Experiential Learning Program (ELP)
2022-2023

Course Number & Title
Advanced Pharmacy Practice Experience (APPE) 401: Health-System Pharmacy Practice

Course Manager
Bethany DiPaula, PharmD, BCPP
University of Maryland, School of Pharmacy
20 N. Pine St, RmN415
Baltimore, MD 21201
Office: (410) 706-6655
Fax: (410) 706-0319
Email: bdipaula@rx.umaryland.edu

Experiential Learning Office e-mail: elp@rx.umaryland.edu
Experiential Learning Program Website: www.pharmacy.umaryland.edu/elp

Credit Hours & Length of Rotation
5 credits; full-time five weeks (200 experiential hours)

Eligible Class Standing
P4

Prerequisites
Students must successfully complete the first three professional years (P1 through P3) and all Introductory Pharmacy Practice Experiences (IPPEs).

Catalog Description
The goal of this rotation is to provide students advanced experience in a health system pharmacy setting. Students will be expected to utilize abilities learned previously in the curriculum in order to oversee drug distribution systems, evaluate and monitor drug therapy, complete medication performance improvement, and educate health professionals. This will be accomplished through a variety of oral and written communication techniques.

Course Outcomes

Upon completion of this experiential course, the student pharmacist will be able to:
1.   **Demonstrate collaboration and effective verbal and written communication skills with patients, caregivers, and the interprofessional team.**
2.   **Demonstrate knowledge of drugs, disease states and physical assessment skills appropriate for this practice setting.**
3.   **Identify and evaluate current and appropriate source of literature to formulate an effective evidence-based response.**
4.   **Demonstrate an understanding of practice management skills and leadership principles**
5.   **Identify opportunities for practice advancement and service enhancement**
6.   **Lawfully, safely, and efficiently manage the dispensing process**
7.   **Demonstrate acceptable qualities and characteristics of professional behavior.**

Required and/or Recommended Texts/Readings

Preceptors may require and/or recommend additional readings for their rotations. Students are expected to communicate with the preceptor regarding such requirements prior to the rotation start date.

Required and/or Recommended Equipment

The School of Pharmacy name badge must be worn during all rotations. Additional equipment may include:

- Lab coat
- Stethoscope
- Watch with second hand

Preceptors may require and/or recommend additional equipment for their rotations. Students are expected to communicate with the preceptor regarding such requirements prior to the rotation start date.

ELP Policies

Students and preceptors are expected to comply with the ELP Policies and Procedures Manual, posted on the website: http://www.pharmacy.umaryland.edu/preceptors/policies.html

Preceptor and Site Criteria

The preceptor must have a clinical faculty appointment from the University of Maryland School of Pharmacy. The preceptor is assigned to specific course(s) based upon experiences, credentials, and roles/responsibilities at the site. The site or practice setting must offer sufficient opportunities for students to meet the course outcomes. The preceptor is encouraged to provide face-to-face feedback for the final evaluation and should assure that the course objectives, including the required hours of participation, were accomplished.

When available, preceptors should facilitate opportunities for students to compound the most commonly prescribed drug products in acute settings (e.g. IV admixtures, total parenteral nutrition) and/or chronic care settings (e.g. oral suspensions, topical preparations) to meet practice standards. In an interdisciplinary setting, students will use technology to effectively carry out professional functions which may include monitoring patient outcomes, answering patient-specific or provider questions, providing medications for patient use, and participating in quality assurance and performance improvement processes. Students will also participate in health policy decision-making for managing drug use. Compliance with legal, regulatory/legislative, and medication safety requirements, as well as accreditation quality standards to maintain professional competence, will be emphasized.

Student Activities and Assignments

Students will work with preceptors to complete activities and assignments which will enable them to accomplish the course objectives by the end of the rotation. Preceptors may utilize a learning contract and rotation calendar to organize the experience, to clearly communicate

expectations, and to account for student responsibilities such as ambulatory clinic, presentations, and projects.

Student Assessment and Grading: The student will be assessed by the preceptor on performance and professionalism at the midpoint and at the end of the rotation. Midpoint evaluations are required to be completed in CORE ELMS for each rotation to document student performance and allow for areas of focus and improvement during the latter half of the rotation. The midpoint evaluation will NOT be used in the calculation of the student's grade. Within one week of completion of the rotation, the Preceptor Evaluation of Student must be submitted to the Experiential Learning Office. Failure to do so may result in an "Incomplete." Evaluations should be completed online in CORE ELMS.

Performance Definitions: Each performance item on the assessment tool will be rated using the following definitions except professionalism. All performance areas are weighted equally. Professionalism must be rated as acceptable to achieve a passing score for the rotation.

Level 1	Unsatisfactory Performance with Low to Minimal Trust
Level 2	Needs Improvement with Moderate Trust
Level 3	Progressing Satisfactorily with High Trust
Level 4	Practices Independently with Distant Supervision and Complete Trust

Final Letter Grade: A red box indicates a professionalism failure. Letter grades will be based on final scores as follows:

A	**≥ 3.5**
B	**3.0-3.49**
C	**2.5-2.99**
F	**<2.5**

Grade Appeals: Students who wish to appeal a rotation grade must do so within one week of the date of the preceptor's completed evaluation. Please refer to the Academic Affairs policy regarding grade challenges and appeals.

Remediation Policy
This course follows academic policies for remediation established by the School of Pharmacy. Please refer to this course's Blackboard site course information page for School policies or the School's website at:
http://www.pharmacy.umaryland.edu/preceptors/policies.html (view "Remediation policy")

Preceptor Assessment: The student will submit the Student Evaluation of Self/Preceptor/Site on-line no later than one week following the completion of the rotation. Each summer, preceptors will be provided summaries (no student names included) of their evaluations in order for them to improve rotations. If a preceptor has had only one student during the previous year, no summary will be sent.

Preceptor's Evaluation of Student

Evaluating/Rating Student Performance (Enter in Core Elms):
- Select appropriate rating (Level 1, 2, 3, or 4) in each column for each item and add comments as needed.

  Note: Comments are strongly encouraged. If a student scores a 2 or lower, the evaluator must provide constructive feedback on how to improve performance
- The midpoint evaluation tracks student progress, provides formative feedback for students to improve performance, and guides activities for the remainder of rotation.
- If the student's overall performance at midpoint is deficient (i.e. numerous "1 or 2" ratings), contact the course manager and/or ELP office.
- Grades will be assigned based on the final evaluation.

Performance Outcomes Criteria: The preceptor should evaluate the student at both the mid-point and at the conclusion of the rotation, using the following competency levels and descriptors. Each performance item on the assessment tool, with the exception of professionalism items will be rated using the competency levels: 1, 2, 3, or 4. The student may fit into more than one category; please select the competency level using the corresponding examples that best describe the student's performance at the point of assessment.

Level 1	Level 2	Level 3	Level 4
Unsatisfactory Performance with Low Trust	*Needs Improvement* with *Moderate Trust*	*Progressing Satisfactorily* with *High Trust*	*Independent* with *Complete Trust*
Student does not meet outcomes when completing basic or routine tasks, AND student requires complete guidance or was unprepared; preceptor had to do most of the tasks. "Preceptor did it."	Student meets outcomes when completing basic or routine tasks, AND student performs some tasks but requires repeated directions. "Preceptor talked student through it."	Student meets outcomes when completing basic and complex tasks, AND student demonstrates some independence, only requiring intermittent prompting. "Preceptor directed student from time to time."	Student meets outcomes when completing basic and complex tasks, AND student functions independently with distant supervision, only needing assistance with nuances or complex situations. "Preceptor was available just in case."

The following are the course outcomes and skills that the preceptor will assess on the midpoint and final evaluations:

DOMAINS	EVALUATION CRITERIA	EXAMPLE SKILLS
Communication and Collaboration as an Interprofessional Team Member	1. Communicates verbally with the interprofessional team, appropriately demonstrates a willingness to form an opinion, expresses observations and/or asks questions, demonstrates assertiveness and confidence when making recommendations, and responds to questions in a clear and concise manner. 2. Communicates in writing. 3. Communicates verbally with patients and their caregivers. 4. Collaborates with the interprofessional team and engages patients and/or caregiver.	1. Verbally presents only the information relevant to the problem(s) at hand. 2. Offers his/ her assessment of the problem(s) without prompting 3. Offers his/ her plan for the problem(s) without prompting 4. Exhibits command of verbal expression (e.g. fluency, grammar, vocabulary, tone, volume, modulation of voice, rate of speech, and pronunciation). 5. Uses appropriate terminology and abbreviations (e.g. avoid "do not use" abbreviations, use lay- terms for patients Personal Medical Record {PMR}).
Drug and Disease State Knowledge	1. Recalls knowledge about drug name, mechanism of action, usual dosing, common side effects, and major drug interactions. 2. Discusses disease pathophysiology and explains how subjective and objective findings correlate to pathophysiology for diseases. 3. Demonstrates knowledge of evidence-based medicine and clinical practice guidelines.	1. Answer drug information questions. 2. Present an educational topic to pharmacy staff.

Use and Interpretation of Drug Information	1. Retrieves scientific and clinical literature. 2. Evaluates and applies scientific and clinical literature. 3. Given a drug, health or operational information question, the student formulates a timely efficient, thorough and effective response using and citing appropriate sources of information.	1. Collects pertinent background information for each question to be answered. 2. If necessary, effectively uses secondary literature searches to identify primary literature. 3. Uses primary and tertiary references as appropriate in formulating responses. 4. Responds to questions in a clear and concise manner with supporting evidence/rationale via written or verbal communication as appropriate to the situation. 5. Provides timely responses as appropriate to the nature of the question. 6. If a written answer is submitted, appropriately references the document.
Practice Management	1. Discusses use of management principles (e.g. planning, organizing, directing and controlling) for tasks and activities. 2. Discusses and/ or participates in resource management related to time, people, finances, and technology/ informatics. 3. Assists in identification of quality improvement initiatives to enhance service delivery. 4. Identifies methods to enhance pharmacy services 5. Demonstrates an understanding of leadership needs and opportunities in pharmacy practice.	1. Participates in administrative tasks, pertinent to the site, in managing time, people, finances, technology, or informatics. 2. Assists with identifying and resolving medication safety to improve drug use issues. 3. Identifies methods to enhance and improve workflow and pharmacy services 4. Engages in innovative activities by using creative thinking to envision better ways of accomplishing optimal patient outcomes. 5. Attend facility pharmacy administrative meetings such as Pharmacy and Therapeutics Committee
Medication Distribution	1. Conducts practice activities that adhere to state and federal laws/regulations and site quality and safety procedures 2. Manages the dispensing process in a safe and efficient manner. 3. Assists in the identification of underlying system- associated causes of errors and medication safety issues to improve the medication use process.	1. Enter patient-specific information into an electronic health or pharmacy record system 2. Prepare commonly prescribed medications that require basic sterile or non-sterile compounding 3. Applies a systematic approach for final verification 4. Compare costs of medications to improve access 5. Assist a patient to acquire medication(s)

		through support programs
		6. Utilize automated storage and distribution systems
		7. Demonstrate understanding of pharmacy law and regulations as they pertain to medication distribution
		8. Complete a medication error and/or adverse drug reaction error report.
		9. Complete a pharmacy inspection

Professionalism is scored as acceptable or unacceptable. Students must exhibit all of the required behaviors in order to receive an acceptable rating for the professionalism domain. A rating of unacceptable results in a course failure. The preceptor must note the required behavior(s) that is unacceptable.

DOMAIN	EVALUATION CRITERION	REQUIRED BEHAVIORS
Professionalism	1. Demonstrates acceptable qualities and characteristics of professional behavior.	1. Participates in the process of self-assessment and displays an interest in lifelong learning and continuous professional development
		2. Maintains a professional manner in both appearance and behavior at all times
		3. Demonstrates courtesy, respect, cultural sensitivity and tolerance towards others and exhibits self- control in all interactions
		4. Maintains confidentiality
		5. Arrives on time and prepared for all rotation activities, remains engaged in patient care,

		and completes all duties until permission to leave
		6. Demonstrates appropriate time-management skills and the ability to prioritize
		7. Demonstrates initiative and responsibility for providing patient care
		8. Demonstrates an ability to receive, process, and respond appropriately to constructive feedback.
		9. Demonstrates active listening and empathy