therapeutic outcomes. Effective use of health care resources can minimize overall medical costs, improve patient access to more affordable care and provide an improved quality of life.

In this elective course, students will learn about common decision-analysis tools used in formulary decision-making. The focus will be on cost-effectiveness and budget impact analyses. This class will include didactic learning, directed reading assignments, and classroom discussions. Open to year 2 PharmD students only. See registration notification for capacity, course dates/times.

**PHRM ELC10 The Chemistry of Cosmetics (1.0 Credit, Letter Grade, Spring)**

This course introduces the components of cosmetic products, their function and chemistry. Specifically, we discuss cosmetics, such as skin and hair care products, sunscreens, and perfumes as well as product safety issues, and evaluation. The students have directed reading assignments and discussions. Open to year 2 PharmD students only. See registration notification for capacity, course dates/times.

**PHRM ELC11 OTC and Self-care for PIP Students (1.0 Credit, CR/NCR, Spring)**

This course provides an extended review of OTC and Self-care to supplement instruction in the PIP program. Through this elective, faculty will go over key concepts in OTC/Self-care that will better prepare student pharmacists in the PIP program for their career as students and practicing pharmacists. Open to year 2 PIP PharmD students only. See registration notification for capacity, course dates/times.

**PHRM ELC12 Immunotherapies (1.0 Credit, CR/NCR, Fall)**

This course provides an overview of commonly used immunotherapies and discussion of the disease states they can target. Discussions on the pros and cons of the immunotherapies are presented. Additional presentations from clinical and industry perspective are presented to give an overview of the role of pharmacists in working with these therapies. Open to year 2 and year 3 PharmD students only. See registration notification for capacity, course dates/times.

**PHRM ELC13 Pharmacy Residency Elective Preparation (PREP) Course (1.0 credit, CR/NCR, Spring)**

In this hands-on course, you will learn how to prepare for the pharmacy residency application process. We will guide you through researching residency programs, applying through PhORCAS, and preparing a *curriculum vitae* and letter of intent. You will also have opportunities to participate in clinical case questioning and mock interviews and with the course facilitators. A combination of virtual in-person and online activities will be utilized during the course. Open to year 2 PharmD students only. See registration notification for capacity, course dates/times.

**PHRM ELC15 Principles of Biomedical Ethics (1.0 Credit, Letter Grade, Spring)**

This course consists of three topics within modern biomedical ethics. First, the course will survey the various moral philosophies that are used in society as well as the biomedical enterprise. Second, the course will utilize a small group format to discuss medical scenarios to tease apart ethical approaches and the conflict between various ethical theories. Lastly, the course will continue in the small group format to discuss research ethics and use real cases to examine the role that ethics and ethical theories play in laboratory science. Students are also expected to explore their own ethical philosophy and articulate this philosophy in line with the traditional philosophies that will be discussed in class. Open to year 2 PharmD students only. See registration notification for capacity, course dates/times.

**PHRM ELC20 Stress Management for Student Pharmacists: MMY Method (MINDFULNESS, MEDITATION AND YOGA) (1.0 Credit, CR/NCR, Fall/Spring)**

This elective is designed as an introductory to intermediate level course for the student pharmacist to learn basic techniques of Yogic breathing (Pranayama), postures (asanas), mindfulness and meditation towards relaxation and stress reduction. The benefits of the course are intended to be both short and long term, dependent on individual levels of practice. Open to year 1, year 2 and year 3 PharmD students in the fall term and year 1 and year 2 students in the spring term. See registration notification for capacity, course dates/times

**PHRM ELC22 Pharmacist & Patient Centered Diabetes Care Certificate Training Program (APhA) (2 Credits, Letter Grade, Fall/Spring)**

This course will enhance student pharmacists' clinical expertise in evaluating and adjusting drug therapy regimens for patients with Type 1 and Type 2 diabetes, counseling patients about lifestyle interventions, analyzing and interpreting self-monitoring blood glucose results, and assessing the overall health status of patients to identify needed monitoring and interventions. Student pharmacists will receive a certification by completing all activity requirements, which include the self-study activity assessment, liver seminar involves demonstrating competency in blood pressure testing, self-injection techniques, diabetic foot exam, and blood glucose testing, and a final exam. Open to year 2 and year 3 PharmD students for the fall term and open to year 2 PharmD students for the spring term. See registration notification for capacity, course dates/times.

**PHRM ELC24 Global Health Summer Rotation (2.0 Credits, CR/NCR, Summer)**

This elective course aims to provide a global health experience to student pharmacists interested in learning about the pharmacy profession in countries outside of the USA. The course is offered during summer months of the P1 and P2 years and depends on availability of the international sites at the time of application. The total duration of the course will be 4 weeks of which 1-week accounts for travel back and forth from the international destination and also for report writing. The remaining 3 weeks will focus on spending time at the campus of our affiliate host institutions and visits to hospital pharmacies and pharmaceutical industries or as planned by the host institution. Current memorandums of understanding exist with institutions in China, Japan, Korea and Thailand. While there will be no tuition fee for participating in this elective course (provided it is within the credit limits as designated by the College), there will be costs pertaining to visa, travel, lodging and food which will be the responsibility of the student. Student pharmacists interested in this elective course can request estimated costs for the trip from the facilitator. A waiver form will need to be signed prior to travel. **Please note student pharmacists must enquire with the facilitator prior to registering for this elective.** Open to year 1 and year 2 PharmD students only. See registration notification for capacity, course dates/times.

**PHRM ELC25 Advanced Clinical Research Design (1.0 Credit, CR/NCR, Spring)**

This course aims to have the students learn various issues associated with clinical research and

experimental designs. This elective helps students to learn the practical aspect of clinical trials and how to develop the study objectives, the research protocol, IRB preparation, study design issues, data analysis, and preparation of abstracts, and publish the findings. This course will help those interested in pursuing research career, i.e., fellowship, industry, or academia. Throughout the elective course we will discuss principles of the study objectives, clinical research/ experimental design, protocol development, managing and monitoring clinical trials, data management and analysis, and regulatory issues with drugs, and the student will have the opportunity to develop his/her own study protocol. Open to year 2 PharmD students only. See registration notification for capacity, course dates/times.

**PHRM ELC26 History of Pharmacy in the US and Abroad (1.0 Credit, CR/NCR, Spring)**

This course will explore the development of pharmacy as a profession and use historical examples to prepare student pharmacists for opportunities to create unique roles and responsibilities for themselves in various career settings. Special emphasis will be placed on the evolution of pharmacists' relationships with other healthcare providers, our ethical responsibility to patients, and select advocacy initiatives. This course will combine didactic teaching and active learning exercises.

The elective will include two main projects. First, students will participate in a classroom debate regarding a currently relevant advocacy initiative within the field of pharmacy (e.g. Should PGY-1 residency training be required for all pharmacists with direct patient care responsibilities?). Students will be assigned a pro or con position for one of several potential debate topics and be expected to research their position prior to participating in the classroom discussion. For a final project, students will be organized into groups for the purpose of preparing a brief presentation on a notable figure in pharmacy who has had a significant impact on the profession. Open to year 1 and year 2 PharmD students. See registration notification for capacity, course dates/times.

**PHRM ELC27 Transgender Health (2.0 Credits, Letter Grade, Fall/Spring)**

This course will introduce student pharmacists to the terms, concepts and guidelines related to transgender health. In addition, student pharmacists' will gain insights into cross-sex hormonal therapy (CSHT) specific to transgender health and addressing primary care, preventive, and mental health perspectives of transgender patients. The live seminar incorporates active learning through interactive case studies and group discussions. Open to year 2 and 3 PharmD students in the fall and year 2 PharmD students in the spring. See registration notification for capacity, course dates/times.

**PHRM ELC28 Advanced Informatics (1.0 Credit, CR/NCR, Fall/Spring)**

This elective will serve as a project-based course in various areas of how health informatics relates to the real world. Students will be partnered in teams to work on specific project as required at the time. Students will have the ability to work together to create presentations on assigned research topics and projects in regard to health technology and the impact on patient care. The elective will be a mixed approach with current papers and topics in informatics as well as project based. Student pharmacists will learn about advanced topics about various aspects of informatics. At the end of the course, a presentation of findings will be given by the student teams. Open to year 2 and 3 PharmD students in the fall and year 2 PharmD students in the spring. See registration notification for capacity, course dates/times.

**PHRM ELC29 Personal Finances and Investments (1.0 Credit, CR/NCR, Spring)**

Many students find it challenging to manage personal finances and invest when struggling with student loans and living expenses with little-to-modest income during academic training. This course provides an introduction to money management and optimizing practical yet realistic strategies to build their investment

portfolio to exceed \$1 million dollars by retirement. The course will identify ways to budget for personal expenses, prioritize select debt repayments, and build additional savings for tax-sheltered investments. Furthermore, approaches to selecting stocks or mutual funds, sector rotation based on economy, and basic stock chart technical analyses will be introduced. Class sessions will be a combination of online modules, interactive discussion, personal budget challenge assignment with reflections, and development of a personal finance investment plan. All meetings will occur through Zoom. Open to year 2 PharmD students only. See registration notification for capacity, course dates/times.

**PHRM ELC30 Introduction to Pharmaceutical Research (1.0 Credit, CR/NCR, Fall)**

Pharmaceutical research produces drug products for treating various human diseases. This elective introduces the student pharmacist to the interdisciplinary nature and practice of pharmaceutical research. Throughout the course the student pharmacist will learn the history, science, scope, experimental design, intellectual property, and the skills to critically evaluate pharmaceutical research publications. The emphasis will be placed on pharmaceutical innovation. Open to years 1, 2 and 3 PharmD students. See registration notification for capacity, course dates/times.

**PHRM ELC33 Oncology Practicum (1.0 Credit, CR/NCR, Fall/Spring)**

The care of patients with cancer is complex, often involving multimodal therapies with high potential for toxicities. The pharmacist must be knowledgeable about cancer disease states and appropriate management of toxicities of cancer therapeutics to educate patients and optimize patient outcomes. This course will be led by a team of oncology pharmacist preceptors who will introduce student pharmacists to topics in oncology through interactive lectures, journal clubs and patient cases. By the end of the course, student pharmacists will be able to develop evidence-based pharmaceutical care plans and provide medication counseling for patients with cancer. Open to year 2 and year 3 PharmD students in the Fall and open to year 2 PharmD students only in the Spring. See registration notification for capacity, course dates/times.

**PHRM ELC34 Artificial Intelligence in Pharmacy (1.0 Credit, CR/NCR, Fall)**

This elective is to introduce the application of artificial intelligence in healthcare and in pharmacy. The student pharmacist will learn about where artificial intelligence is already seen in already being applied in pharmacy and how it can evolve in the near future. There are online video modules that will help to understand different concepts. The in-class quizzes and writing assignments will further strengthen different learning outcomes in the block. After the block, student pharmacists will be able to understand how artificial intelligence is applied in pharmacy and how it can change the practice of pharmacy and other healthcare fields. Open to years 1, 2 and 3 PharmD students. See registration notification for capacity, course dates/times.

**PHRM ELC35 Managed Care (1.0 Credit, CR/NCR, Spring)**

This course is an overview of managed care pharmacy to introduce students to different fields in pharmacy and gain some practical skills. The course will introduce different fields within managed care pharmacy and the roles of pharmacists. The students will also understand the different quality metrics health plans and healthcare providers try to meet. There will be some hands-on work to gain some experience with data analysis, prior authorizations and MTM cases. The class will be a combination of live lectures, online webinars, interactive discussion, and self-study homework. Open to Year 2 PharmD students only. See registration for capacity, course dates/times.

**PHRM ELC36 Legislative Advocacy (1.0 Credit, CR/NCR, Fall)**

This course focuses on teaching students basic knowledge of the legislative process and fundamental advocacy techniques and how they can actively participate in the legislative process. Students will learn about current legislation relevant to pharmacy and how they can influence lobbyists, legislators, and policy professionals. Through this course, students will become aware of local, state, and national healthcare issues that affect pharmacists and their patients. Students will also learn about the role of professional organizations in the legislative process and the policy development process for these organizations. Students will participate in advocacy events such as a mock house of delegates and student legislative day. As part of this course, students will also write a letter to their legislator and schedule a meeting with their legislator's staff to discuss pharmacy-related issues and legislation. Open to years 1, 2 and 3 PharmD students. See registration notification for capacity, course dates/times.

**ELC37 Happiness in Pharmacy School (1.0 Credit, CR/NCR, Fall)**

Pharmacy school could have a negative impact on a student's sense of well-being. As the year progresses, students may experience stress and start to feel burned out. This course challenges students to explore and engage in activities that can increase their own happiness and help maintain their sense of well-being in the midst of a busy pharmacy school year. Together, we will dive into what the research says about what we think will make us happy versus what actually makes us happy. We will also see what data there is regarding whether or not we can improve our own happiness. Through this course, students will identify evidence-based strategies they can put into practice in order to build healthier habits. Students will experiment with these practices to see if it helps them prevent burnout during the school year and assess what impact this has on their own happiness. Open to years 1, 2 and 3 PharmD students. See registration notification for capacity, course dates/times.

**PHRM ELC38 Introduction to Scientific Writing and Publication (1.0 Credit, CR/NCR, Fall & Spring)**

This elective is to introduce the basic elements in scientific writing and the publication process. Student pharmacists will learn how to evaluate a research article, a review article, and a book chapter. In addition, Student pharmacists will select a research topic of interest, collect relevant literature, and write a review article. Selection of an appropriate journal to publish the review article will also be discussed. By the end of the course, student pharmacists will have hands-on experience in writing a review article and be familiar with the process of journal selection and manuscript submission. Open to years 1,2 and 3 PharmD students in the fall and years 1 and 2 PharmD students in the spring. See registration notification for capacity, course dates/times.

**PHRM ELC39 HPLC Practicum: Method Develop and Validation (1.0 Credit, CR/NCR, Fall)**

This elective is to introduce the basic concepts in pharmaceutical and biomedical analysis. Particularly, the student pharmacists will learn the theory and instrumentation of high performance liquid chromatography (HPLC) and its application in pharmaceutical and biomedical analysis. In addition, Student pharmacists will select a drug or an experimental therapeutic, develop and validate according to FDA guidelines an analytical HPLC assay for the selected chemical entity in plasma, and write a lab report. By the end of the course, student pharmacists will have the knowledge and hands-on experience in developing HPLC method for drug analysis in biological samples. Open to years 1,2, and 3 PharmD students. See registration notification for capacity, course dates/times.

## Honors and Awards

The following awards for PharmD students are presented annually on Honors Day in April (some awards subject to change).

Albertsons/Sav-on Scholarship  
The Robert L. and Mrs. Gloria Austin Scholarship  
California Korean American Pharmacists Association Endowed Scholarship  
Cardinal Health Pharmacy Scholarship  
CVS Health Foundation Pharmacy School Grants Program Scholarship  
Dean's Endowment Scholarship  
Dean's Merit Scholarship  
Drs. Sumit & Bhavesh Desai Scholarship Endowment  
Debbie Robinson Memorial Scholarship  
East-West Scholarship  
Good Neighbor Pharmacy/Institute for Community Pharmacy Scholarship  
Hoffman Family Leadership Endowed Scholarship  
Indian Pharmacists Association Endowed Scholarship  
Melanie S. Lim Memorial Scholarship  
Melinda Mah Memorial Scholarship  
Sripriya (Priya) Upadhyayula Patel Memorial Endowed Scholarship  
Ralphs Pharmacy Scholarship  
Rite Aid Scholarship  
Robinson Celebrating Diversity Endowment Scholarship  
Rosenberg Endowed Scholarship  
RX Prep Scholarship  
Dr. Sam Shimomura Scholarship Endowment  
The Thai Family Endowed Scholarship  
Tribute to Caring Scholarship  
Dr. Fidel Valenzuela Scholarship Endowment  
Vietnamese Pharmacists Association (VPhA in the USA)  
Walgreens Diversity Scholarship  
Walgreens Diversity & Inclusion Excellence Scholarship  
Walmart Pharmacy Scholarship

The following awards are presented annually to graduates at the Commencement Dinner Dance:

Dean's Award

## Academic Calendar

COP academic calendar is subject to change.

Fall 2022	
May 16, 2022	Fall Rotations Begin (PharmD Year 4, PIP Year 3)
July 4, 2022	Independence Day Observed – No Classes*
July 1, 2022	Fall Classes Begin (PIP Year 1)
July 11, 2022	Fall Classes Begin (PIP Year 2)
August 1-5, 2022	Orientation/Welcome Week (PharmD Year 1)
August 6, 2022	Convocation/White Coat Ceremony (PharmD/PIP Year 1)
August 8, 2022	Fall Classes Begin (PharmD Years 1-3)
September 5, 2022	Labor Day - No Classes*
November 4, 2022	Fall Rotations End (PharmD Year 4, PIP Year 3)
November 11, 2022	Veteran's Day – No Classes*
November 23, 2022	Thanksgiving Recess Begins @ 5:00 p.m.
November 28, 2022	Fall Classes Resume
December 16, 2022	Fall Classes End (PharmD Years 1-3, PIP Years 1-2)
December 17, 2022	Winter Recess Begins
Spring 2023	
November 7, 2022	Spring Rotations Begin (PharmD Year 4, PIP Year 3)
January 3, 2023	Spring Classes/Rotations Begin (PharmD Years 1-3, PIP Years 1-2)
January 16, 2023	Martin Luther King Day – No Classes*
February 20, 2023	President's Day – No Classes*
March 20, 2023	Spring Break Begins for PharmD Year 1
March 22, 2023	Spring Break Begins for PharmD Year 2
March 27, 2023	Spring Classes Resume for PharmD Year 1
March 29, 2023	Spring Classes Resume for PharmD Year 2
April 6, 2023	Honors Day
May 5, 2023	Spring Rotations End (PharmD Year 3-4, PIP Year 2-3)
May 18, 2023	Commencement
June 16, 2023	Spring Classes End (PharmD Year 1)
May 29, 2023	Memorial Day – No Classes*
June 16, 2023	Spring Classes End (PIP Year 1)
August 4, 2023	Spring Classes End (PharmD Year 2)

*\*Student pharmacists in clinical rotations observe their preceptor's hours, which may include working on federal holidays.*