

COURSE SYLLABUS

Advanced Pharmacy Practice Experiences Advanced Institutional PHAR 772 (May be taken as PHAR 764 or 765 for elective credit)

I. APPE Director and Course Coordinator

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II. Primary Preceptor

Please refer to the Site Specific Syllabus Information Form.

III. Additional Preceptors and Site Staff

Please refer to the Site Specific Syllabus Information Form.

IV. Reporting Information

The student should contact the preceptor 4 weeks prior to the start of rotation to confirm a meeting place and time for the first day of rotation.

Please refer to the Site Specific Syllabus Information Form for additional information.

V. Catalog Description

Five-week experience in the delivery of pharmaceutical care in a health system setting.

VI. Course Philosophy

The Advanced Pharmacy Practice Experiences (APPE) program at WVU SOP provides hands-on experiences throughout the fourth year of the curriculum designed to enhance knowledge and skills learned in the classroom. By completing APPE, students gain a wide variety of experiences and develop advanced application skills.

This course is part of an eight course series that consists of a minimum of 1600 clock hours completed during the fourth (4th) year of the professional program. Students

complete rotations in the summer, fall and spring semesters. Students will complete a minimum of 200 clock hours for each rotation (5 week block).

VII. Rotation Description

This rotation is designed to provide students experiences and practice in the development of behaviors, knowledge, and skills necessary to function as an entry-level provider in the institutional practice setting. Activities in this rotation will be related to drug distribution, formulary management, sterile IV admixing, patient safety, providing appropriate answers to drug information questions. Most learning objectives will be assessed through direct observations and interaction with the preceptor and other healthcare providers at the rotation site.

Please refer to the Site Specific Syllabus Information Form for additional information.

VIII. Areas of Emphasis

Distribution systems and workflow Legal aspects of hospital pharmacy practice Order entry and verification and drug dispensing systems Appropriate documentation of pharmacy services Formulary management Medication safety Medication use evaluation

Common disease states (not all inclusive): Acute Infection (e.g. pneumonia, UTI, cellulitis, etc.) requiring hospitalization COPD exacerbations CHF exacerbations ACS AKI ACLS Pain (acute) Hypertension Hyperglycemia Allergies

Please refer to the Site Specific Syllabus Information Form.

IX. Required Course Text or Other Required Materials

Student will be assigned readings from primary literature or other sources as directed by the preceptor.

- X. School Education Outcomes (EOs) (see Appendix A)
- XI. Course Ability-Based Outcomes (ABOs) (Learning Outcomes)

Professionalism Competency Domain

- 1. Display professional demeanor and behavior
 - a. Maintain a high standard for personal and professional demeanor, accepting responsibility and accountability for words and actions
 - b. Demonstrate respect for everyone encountered during the rotation, including site employees, patients/families, and the general public
- 2. Manage time well and demonstrate an appropriate level of preparedness
 - a. Prepare appropriately for all assignments and daily tasks
 - b. Manage time well, arriving in time to begin required activities promptly and completing tasks in the required timeframe
 - c. Accurately triage multiple priorities in times of high activity and workload
- 3. Display self-awareness and self-improvement
 - a. Recognize and reflect upon personal strengths and limitations and actively work to correct deficiencies, seeking assistance when needed
 - b. Demonstrate active, self-directed pursuit of new knowledge and skills
 - c. Demonstrate the ability to accept constructive feedback and a willingness to correct and learn from errors
- 4. Practice in an ethically responsible manner and in compliance with all applicable legal requirements
 - a. Complies with all applicable local, state, and national laws
 - b. Apply professional ethics as they relate to the practice of pharmacy
 - c. Maintain patient confidentiality and privacy rights, as legally and ethically required
- 5. Practice in patient-centered manner and advocate for patients
 - a. Demonstrate patient and caregiver compassion and empathy
 - b. Honor the autonomy, value, and dignity of each patient
 - c. Keep patient and caregiver needs at the forefront when providing care and other services in the practice setting
 - d. Consider and represent the patient's best interest with respect to alternative approaches to providing care

Communication and Cultural Competence Domain

- 6. Display effective verbal and non-verbal communication skills
 - a. Communicate effectively verbally in a manner appropriate for the intended audience (e.g. patient, healthcare provider, colleague, etc.)
 - b. Speak clearly and appropriately, using proper grammar and vocabulary
 - c. Respond to questions with the appropriate level of detail necessary to ensure proper communication with other relevant parties
 - d. Maintain appropriate eye contact and body posture, without using distracting behaviors or mannerisms
- 7. Display effective written communication skills
 - a. Communicate effectively in writing in a manner appropriate for the intended audience (e.g. patient, healthcare provider, colleague, etc.) and purpose (e.g.

health record documentation, drug information question response, topic education)

- b. Appropriately document services and follow-up with other health professionals
- 8. Demonstrate cultural competence
 - a. Convey comfort with new or different perspectives that persons from a variety of cultures or backgrounds can provide
 - b. Acknowledge the attitudes, opinions, and needs of persons from different cultures or backgrounds
 - c. Avoid behaviors and communication that judges or classifies others base on stereotypes
 - d. Appropriately interact with persons from backgrounds or cultures different than one's own

Interprofessional Teamwork Domain

- 9. Effectively interact with members of the healthcare team
 - a. Develop positive professional relationships with other healthcare providers
 - b. Respect the values and abilities of fellow healthcare providers
- 10. Actively contribute as a member of the healthcare team
 - a. Collaborate with health care professionals, patients, and/or caregivers to ensure achievement of desired health outcomes
- 11. Assume appropriate leadership roles as part of the healthcare team
 - a. Take responsibility for creating and achieving shared patient-care or team goals that are appropriate for his or her position
 - b. Help and support other members of healthcare team as needed

Knowledge and Skills Domain

- 12. Demonstrate the requisite pharmacy knowledge to function as an entry-level provider in the practice setting
 - a. Demonstrate understanding of common indications, dosing, monitoring parameters, and safety consideration of relevant medications
 - b. Identify medication therapy problems, including drug interactions, gaps in pharmacy-related treatment, and monitoring parameters
 - c. Demonstrate appropriate level of knowledge regarding the pathophysiology of commonly seen disease states
 - d. Demonstrate appropriate level of knowledge regarding standards of care for the pharmacy-related treatment of commonly seen disease states
 - e. Describe the appropriate use of injectable medications, including intravenous, intrathecal, intraocular, intradermal, and other routes
 - f. Describe the basic drug procurement process including drug selection, inventory management, backorders, recalls, drug waste, handling of drug shortages, and their relationship to safe, effective patient care
- 13. Demonstrate the requisite pharmacy skills to function as an entry-level provider in the practice setting
 - a. Recommend therapeutic alternatives and generic substitutions

- b. Evaluate medication orders for appropriate therapy, efficacy, safety, and compatibility with other medications, proper dose, dosage form, accuracy and completeness
- c. Analyze patient records for pertinent information before dispensing, and identify allergies, potential interactions with other drug therapy or disease states, and duplicate therapy
- d. Prepare prescriptions for the patient by evaluating the prescription and selecting the proper product
- e. Package and dispense multiple dosage forms including IV admixtures
- f. Accurately perform appropriate calculations
- g. Apply pharmacokinetic dosing principles for commonly used drugs that rely on serum levels for dosing, determine the correct dose
- 14. Demonstrate effective problem-solving skills
 - a. Use critical thinking skills when solving a given problem
 - b. Analyze components of complex problems in an orderly fashion
 - c. Identify multiple potential solutions to the original problem and the potential consequences of those solutions
 - d. Choose a course of action based on evidence
 - e. Assess chosen course of action and make adjustments as necessary
- 15. Demonstrate effective critical-thinking skills
 - a. Clearly formulate clarifying questions relevant to a given situation
 - b. Use credible sources to seek complete information to address a situation
 - c. Use reason to analyze all aspects of a situation
 - d. Demonstrate willingness and ability to take or change a position or plan as evidence dictates
- 16. Demonstrate creative thinking
 - a. Think "outside of the box" (i.e. differently, unconventionally, or from a new perspective) when faced with a potential problem
 - b. Consider and articulate innovative ways to accomplish goals or complete tasks
 - c. Engage in innovative activities as appropriate to achieve goals

Evidence Based Practice Domain

- 17. Obtain all relevant background information needed to clarify the question or problem
 - a. Clearly states or formulates clinical or other drug-related question or information need
 - b. Determines actual information need from an information request
 - c. Obtains and assesses all relevant background information needed to clarify the question or information need
- 18. Provide applicable, concise, and timely responses to requests for drug information that fully addresses the actual information need
 - a. Use appropriate drug information resources to develop responses to drug information requests
 - b. Determine actual information needed from a drug information request

- c. Appropriately communicate all relevant, needed information concisely without extraneous or unclear information
- d. Appropriately respond to drug information requests in an appropriate timeframe based on the urgency of the information need
- 19. Accurately interpret primary literature, identifying important factors to determine key strengths and weaknesses of a study
 - a. Identify important factors that impact adequacy of study and its design and methods
 - b. Determine key strengths and weaknesses of a study
 - c. Identify common statistical analyses and their appropriate use in studies
 - d. Formulate appropriate conclusions from clinical studies

Safety and Systems Domain

20. Proactively assess and resolve issues related to patient safety

- a. Document medication errors according to institutional policies
- b. Outline the basic functionality of commonly used automated systems related to medication use (such as automated dispensing cabinets, computerized prescriber order entry systems, bar code medication administration systems, programmable infusion devices, and robotics), understanding their appropriate and safe use as well as unintended consequences
- c. Employ performance improvement techniques used in health systems and describe how they are used to improve the medication use process
- d. Make useful contributions to the establishment of medication-use policies, criteria, and maintenance of the formulary, including prospective and retrospective financial and clinical outcomes analyses to support formulary recommendations and therapeutic guideline development
- e. Evaluate medication-use patterns in a specified patient population
- 21. Apply national standards, guidelines, and best practices
 - a. Use institutional procedures and best practices to ensure continuity of care for patients transitioning between healthcare settings
 - b. Summarize current National Patient Safety Goals and articulate those goals that relate to medication use, pharmaceutical care, and pharmacy's role in each
 - c. Describe how organizations such as the Joint Commission strive to ensure quality of healthcare through the accreditation process, giving examples of relevant standards related to safe and appropriate medication use
 - d. Demonstrate patient safety procedures in filling and dispensing prescriptions
 - e. Demonstrate aseptic technique and describe processes and facilities needed to provide sterile compounded parenteral solutions, including the basic requirements of United States Pharmacopeia (USP) 797
 - f. Describe the appropriate roles of pharmacy technicians and pharmacists in the hospital drug distribution process
 - g. Participate in inventory management and purchasing activities, as appropriate
 - h. Participate in the management of the use of investigational drug products, as appropriate

Site Specific Learning Objectives

Please refer to the Site Specific Syllabus Information Form for additional information.

XII. Requirements for Successful Completion

The following items must be submitted by the last day of the rotation:

- 1. Completed hours log on RXpreceptor
- 2. Student self-assessment on RXpreceptor
- 3. All rotation specific assignments on RXpreceptor:
 - a. APPE Institutional Discussion Checklist
 - b. 4 parenteral drug reports
 - c. 2 drug information requests
 - d. 2 journal article summaries
 - e. 1 formulary review assignment
- 4. Evaluations of preceptor and site (through RXpreceptor)

Failure to submit any required assignment or evaluation by the last day of rotation will result in an administrative adjustment of the competency score for "Manages time well and demonstrates an appropriate level of preparedness" within the Professionalism Competency Domain to a **2** (requires substantial assistance) or to a score of **1** (entirely unable to meet expectations) if the original competency score assigned is a 2.

Finals grades cannot be submitted to the Office of the Registrar until assignments and evaluations are received.

Site Specific Rotation Assignments

Please refer to the Site Specific Syllabus Information Form for additional information.

XIII. Evaluation of Learning and Grading

This course is graded on a scale of Honors "H", Pass "P", or Fail "F". Students will be evaluated on the basis of the competencies outlined in the Student Assessment Form. The Student Assessment Form consists of six competency domains: professionalism; communication; interpersonal/interprofessional work; knowledge and skills; evidence based practice; and safety and systems.

Students will be evaluated at two weeks and at five weeks using the Student Assessment Form. Two and five week evaluations will be submitted using RXpreceptor. Scores from the five week evaluation will be used to determine the final grade.

Note: Failure to submit any required assignment or evaluation by the last day of rotation will result in an administrative adjustment of the competency score for "Manages time well and demonstrates an appropriate level of preparedness" within the Professionalism Competency Domain to a **2** (requires substantial assistance) or

to a score of **1** (entirely unable to meet expectations) if the original competency score assigned is a 2.

To receive a grade of "H", the student must receive an average score of at least 4.5 on each competency domain.

To receive a grade of "P," the student must receive an average score of at least 3 on each competency domain.

Rotation specific assignments, while not formally graded, directly correlate with the learning objectives and competencies for this course and will be considered in the determination of associated scores on the Student Assessment Form.

All required assignments and evaluations must be completed in order to have a grade of "P" submitted to the Office of the University Registrar.

Students receiving an average score of < 3 for any competency domain on the Student Assessment Form **will receive a grade of "F."**

Students may be removed from rotation prior to completion of 5 weeks at the request of the preceptor or rotation site. **Removal from a rotation prior to the completion of the rotation will result in a grade of "F" if the removal is due to poor student performance in any of the competency domains as determined by the preceptor, student insubordination or behavior which is unacceptable to the preceptor, or if the student has violated rotation site policies or procedures.** Rotation sites have sole discretion in determining if students have violated their policies or procedures.

For grades of "F", progression through the rotation schedule may be halted. The student will be referred to the Academic Standards Committee. At a minimum, the student will repeat the rotation category. For students with a vacation block remaining on their schedule, the vacation block will be used provided a rotation within the needed category is available. Otherwise, the rotation will be scheduled in the next academic year, during the earliest block a rotation within the needed category is available. All remedial rotations must occur during regularly scheduled rotation blocks. (e.g. Students may not complete rotations during rotation breaks in December and May.)

Incomplete grades are issued according to WVU guidelines as identified by the Office of the University Registrar.

Grades of "NR" are rarely issued and are issued only in circumstances in which the student could not complete the rotation but does not meet the guidelines for a grade of "I."

The final grade for the rotation cannot be submitted to the Office of the University Registrar until the 5 week Student Assessment Form has been received from the preceptor.

Student obligations for reporting performance to the Director of APPE:

The student is to notify the Director at the 2 week evaluation if the student is performing unsatisfactorily, i.e. has score < 3 on any competency domain graded on the 2 week evaluation. The student is to notify the Director immediately if a grade of "Fail" is received at the 5 week evaluation.

Performance across rotations:

Any student who receives a score of < 3 on any individual competency within the Professionalism domain over two or more rotations will be referred to the Professional Integrity Committee. Any student who receives a score of < 3 on any individual competency within any other domain over two or more rotations will be referred to the Academic Standards Committee. Either committee may impose additional requirements or remediation related to the competencies in question.

Honors	Average score of at least 4.5 on each
	competency domain and completion of all
	required assignments and evaluations
Pass	Average score of ≥ 3 on each competency
	domain and completion of all required
	assignments and evaluations
Fail	Average score of < 3 on any competency
	domain or early removal from rotation due to
	poor student performance in any of the
	competency domains as determined by the
	preceptor, student insubordination or behavior
	which is unacceptable to the preceptor, or if
	the student has violated rotation site policies
	or procedures

XIV. Course Grading Scale

XV. Attendance

Attendance

Students must be mindful at all times that the primary objective of experiential rotations is learning by doing. Therefore, attendance is mandatory to fulfill the required number of hours for each APPE rotation.

Students will typically attend rotation Monday-Friday for at least 40 hours per week. Certain rotation sites may allow the student to attend four days per week for at least 40 hours per week (e.g. four (10-hour) shifts), at the discretion of the preceptor. Students may be asked to work evening shifts or on weekends depending on required activities and the preceptor's work schedule. Students are permitted to have up to 40 hours of excused absence time that will not need to be made up unless otherwise required by the preceptor over the course of the **entire 8 block APPE year**. These excused absence hours are to be used for illness, emergency situations, residency interviews, and job interviews. The excused absences are **not** vacation/personal days. Students may not accumulate more than three days or 24 hours excused absence during any one rotation unless approved by the Director of APPE.

The student must report to the APPE Director any time more two or more consecutive days will be missed during a rotation. Failure to notify the Director may result in the student having to make up those days.

It is the responsibility of the student to contact the preceptor at least 4 weeks in advance of the first day of the rotation to **ask for permission** for any anticipated missed days (e.g., previously scheduled medical/dental appointment, legal appointment, job/residency interviews, etc.). Preceptors reserve the right to decline requests that would significantly impair the student's rotation activities or request that the time be made up either on site or through assigned projects.

Students having greater than 40 hours of absences during the experiential year will need to make up all days over the 40 hour limit. Students having greater than 24 hours of absence during any one block will need to make up the time unless granted a waiver by the Director. If the Director approves excused absences of greater than 24 hours but the preceptor requests that the time be made up, the preceptor's decision will be honored. The Director of APPE will monitor hours absent.

Students will record all hours on site using the hours log on RXpreceptor. Each student must account for a minimum of 200 hours for each rotation. Hours physically on site can be logged as rotation hours. Excused absences, days missed due to major holidays, days missed due to pre-approved school events, or days missed in accordance with the inclement weather policy (below) are logged as absences in RXpreceptor. Excused absences, holidays, school events, and inclement weather absences will count toward the 200 rotation hours but not toward the minimum 1440 hours of on-site time needed to complete APPE.

Students are excused from the rotation site and are not required to make up the time if they notify the preceptor for the following WVU SoP programs: Career Fair, Career Day and reception, Residency Fair, P4 Day, and other special events designated by WVU SoP.

Exceptional circumstances will be reviewed by the Director of APPE in consultation with the Experiential Learning Committee Chair and the Associate Dean for Student Services.

Required Activities Outside of Rotation Site and Rotation Hours

Individual rotations may require work to be completed outside of the rotation site and/or regular work time. Further, the student should be prepared to work on weekends and evenings if requested, as extended hours frequently occur in practice sites. Each rotation is designed to provide a minimum of 200 hours of experience; however, in many instances more than 200 hours may be required to successfully fulfill the requirements of an individual rotation. Preparation, homework, active participation, frequent communications, completion of assignments and duties, and evaluations are required if academic and licensure credit are to be received. Although rotations are not a traditional classroom setting, homework may be assigned and must be completed on time. Examples include but are not limited to reading/analysis of journal articles, calculations, projects, patient care plans, evening presentations, and community/service learning projects.

Failure to Complete a Rotation for Non-Academic Reasons

If a student must leave a rotation early or cannot begin a rotation for a non-academic reason (e.g. illness, injury, family emergency, or preceptor illness or injury), he or she will receive an incomplete (I) for the rotation. Make-up rotations will be assigned during the student's vacation block or during the academic year that follows completion of the normal experiential course cycle and when appropriate rotations are available. Students must complete all APPE requirements over the span of 8 rotations, even if the rotations are not consecutive. APPE rotation rescheduling will be at the discretion of the APPE Director and will be based upon site and preceptor availability.

Inclement Weather

Since severe weather conditions may often be a local phenomenon, closure of WVU in Morgantown does not necessitate the day(s) off for students on rotations elsewhere. If a student's site is closed, this is not counted as an absence.

If a student's site is open, the student is expected to come to the site. However, students should use their own judgment in determining whether or not they are able to travel in adverse weather conditions. The student MUST call the preceptor if they are going to be late or are unable to attend. If the site is open, the student must use excused absence time or make up any time missed.

If the student's site is open AND the student's preceptor instructs the student not to come in, this is not counted as an absence. However, the student is expected to complete any additional projects the preceptor may assign as a result of the absence. If the site is closed (or the student is instructed not to come in) for > 24 hours during a rotation; all days over the 24 hours must be made up.

Requests to Change Rotation Days/Hours

Students are to be in attendance on the day/shift assigned by the preceptor. If a student wishes to be in attendance on a day/shift other than that scheduled by the preceptor (i.e., exchange a day/shift) the student must first obtain preceptor consent. Preceptors reserve the right to decline such requests. If the student day/shift exchange

request exceeds more than one day, the student must also obtain permission from the APPE Director. The exchanged days/shifts must be made up prior to the start of the next rotation block.

XVI. Dress Code

Professional attire is required when students are at experiential sites. The student is expected to adhere to the WVU School of Pharmacy Dress Code Policy and Procedures for Doctor of Pharmacy Clinical Rotations, unless specifically directed to adhere to site specific dress code policies. This includes a white laboratory coat with an identification badge.

Please refer to the Site Specific Syllabus Information Form for additional information.

XVII. Procedures for Reporting in the Preceptor's Absence

Student will be given specific instructions for reporting on days that the preceptor will be absent. In the event of an unforeseen absence by the preceptor, the student should follow instructions given by the preceptor during first day orientation.

Please refer to the Site Specific Syllabus Information Form for additional information.

XVIII. Special Policies

Please refer to the Site Specific Syllabus Information Form for additional information.

Behaviors or Circumstances Resulting in Removal from Rotation

Violation of any site policy is grounds for immediate removal from rotation.

Please refer to the Site Specific Syllabus Information Form for additional information.

XIX. Academic Integrity

The integrity of the classes offered by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. Therefore, I will enforce rigorous standards of academic integrity in all aspects and assignments of this course. For the detailed policy of West Virginia University regarding the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions, please see the West Virginia University Academic Catalog at http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification/#academicintegritytext. Should you have any questions about possibly improper research citations or references, or any other activity that may be interpreted as an attempt at academic dishonesty, please see me before the assignment is due to discuss the matter.

XX. Cheating and Plagiarism

Cheating and Plagiarism: Any use of resources other than your own recollection and reasoning ability on an exam, paper, or assignment is cheating. Plagiarism, a form of cheating, occurs when another person's work is used without attribution or when it is copied without attribution. If a student cheats or plagiarizes she or he will fail the course. All incidents will be reported in writing to the Associate Dean for Student Services. WVU procedures regarding academic dishonesty will be enforced.

Note: This includes cutting/pasting information from Clinical Pharmacology and similar resources to prepare a drug monograph or respond to written drug information questions.

XXI. Inclusivity Statement

The West Virginia University community is committed to creating and fostering a positive learning and working environment based on open communication, mutual respect, and inclusion. If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with the Office of Accessibility Services (293-6700). For more information on West Virginia University's Diversity, Equity, and Inclusion initiatives, please see http://diversity.wvu.edu.

XXII. Statement on Sexual Misconduct

West Virginia University does not tolerate sexual misconduct, including harassment, stalking, sexual assault, sexual exploitation, or relationship violence [BOG Policy 44]. It is important for you to know that there are resources available if you or someone you know needs assistance. You may speak to a member of university administration, faculty, or staff, but keep in mind that they have an obligation to report the incident to the Title IX Coordinator. If you want to speak to someone who is permitted to keep your disclosure confidential, please seek assistance from the **Carruth Center**, 304-293-9355 or 304-293-4431 (24-hour hotline), and locally within the community at the **Rape and Domestic Violence Information Center** (**RDVIC**), 304-292-5100 or 304-292-4431 (24-hour hotline).

For more information please consult WVU policies at http://titleix.wvu.edu

XXIII. Additional Course Information

Rotation Site Change Requests

Once student-preceptor assignments are announced, changes are made only in circumstances when the preceptor or site become unavailable or if there is a substantial problem that prevents the student from participating as scheduled. With preceptor-driven changes, OEL provides reassignment options, when possible, to the student for review and submission of preferences. OEL then works in order of the student's preferences to confirm preceptor availability and approval. When a student wants to change a rotation, the student must submit in writing a Rotation Change Request form describing the substantial problem that prevents the student from participating as scheduled. The request is subject to review and approval or denial by the OEL. All decisions are final, and all parties are notified as appropriate.

It is inappropriate for the student to contact a preceptor directly at an affiliated practice site to attempt to arrange or change a rotation. Due to the complexity of rotation placements, all rotation scheduling must go through OEL.

Housing

The student must arrange his or her own housing for all rotations. Some free housing is available in various sites. Students are encouraged to utilize free living arrangements with family and friends for rotations throughout the APPE year or share rental housing with friends.

Transportation

The student must arrange transportation to and parking at rotation sites. Typically, students may need to travel up to 1 hour to rotation assignments within the student's assigned region; however, students may need to travel > 1 hour to rotation assignments if an acceptable rotation is not available closer to the student's housing. Therefore, the student must be prepared to commute if necessary. The student must obtain information about parking from the preceptor prior to the start of the rotation. Transportation and parking expenses are the student's responsibility.

Site Specific Requirements

The student must be attentive to any special requirements imposed by some sites on students before the start of the rotation. Specific site requirements, if provided by the site, are listed on SOLE. Students are expected to make inquiries about special site requirements when contacting the preceptor 4 weeks in advance of the rotation. The site may decline to accept the student if he or she has not fulfilled the site-specific requirements by the due date imposed by the site. Consequently, the rotation may need to be rescheduled for the next available rotation block, and if applicable, may result in a delay in graduation. Any expenses associated with the site's special requirements are the student's responsibility.

Remuneration

The student must not receive any remuneration from the practice site or preceptor to which he or she is assigned.

XXIV. Rotation Activities and Schedule

General Rotation Hours

A calendar will be provided to the student on the first day of the rotation that will outline the general schedule for the 5-week rotation block. The student should provide the preceptor with a calendar detailing their responsibilities outside of the rotation for the month so these schedules can be coordinated. Please refer to the Site Specific Syllabus Information Form for additional information.

Please refer to the Site Specific Syllabus Information Form for additional information.

Activity	Assessment Method	Frequency
Evaluate medication orders for appropriate therapy, efficacy, safety, and compatibility with other medications, proper dose, dosage form, accuracy and completeness	Direct Observation	Daily
Analyze patient records for pertinent information before dispensing, and identify allergies, potential interactions with other drug therapy or disease states, and duplicate therapy	Direct Observation	Daily
Prepare prescriptions by evaluating the prescription and selecting the correct product	Direct Observation	Daily
Package and dispense multiple dosage forms including IV admixtures	Direct Observation, 4 Parenteral Drug Reports on RXpreceptor	Daily
Document services and follow-up with health professionals	Direct Observation	Daily
Collaborate with health professionals to ensure optimal patient outcomes	Direct Observation	Daily
Provide accurate and complete information related to drug information requests	Direct Observation, 2 Formal Drug Information Reports on RXpreceptor	As needed throughout the rotation
Complete two journal article summaries	2 Journal Article Summary on RXprecpetor	Twice

Site Specific Activities

Please refer to the Site Specific Syllabus Information Form for additional information.

Rotation activities and general schedule will be flexible, with specific days and times of scheduled activities subject to change.

APPENDIX A

Check the extent to which each EO is addressed in the course:

B - **Background** (EO only indirectly addressed; at least part of course provides background knowledge or skills needed to achieve final EO that is covered by other courses

I – **Introduction/Initial Exposure** (at least part of course provides introductory knowledge or skills directly related to EO; outcome mastery is NOT expected at this level)

R – **Reinforced** (at least part of course directly builds upon knowledge or skills needed to achieve final EO; partial mastery might be demonstrated but complete mastery is not expected)

E – **Emphasized** (most or all of EO is important component of course; EO mastery largely or completely should be demonstrated and assessed)

Educa	ation Outcome	Extent	
1.1.	Acquire and demonstrate depth and breadth of knowledge of foundational	R	
	scientific, clinical, socioeconomic, and humanistic concepts and skills.		
1.2.	Explain how knowledge in the foundational sciences is integral to pharmacy	R	
	practice.		
1.3.	Integrate knowledge from foundational sciences to explain how specific drugs	R	
	or drug classes work and evaluate their potential value in individuals and		
	populations.		
1.4.	Apply foundational concepts and skills to practice.	E	
1.5.	Use scientific reasoning and critical thinking skills in practice to address	E	
	problems, issues, or concerns.		
1.6.	Develop and apply creative and innovative approaches to effectively resolve	R	
	problems and improve patient outcomes.		
1.7.	Apply an evidence-based approach to practice by identifying appropriate	E	
	questions to address, using databases and other resources to retrieve		
	information, critically analyzing and interpreting relevant scientific		
	information and other evidence, formulating sound conclusions, and		
	integrating the best published evidence with expertise and individual patient		
	values/needs.	_	
1.8.	Analyze and use epidemiologic, pharmacoeconomic, medication utilization,	R	
	and quality improvement data when developing evidence-based programs and		
1.10	protocols.	-	
1.10.	Use information technology where appropriate to enhance individual	R	
0.1	knowledge and skills.		
2.1.	Use appropriate verbal and nonverbal communication skills with individuals	E	
	or groups, including patients, health professionals and others		
2.2.	Use effective written communication skills with patients, health professionals,	R	
	and others, including the development of documents pertinent to professional		
2.4	or organizational needs (e.g., monographs, reports).	D	
2.4.	Use technology to facilitate or enhance professional communications and	R	
0.1	presentations.		
3.1.	Conduct pharmacy practice duties and patient care responsibilities in	E	
	accordance with applicable federal, state, and local laws, statutes, and		
	regulations, as well as professional guidelines and standards.		

3.4.	Serve as a positive role model in actions/communications for peers and other health care providers by maintaining a high standard for personal and professional demeanor and ethical conduct.	Е
3.5.	Respect all points of view in professional interactions while placing patients' needs and desires at the forefront.	Е
3.6.	Demonstrate compassion, empathy, honesty, integrity, ethical behavior and altruism in all actions and communications with patients, families, and care providers.	Ε
3.7.	Develop professional competence through ongoing, active and self-directed pursuit of new knowledge and skills.	Е
3.8.	Identify and analyze emerging health care and pharmacy issues and incorporate new roles, products and services into practice that can improve patient outcomes.	R
3.9.	Accept accountability and responsibility for one's words and actions.	Е
4.1.	Conduct self-assessments on a regular basis and create, implement, evaluate, and modify as needed plans for personal improvement and continuing professional development.	Е
4.2.	Recognize personal strengths and limitations and seek assistance when needed.	Е
4.3.	Approach tasks and situations with flexibility and a desire to learn.	Е
4.4.	Accept constructive criticism and display a willingness to correct and learn from errors.	
5.1.	Collaborate with health care professionals, patients, and/or caregivers to ensure that desired patient-specific or population-based health outcomes are achieved.	R
5.2.	Facilitate team building among health care professionals by developing and maintaining an atmosphere of mutual respect and shared values that place the patient at the forefront.	R
6.1.	Accurately interpret, prepare and/or compound, handle and dispense prescriptions for patients.	Е
6.2.	Obtain necessary patient-specific data (e.g., consulting patient records, taking medication histories, performing basic physical assessments, ordering/interpreting lab tests), and evaluate and use these data when performing patient care related responsibilities.	Ε
6.3.	Evaluate pharmaceutical products, including information about the drug, dosage form, delivery system and cost/benefit, when conducting a medication review or preparing a care plan.	E
6.9	Document patient-care services in charts/medical records and on forms needed for reimbursement.	R
8.1.	Demonstrate knowledge of pharmacy management including operations, human and fiscal resources, marketing, and leadership principles.	R
8.2.	Design, use, and manage systems to prepare, dispense, distribute and administer medications to optimally serve patient's drug-related needs.	R
8.5.	Demonstrate and apply knowledge of national standards, guidelines, best practices, and established principles and processes for safe medication use to protect patient safety	E

8.6.	Participate in quality improvement programs and employ performance	R
	indicators to enhance the quality of care and cost effectiveness of services	
	provided and to optimize safe, appropriate medication use.	
8.7.	Participate in developing and performing medication use evaluations to	R
	identify and resolve drug therapy problems or concerns.	
8.9.	Use current and emerging information and system technologies to enhance	R
	safe and effective medication use.	
8.10.	Provide recommendations for developing and managing a formulary that	R
	incorporate pharmacoeconomic principles.	