University of Maryland
School of Pharmacy

Experiential Learning Program
(ELP) 2022-2023

Course Number & Title
Advanced Pharmacy Practice Experience (APPE) 453: Community Pharmacy Practice

Course Manager
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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
Introductory Pharmacy Practice Experiences (IPPEs).

Catalog Description
The goal of this rotation is to provide students advanced experience in a community pharmacy setting. Students will be expected to utilize abilities/skills and knowledge learned previously in the curriculum in order to participate in the Pharmacists' Patient Care Process, which includes collecting and assessing patient-specific information; developing and implementing individualized patient-centered care plans; and monitoring and evaluating the effectiveness of care plans. Students will also educate patients or caregivers, and respond to drug information inquiries. This will be accomplished through a variety of
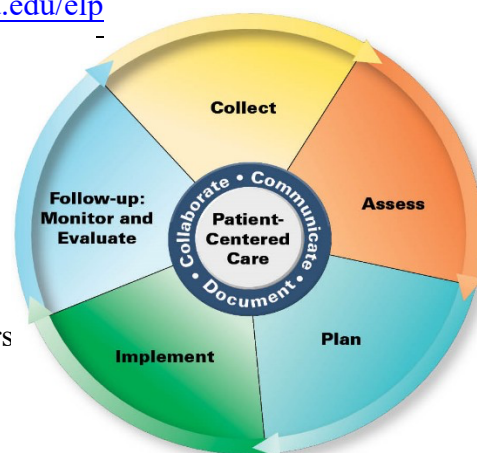
The Pharmacists' Patient Care Process (PPCP)

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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. **Utilize the pharmacist patient care process to conduct an effective patient interview and collect appropriate subjective and objective information from the patient, caregiver, and health care records.**
4. **Utilize the pharmacist patient care process to identify and assess problems, implement a plan, monitor, evaluate, and follow up with the patient.**
5. **Demonstrate an understanding of practice management skills and leadership principles.**
6. **Identify opportunities for practice advancement and service enhancement.**
7. **Lawfully, safely, and efficiently manage the dispensing process**
8. **Optimize public health outcomes.**
9. **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 and sphygmomanometer
- Watch with second hand
- Calculator

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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.

Community pharmacy preceptors will provide at least one of the following cognitive services for which they seek compensation, in addition to order fulfillment: Collaborative Drug Therapy Management (CDTM) under protocol, immunizations, the Maryland P3 Program, and/or Medication

Therapy Management (MTM) Services. Students must be allowed to play a role in these services while at the practice site. Further, students will educate patients and health care professionals using appropriate drug information resources and a comprehensive approach to thoroughly analyze data, research questions, and provide appropriate answers. Advanced community sites will also provide self-care recommendations, health and wellness information, and/or blood pressure screenings.

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 requirements such as ambulatory clinic, presentations, patient encounter documentation, and the required abilities checklist.

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. 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.

Final Letter Grade
The final grade will be assigned based on the ratings assigned for all evaluation items according to the following criteria. All domains are weighted equally. The professionalism/behavioral items do not contribute toward the letter grade. **However, an "unacceptable" rating on any professionalism/ behavioral item at the end of the rotation will result in automatic course failure.**

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, 4, 5). 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."

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

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

Please refer to the Academic Affairs policy regarding grade challenges.

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 for them to improve rotations. If a preceptor has had only one student during the previous year, no summary will be sent.

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

DOMAINS	EVALUATION	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. Presenting the case in standard format (e.g. CC/HPI followed by subjective information, followed by objective information). 2. Verbally presenting only the information relevant to the problem(s) at hand. 3. Offering his/her own assessment of the problem(s) without prompting. 4. Offering his/her own plan for the problem(s) without prompting. 5. Record patient encounters in a manner that conforms to the practice site's standards. 6. Provide complete, accurate, organized, and concise written communication regarding the patient encounter consistent with site requirements. 7. Exhibit command of verbal expression (e.g. fluency, grammar, vocabulary, tone, volume, modulation of voice, rate of speech, and pronunciation). 8. Effectively engage the patient/caregiver with non-verbal expression (e.g. eye contact, gesture, posture, use of silence/active listening). 9. Use appropriate terminology and abbreviations (e.g. avoid "do not use" abbreviations, use lay-terms for patient's Personal Medication 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 explain how subjective and objective findings correlate to pathophysiology for diseases. 3. Demonstrates knowledge of evidence-based medicine and clinical practice guidelines.	
Pharmacist Patient Care Process- Collection of Information	1. Conducts interviews to collect and organize subjective information. 2. Collects and organizes objective information.	1. Elicit a complete chief complaint and history of present illness. 2. Elicit information regarding past medical history, social history, and family history as pertinent to the encounter. 3. Conduct a review of systems as pertinent to the encounter. 4. Collect a complete and accurate medication history (e.g. prescriptions, OTCs, herbals, dietary supplement). 5. Elicit information regarding patient adherence to the medication regimen and/or treatment plan. 6. Appropriately respond to patient/caregiver's needs and feelings. 7. Demonstrate an organized, but flexible, approach to the interview. 8. Adapt to literacy and cultural needs. 9. Elicit laboratory and testing results from existing medical records, pharmacy records, or other providers.
Pharmacist Patient Care Process- Problem Assessment	1. Identifies and develops a problem list. 2. Assesses each problem (etiology, severity, why now). 3. Identifies drug related problems and	1. Clearly identify all diseases or medical conditions (i.e. problem list does not include merely a list of symptoms). 2. Appropriately prioritize problems. 3. Identify and perform site appropriate assessments necessary for determining efficacy/toxicity of current drug therapy or to evaluate new complaints.

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	assesses each medication for indication, appropriateness, effectiveness, safety, and adherence.	4. Identify pertinent laboratory data or testing that is required to assess efficacy/toxicity of current drug therapy or to evaluate new complaints.
		5. Accurately perform necessary calculations based on the data collected (e.g. CrCl, adjust phenytoin levels, risk calculations, etc.)
		6. Correctly identify presence of or risk for the following drug-related problems:
		  a. Indication- Untreated Indication; Drug Use Without Indication
		  b. Effectiveness- Ineffective Treatment Regimen; Subtherapeutic Dose; improper Drug Selection
		  c. Safety- ADR, Drug interaction, Overdosage,
		  d. Adherence - Failure to Take/Receive Drug
		  e. Identify therapeutic goals/endpoints.
		7. Assess problem etiology.
		8. Assess problem severity/stability.
		9. Utilize patient-related variables (i.e. age, family/social history, etc.) to identify risk factors for diseases.
		10. Identify vaccinations that should be administered.

Pharmacist Patient Care Process- Plan and Follow-Up: Monitor and Evaluate	1. Creates the most appropriate cost-effective and evidence- based treatment plan, designed to create optimal patient outcomes. 2. Develops an appropriate monitoring plan to assess for efficacy and toxicity. 3. Evaluates the	1. Recommend pharmacologic therapy for each of the problem(s) assessed that is likely to result in desirable health outcome(s). 2. Recommend appropriate non-pharmacologic therapy for each of the problem(s) assessed. 3. Base recommendations on published clinical practice guidelines, patient-related variable, and/or primary literature. 4. Recommend drug and non-drug therapy to prevent disease and promote health (e.g. calcium and vitamin D for bone health, ASA for

	treatment to determine if adjustments to the plan are needed. 4. Assures proper follow-up and transition of care throughout the healthcare system.	primary prevention). 5. Recommend appropriate health screenings. 6. Develop and implement (when possible) a monitoring plan for the treatment recommendation(s) that will evaluate therapeutic efficacy and drug toxicity. 7. Base monitoring plan on severity of condition, published clinical practice guidelines, primary literature, and/or package inserts.
Pharmacist Patient Care Process-Implement	1. Educates the patient and/or caregiver on treatment and monitoring plans and assesses comprehension of the plan. 2. Implements a treatment plan in collaboration with the patient and/or interprofessional team.	1. Counsel the patient and/or caregiver on his/her treatment plan (drug and non-drug), including therapy benefits/risks. 2. Counsel the patient and/or caregiver on self-monitoring parameters. 3. Accurately educate the patient and/or caregiver regarding directions/instructions for use, and when indicated, demonstrate administration technique and evaluate the patient and/or caregiver's ability to administer/use medication(s). 4. Evaluate the patient and/or caregiver's comprehension of the education delivered. 5. Assess the patient's ability to adhere to the new treatment plan and make appropriate recommendations for improvement. 6. Respond appropriately to questions posed by the patient and/or caregiver. 7. Use appropriate terminology for the patient/caregiver.
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/	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

	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.	optimal patient outcomes.
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. Obtain authorization for a non-preferred medication when clinically appropriate 6. Assist a patient to acquire medication(s) through support programs 7. Utilize automated storage and distribution systems
Population Health	1. Identifies patients at risk for prevalent diseases in a population. 2. Determines the appropriate use of medications in a population.	1. Assesses the healthcare status and needs of a targeted patient population 2. Develops and provides an evidence-based approach that considers the cost, care, access, and satisfaction needs of a targeted patient population 3. Participates in population health management by evaluating and adjusting interventions to maximize health. 4. Perform a screening assessment to identify patients at risk for prevalent diseases in a population 5. Design and implement strategies to

			prevent diseases
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 Demonstrates active listening and empathy

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