

**University of Pittsburgh School of Pharmacy  
Advanced Pharmacy Practice Experience  
Elective Rotation**

**Mission of the PharmD Program**

The Pitt Pharmacy Doctor of Pharmacy Program inspires students to personalize their education and become medication experts, inter-professional collaborators, and leaders who advocate, champion, and act to improve health, wellbeing, and quality of life for individuals and communities.

**Course Title, Course Number, Credit Allowance**

**Advanced Pharmacy Practice Experience, Pharm 5400 series  
Elective Rotation, 5 credits**

**Professional Year and Terms Offered (Fall, Spring, Summer)**

Professional Year P-4, all terms

**Days, Time, Location**

Each experience takes place at an assigned site external to the school, is 5 weeks in duration, and requires the student to be on-site for at least 40 hours per week. A minimum of 200 experiential hours are required. The exact time and location is dependent on the preceptor and site-specific characteristics.

The site/location for this APPE is \_\_\_\_\_.

**Participating Faculty (School of Pharmacy)**

**COURSE COORDINATOR**

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**COURSE (APPE ROTATION) PRECEPTORS**

Varies with site – please list

**Course Description**

*(Please describe the practice site and provide a brief summary of major learning opportunities and objectives possible during the rotation. Indicate any special features that make your site unique. This is the content that students will see in our rotation management system.)*

During this rotation students will develop competence in \_\_\_\_ (practice area/s)\_\_\_\_\_.

Student experiences may include but are not limited to:

*(preceptor may use example experiences below and/or develop additional experiences based on work of the site)*

- Review organization/facility mission, vision, and values as they relate to healthcare delivery
- Participate in interdisciplinary discussions and meetings to understand organization workflow
- Develop a project or presentation that adds value to the organization/facility based on an internal or external needs assessment
- Assist in the development of new individual and group-based programming or educational sessions
- Collaborate with other disciplines to develop projects and solve problems
- Present findings of project or research to site colleagues and/or other students
- Actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.
- Identifies problems, explores and prioritizes potential strategies; and designs, implements and evaluates viable solutions.

**A “Patient Care Elective” is defined below:**

During this rotation, students will develop an understanding of aspects of direct and indirect patient care, for example, patient counseling/discussions over the phone or in clinic, formulary decision-making and protocol development, use of surveillance or monitoring reports to impact patient medication management, designing/implementing clinical or operational pharmacy services, and/or medication safety. A blend of individual patient or specific population-based patient care activities will take place but may not encompass the entire rotation. All students on the rotation should have the same opportunity for patient care exposure.

Examples of patient care electives may include, but are not limited to:

- Compounding
- Formulary decision-making/clinical protocol development
- Home infusion
- International experiences (hospitals, community pharmacies, clinics)
- Investigational drugs
- Informatics
- Long-term care
- Nursing home consulting
- Administration/leadership
- Managed care (MTM, adherence, etc. )
- Specialized practice sites (behavioral health, pediatrics)
- Specialty pharmacy (patient care/medication management focus)

**PITT Pharmacy Outcomes Addressed by the Course**

*(Select all that apply. Not all outcomes need to be selected. Sample objectives should be listed with each outcome in next section of syllabus)*

Learner

Provider

Medication Use Steward

Ally, Promoter, and Champion

Leader  
Problem-Solver  
Communicator and Educator  
Professional and Advocate  
Interprofessional Collaborator  
Self-Aware

### **Rotation Learning Objectives**

*(Examples below may be used as a guide, depending on activities of the rotation experience. Preceptor may use, add, or delete content as appropriate.)*

#### **Learner**

- Demonstrate foundational scientific and practice knowledge to achieve patient-centered care and population health
  - Disease states including pathophysiology, anatomy/physiology
  - Medication therapy including pharmacology, pharmacokinetics, dosing
  - Workflow and processes for safe and efficient practice

#### **Provider**

- Use the Pharmacists' Patient Care Process to develop individualized, patient-centered care plans in collaboration with the patient, other healthcare professionals, and/or caregivers
- Review manual or electronic patient record/profile to accurately identify factors affecting therapy, health or disease management
- Create and/or update patient record/profiles accurately and in a timely manner
- Accurately create a drug-related problem list with prioritization of problems
- Conduct accurate and complete patient interviews to obtain medication histories
- Accurately perform necessary elements of physical assessment (e.g., blood pressure, foot exam, hearing)
- Assess appropriateness of patient medication therapy (e.g., medication, dose, routes, etc.)
- Make appropriate and complete recommendations for care: non-pharmacologic and pharmacologic therapies
- Recommend appropriate non-drug treatments (e.g., diet, smoking cessation, CAM)
- Establish therapeutic outcomes/goals via a prioritized drug-related problem list
  - Identifies and evaluates feasible therapeutic and cost-effective alternatives
  - Designs and manages drug therapy regimens to enhance outcomes
- Accurately identify, manage, and prevent drug-related problems and make appropriate decisions
- Assess regimens for efficacy and toxicity
  - Selects parameters that are specific, measurable, achievable and associated with time frames
  - Redesigns regimen as necessary
- Demonstrate ability to appropriately triage patient for treatment or referral

#### **Medication Use Steward**

- Interpret, evaluate and clarify written prescriptions of medications to ensure appropriate, safe, and cost-effective patient care, including selection of product, dosage form, route, and methods of administration
- Comply with local policy, state and federal laws, recommendations of regulatory agencies, and best practices
- Perform calculations for medication dosages to ensure optimized regimens for patient-specific needs

- Participate in delivery of medications and immunizations to individuals and the community as within the scope of practice and regulations of the practice setting
- Manage the medication use system (i.e., procurement, storage, prescribing, transcription, dispensing, administration, monitoring, and documentation) as it pertains to direct patient care while ensuring safety, efficacy, and efficiency.
- Detect and report actual and potential medication errors and adverse drug events to identify underlying causes and minimize/prevent patient harm
- Understand and apply guidelines of collaborative practice agreements, where applicable
- Understand the role of the ambulatory care pharmacist in all steps of the medication use process/medication management

### **Ally, Promoter, and Champion**

- Accurately assess patient health literacy, adherence, health status and care needs, and adapt care based on diverse individuals and populations, to diminish disparities and inequities in care
- Interpret data and information to assess health needs of an individual, community, and/or population, across the continuum of care
- Take responsibility for health outcomes while making culturally responsive, ethical, and equitable decisions that represent the best interest of the individual and community

### **Leader**

- Effectively and respectfully collaborate with technical support staff, pharmacy team, and other healthcare providers, to optimize care
- Demonstrate appropriate human relations skills: displaying interest in others; sensitivity, empathy, acting in the best interest of others
- Demonstrate formal and informal leadership by taking responsibility for creating trust and open communication
- Demonstrate skills of management including resources to accomplish goals, demonstrating the ability to manage self, others, and roles in medication use systems
- Participate in the pharmacy/site's formulary management, care management, and quality improvement programs

### **Problem-Solver**

- Identify challenges that may affect the practice setting
- Suggest and/or develop creative approaches to improve quality or overcome barriers
- Use critical thinking skills to include interpretation, analysis, evaluation, inference, and explanation
- Retrieve, evaluate and use scientific information to provide information and/or make therapeutic decisions
- Use a systematic, efficient and thorough procedure for information retrieval and evaluation

### **Communicator and Educator**

- Effectively document interventions and care team communications in patient record/profile, documentation systems, and the electronic health record
- Effectively communicate and engage with patients, caregivers, healthcare professionals, and the community to provide medication and health information
- Communicate effectively and professionally via written and verbal methods, to articulate knowledge and recommendations with empathy, sympathy, confidence, and respect
- Use appropriate persuasion techniques to positively impact medication use

- Educate/interact with patients, healthcare professionals, and the general public regarding health promotion, disease prevention, disease management, transitions of care, and wellness

### **Professional and Advocate**

- Demonstrate desire to maintain professional competency through principles of life-long learning
- Advocate for change to improve health and well-being for all
- Demonstrate the characteristics of a pharmacy professional

### **Interprofessional Collaborator**

- Collaborate with the interprofessional team, including patients, caregivers, other health care disciplines, non-healthcare collaborators, and community members
- Consult and intervene with patients and healthcare regarding medications and other needed therapies/modalities
- Participate and engage as a healthcare team member with respect and understanding of shared values, and knowledge of one's role, and roles of others on the team

### **Self-Aware**

- Set personal and professional goals to achieve objectives, including obtaining new skills and knowledge
- Be a life-long learner who is able to examine and self-reflect on knowledge and skills that may enhance, or limit, personal or professional identity formation
- Demonstrate the characteristics of a pharmacy professional
- Manage time wisely to maximize productivity and fulfill rotation obligations
- Maintain situational awareness and the need for professionalism in all settings

### **Methods of Learning**

Ability outcomes will be evaluated based on the student's performance of various tasks throughout the rotation. The methods of learning will vary with the rotation site, but will include observations, activities, and discussions with patients, pharmacists and other health professionals. Self-study and reflection will also be included.

### **Textbooks and Other Learning Resources**

*(Examples below are a guide; preceptor may use, add, or delete content)*

Learning resources will vary with the rotation site. The following is a list of *suggested* resources to assist the student in performing activities:

1. DiPiro JT, et al, editors. Pharmacotherapy: A Pathophysiologic Approach. McGraw-Hill, New York, NY.
2. Koda-Kimble MA, et al, editors. Applied Therapeutics: The Clinical Use of Drugs. Wolters Kluwer | Lippincott Williams & Wilkins, New York, NY.
3. Loscalzo et al, editors. Harrison's Principles of Internal Medicine. McGraw-Hill, New York, NY.
4. Lacy CL, et al, editors. Drug Information Handbook. Lexi-Comp, Inc., Hudson, OH. (Pocket edition and PDA version also available.)
5. Many resources are available via University of Pittsburgh Health Sciences Library, including a variety of databases and full-text online journals, at <http://www.hsls.pitt.edu>.

**\*\*CONTENT BELOW THIS AREA OF THE SYLLABUS SHOULD NOT BE EDITED\*\***

### **Class Attendance Policy and Grade Implications**

Please review the full Absence Request Policy on the Home Page of E\*Value for full details.

1. Any absences by students of one day or less per rotation should be handled by the student and the preceptor. In these instances, it is the preceptor's decision and responsibility to specify and outline a plan for the make-up of the missed day.
2. Any absences in excess of one day per rotation will require the student to complete an "Absence Request" form (see E\*Value site). If possible, this form should be submitted to the preceptor and Ms. Anna Schmotzer in the Office of Experiential Learning at least six weeks prior to the scheduled absence. In the event the absence is not scheduled (i.e., illness, emergency), the student must notify the preceptor as soon as the absence is going to occur, and the form should be submitted to the preceptor and Ms. Anna Schmotzer in the Office of Experiential Learning within three days of the student's return. It is the responsibility of the Director of Experiential Learning, working with the preceptor, to determine if the student can successfully complete the rotation and outline a plan for the make-up of the missed days.
3. Days missed due to interviews and attending professional meetings (e.g., ASHP Midyear Meeting) are considered absences and the guidelines outlined previously should be followed. Students must discuss interview schedules and professional meetings six weeks before rotation start date. It is the preceptor's decision if the student time off can be granted and made-up. The guidelines outlined in item # 1 and # 2 must be followed.
4. If the student is attending a professional meeting during a scheduled APPE, by the Monday following the end of the rotation, the student must submit a one-page reflection to the Pitt Pharmacy Dashboard about their experience at the meeting.
5. Absences for family vacations, personal travel, or other non-rotation/non-school reasons are not excused absences. Repeated absences from a rotation will result in an unsatisfactory grade for the rotation.

## Course Requirements and Grading

H/S/U

Honors/Satisfactory/Unsatisfactory

Core requirements must be completed. If a core requirement cannot be completed due to a site-specific reason, the preceptor must provide an explanation in the student's evaluation. Assignments specific to the site may supersede or supplement core requirements at the discretion of the preceptor.

### CORE REQUIREMENTS (Elective Rotations)

- Create 3 SMART goals for your rotation and discuss with preceptor
- Contribute to and/or develop at least two projects related to curricular and/or co-curricular outcomes
- Attend 1 interdisciplinary/interprofessional meeting and/or site meeting and provide written summary of what was discussed
- Complete and present 1 formal and 1 informal topic discussion related to health-system practice or healthcare (eg. patient case, safety topic, regulatory topic, medication/drug utilization review, regulatory, marketing, innovation, etc.
- Provide drug information responses, including references, to 3 requests. These responses can be related to medications/therapeutics, or can be related to rotation-specific questions researched, such as innovations in pharmacy practice, medication safety, leadership/management, or efficiency of services/costs, or patient outcomes
- Write a 1-2 page reflection on a health inequity you encountered or discovered/researched on the rotation, discussing the systems in place that contribute to the inequity and the real or potential impact on the patients or related population. Discuss the inequity and brainstorm possible resolutions or mitigation strategies with your preceptor and include this in your reflection. Include a service or initiative that the pharmacy provides to address the inequity, if applicable

- If academia elective, follow guidance on mini-syllabus for assignments to complete/post to dashboard
- If international rotation, prepare a written summary that compares pharmacy practices abroad and in the US to explore challenges, innovations, and cultural influences in healthcare access and pharmacy services
- Write a 1-2 page reflection about the rotation, linking learning to curricular and/or co-curricular outcomes

#### CORE REQUIREMENTS (Patient Care Elective Rotations)

- If patient interaction is part of rotation activities, document on PITT Form 25 drug therapy/drug-related problems with patient-specific solutions.
- Create 3 SMART goals for your rotation and discuss with preceptor
- Contribute to and/or develop at least two projects related to curricular and/or co-curricular outcomes
- Attend 1 interdisciplinary/interprofessional meeting and/or site meeting and provide written summary of what was discussed
- Complete and present 1 formal and 1 informal topic discussion related to health-system practice or healthcare (eg. patient case, safety topic, regulatory topic, medication/drug utilization review, regulatory, marketing, innovation, etc.
- Provide drug information responses, including references, to 3 requests. These responses can be related to medications/therapeutics, or can be related to rotation-specific questions researched, such as innovations in pharmacy practice, medication safety, leadership/management, or efficiency of services/costs, or patient outcomes
- Write a 1-2 page summary of how patient care is provided on this rotation, including whether it is directly or indirectly provided, and if the patient(s) impacted are individual, a specific population, those with a specific disease state, or other defining characteristics.
- Write a 1-2 page reflection on a health inequity you encountered or discovered/researched on the rotation, discussing the systems in place that contribute to the inequity and the real or potential impact on the patients or related population. Discuss the inequity and brainstorm possible resolutions or mitigation strategies with your preceptor and include this in your reflection. Include a service or initiative that the pharmacy provides to address the inequity, if applicable
- If academia elective, follow guidance on mini-syllabus for assignments to complete/post to dashboard
- If international rotation, prepare a written summary that compares pharmacy practices abroad and in the US to explore challenges, innovations, and cultural influences in healthcare access and pharmacy services
- Write a 1-2 page reflection about the rotation, linking learning to curricular and/or co-curricular outcomes

#### COURSE GRADING

Students will be assessed using the Preceptor Evaluation of APPE Student form utilizing the Stages of Professional Mastery to assess their ability to function as a pharmacist. Grading is on a satisfactory / unsatisfactory basis. Honors will be awarded to those students who exhibit exceptional skills, mastery of all ability outcomes and perform additional activities beyond those required. Grades will be based on student's pharmacy practice skills, knowledge and attitude. Skills will be assessed through direct observation of patient care activities at the practice site.

Students will be required to perform a mid-point and final self-evaluation and the preceptors will collaborate to perform a mid-point (end of week 2) and final evaluation. The preceptors will provide feedback on student performance on an ongoing basis throughout the rotation. Formal feedback will be documented on the Preceptor Evaluation of APPE Student form and submitted electronically to the Office of Experiential Learning.

A grade of “Unsatisfactory” will be awarded to students who earn such grade with actions in violation of the university and/or School of Pharmacy Code of Conduct Policy, Oath of a Pharmacist, or Code of Ethics. Actions that will result in an unsatisfactory grade include, but not limited to:

- Inability to complete core requirements, evaluations, and portfolio requirements by assigned
- Deadlines
- Poor quality of work, including failure to meet site expectations
- Multiple unexcused absences from site
- A pattern of tardiness and/or unprofessional conduct
- Recommendation by preceptor for student removal from site due to unprofessional conduct including HIPAA or other institutional policy violations or unprofessional behavior
- Preceptor evaluation of unprofessional behaviors as denoted by responses of “NO” on evaluations under the “Professional Behavior and Attitudes” section

### **Academic Improvement Outreach Statement**

Fourth Professional (P4) Year:

The P4 year consists of three terms, starting in the summer term immediately following the P3 year.

1. A student who earns a “U” grade on an APPE rotation must repeat the same type of rotation in an off-block or in a block after the last scheduled rotation for the P4 year.
2. A student who fails to earn a passing grade in the repeated rotation, or earns a “U” grade in any subsequent rotation, will be dismissed from the program.

Course remediation regarding performance on APPEs will only be available if in compliance with experiential learning policies and after discussion with the Course Coordinator and preceptors.

### **Equity, Diversity, and Inclusion Statement**

The University of Pittsburgh does not tolerate any form of discrimination, harassment, or retaliation based on disability, race, color, religion, national origin, ancestry, genetic information, marital status, familial status, sex, age, sexual orientation, veteran status or gender identity or other factors as stated in the University’s Title IX policy. The University is committed to taking prompt action to end a hostile environment that interferes with the University’s mission. For more information about policies, procedures, and practices, visit the Civil Rights & Title IX Compliance web page.

As faculty, we ask that everyone in the class strive to help ensure that other members of this class can learn in a supportive and respectful environment. If there are instances of the aforementioned issues, please contact the Title IX Coordinator, by calling 412-648-7860, or e-mailing [titleixcoordinator@pitt.edu](mailto:titleixcoordinator@pitt.edu). Reports can also be filed online. You may also choose to report this to a faculty/staff member; they are required to communicate this to the University’s Office of Diversity and Inclusion. If you wish to maintain complete confidentiality, you may also contact the University Counseling Center (412-648-7930).

### **Inclusivity Statement**

To proactively prevent structural discrimination in the classroom, it is the responsibility of instructors to select and include materials that are inclusive, accessible, equitable, and diverse along all axes of minoritized experience. This includes using language and examples in our lectures and case studies that combat and redress stereotypes as well as establishing and supporting a class climate that fosters belonging for all students. It is the responsibility of all members of this course to contribute to a respectful, welcoming, and inclusive environment for every member of the classroom community. Any suggestions about other ways to further increase inclusion and access in the course are welcome.

### **Wellness Statement**

The Doctor of Pharmacy professional program can be exciting and challenging for students. Taking time to maintain your well-being and seek appropriate support can help you achieve your goals and lead a fulfilling life. It can be helpful to remember that we all benefit from assistance and guidance at times, and there are many resources available to support your well-being while you are at Pitt. You are encouraged to visit Thrive@Pitt to learn more about well-being and the many campus resources available to help you thrive.

If you or anyone you know experiences overwhelming academic stress, persistent difficult feelings and/or challenging life events, you are strongly encouraged to seek support. In addition to reaching out to friends and loved ones, consider connecting with a faculty member you trust for assistance connecting to helpful resources.

The University Counseling Center is also here for you. You can call 412-648-7930 at any time to connect with a clinician. If you or someone you know is feeling suicidal, please call the University Counseling Center at any time at 412-648-7930. You can also contact Resolve Crisis Network at 888-796-8226. If the situation is life threatening, call Pitt Police at 412-624-2121 or dial 911.

### **Course Remediation Statement**

After final grades have been assigned, this course will utilize processes as detailed in the PharmD Program Course Remediation Policy.

### **Student Disability Statement**

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact your instructor and Disability Resources and Services, 140 William Pitt Union, 412-648-7890, [drsrecep@pitt.edu](mailto:drsrecep@pitt.edu), or 412-228-5347 for P3 ASL users, as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course.

### **Academic Integrity Statement**

Students enrolled in the pharmacy program are also considered to be members of the pharmacy profession and must adhere to the same professional, ethical, and legal standards. It is a violation of the School's code of conduct policy for a student to engage in any act of academic misconduct, such as cheating, plagiarism, deceitful practice, unauthorized collaboration, harassment, or breach of confidentiality. It is also considered to be a violation of the code of conduct policy for a student to tolerate any of the aforementioned acts by other students. Cell phones and audible alarms must be silenced during class.

### **Use of Generative AI**

Since writing, analytical, and critical thinking skills are part of the learning outcomes of our program,

all writing assignments must be prepared by each individual student unless specified as group work. Academic integrity is vital to our Pitt Pharmacy community and for fair evaluation of your work. All work completed and/or submitted must be your own, completed in accordance with the Pitt Pharmacy Code of Conduct and the university's Guidelines on Academic Integrity. You may not engage in unauthorized collaboration or use of generative AI applications (such as ChatGPT, Grammarly or others) at any time.

In some courses, faculty may use or authorize use of generative AI tools. You will be informed as to when, where, and how these tools are permitted to be used, along with guidance for attribution. Any unauthorized use outside of this permission constitutes a violation of Pitt Pharmacy Code of Conduct and also the University of Pittsburgh Guidelines on Academic Integrity.

### **Audio-Video Recording Statement**

To ensure the free and open discussion of ideas, students may NOT record classroom lectures, discussions, and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private study.

### **Copyright Statement**

These materials may be protected by copyright. United States copyright law, 17 USC section 101, et seq., in addition to University policy and procedures, prohibit unauthorized duplication or retransmission of course materials. See Library of Congress Copyright Office and the University Copyright Policy.

### **Course Type:**

Clinical (CLN)

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