



Advanced Pharmacy Practice Experience
Ambulatory Care Pharmacy Practice Syllabus

Course Number: PHA 3040
Course Title: Ambulatory Care Pharmacy Practice
Credit Hours: 5 Hours
Prerequisites: P3 Standing
Date Syllabus Prepared: January 14, 2007

Course Description:

This is a required 5-week advanced pharmacy practice experience in which the student actively participates in the delivery of patient-center pharmaceutical care in an outpatient setting. Practice sites may include hospital-based outpatient clinics, physician practice groups, multidisciplinary rural outreach clinics, and managed care facilities.

Background:

This rotation provides the student with experience in establishing caring relationships with patients in an outpatient clinic setting. When the practice site is such that the student has exposure to both inpatient and outpatient settings, when an outpatient is hospitalized for primary medical care, the student will continue pharmaceutical care in that setting (as directed by the preceptor). As the student identifies actual and potential patient-specific drug-related problems he/she will collaborate with primary care physicians and other health care providers to resolve and/or prevent them.

Outcomes and Goals

The Advanced Pharmacy Practice Experience Manual outlines the core outcomes and goals that are to be achieved by the end of the course. During the Ambulatory Care Pharmacy Practice experience, a special focus will be made on the following outcomes and goals:

Patient Assessment – The student shall contribute to the database of information about the patient by: a) performing a medication history, review of systems, and physical assessment, b) requesting laboratory tests, and c) assessing medical, socio-behavioral and economic status.

- A. Perform an accurate and effective medication history/patient interview.
- B. Perform an accurate and effective socio-behavioral assessment.
- C. Perform relevant and accurate physical assessment procedures.
- A. Develop functional patient databases by gathering and generating relevant information.

Drug Therapy Assessment – The student shall assess the appropriateness of patient's drug therapy, including consideration of the chemical, pharmaceutical, pharmacokinetic, and pharmacological characteristics of the administered medications.

- A. Assess each acute and chronic medical problem.
- B. Identify the following drug-related problems:
 - i. Drug therapy is needed for untreated indications.
 - ii. Patient is receiving a drug that has no indication and/or there is therapeutic duplication.
 - iii. There is a better choice of drug based on patient/disease characteristics, formulary, cost, etc.
 - iv. Drug therapy needs optimization (population and patient-specific pharmacokinetic and pharmacodynamic data indicate a drug regimen is not optimized).
 - v. Medication non-adherence.
 - vi. Drug induced disease/medical conditions.
 - vii. Socio-behavioral and economic barriers to effective drug therapy.
 - viii. Adverse drug reactions that are substantiated by laboratory, test, and physical findings.
 - ix. Routes of administration that are not the best, safest, and most cost-effective.
 - x. Drug interactions that are substantiated with pharmacokinetic/dynamic and compatibility information.
- C. Identify and evaluate each drug-related problem.
- D. Prioritize drug-related problem list.

Develop, Implement, and Monitor Drug Therapy Plans – The student shall develop a therapeutic plan for the patient, which includes appropriate monitoring to address any problem identified.

- A. Establish desired therapeutic outcomes.
- B. Consider drug and non-drug therapy alternatives.
- C. Develop drug therapy plans that are patient-specific, comprehensive, logical, practical, consider current evidence-based medicine recommendations, include strategies for prevention, and include patient education.
- D. Establish a plan for therapeutic drug monitoring that includes accurate documentation of population and patient-specific parameters, dosing history/administration times, monitoring parameters, and daily SOAP notes/plans.
- E. Develop and implement the pharmacotherapeutic plan promptly, efficiently, accurately, and effectively.
- F. Use an effective patient monitoring system (monitoring forms).
- G. Monitor the patient and follow up at appropriate intervals.
- H. Revise drug therapy plans on an ongoing basis.
- I. Ensure continuity of pharmaceutical care to and from the acute and ambulatory care patient care settings.

Pharmacotherapy Decision-Making – The student shall demonstrate the ability to make pharmacotherapy decisions. (Pharmacotherapy decisions determine what, why, where, and how drug therapy is provided. The making of pharmacotherapy decisions is the foremost expressions of the professional knowledge, responsibility, and authority of pharmacists.) The intent of a decision is to maximize the patient’s response to drug therapy and prevent or resolve a drug-related problem(s) in order to ensure positive outcomes.

- A. Pursue the role of drug therapy practitioner over that of drug therapy advisor.
- B. Participate in pharmacotherapy decision-making by:
 - i. Identifying opportunities for decision-making.
 - ii. Proactively engaging decision-making opportunities.
 - iii. Formulating decision rationale that is the result of rigorous inquiry, scientific reasoning, and evidence.
 - iv. Pursuing the highest levels of decision-making.
 - v. Seeking *independence* in *making* decisions and *accepting* personal responsibility for the outcomes to patients resulting from one’s decisions.
 - vi. Personally enacting decisions.

The student should receive a schedule at the beginning of the month that will provide a time-line for completion of the rotation objectives. Some responsibilities may require the student to be present during evenings and weekends.

Typical Rotation Schedule *(To be completed by preceptor and student)*

Times	Monday	Tuesday	Wednesday	Thursday	Friday	Weekends
7-8 am						
8-9 am						
9-10 am						
10-11 am						
11-12pm						
12-1 pm						
1-2 pm						
2-3 pm						
3-4 pm						
4-5 pm						

Rotation Activities

1. **Orientation to rotation** – During the first day of the rotation, the student will be oriented to the pharmacy services and practice site. Pertinent policies and procedures will be reviewed. The student should:
 - a. Tour the practice site and meet appropriate personnel. The preceptor will explain the personnel member’s role within the institution and duties to the student (if applicable) and the student’s responsibilities as a student pharmacist within the institution.
 - b. The student and instructor should discuss rotation and institutional specific policies and procedures. Specific discussion points should include:
 1. Confidentiality including HIPAA
 2. Appropriate Dress
 3. Lines of Authority

4. The student's schedule
 5. Available drug information resources
- c. Learn about the instructor's practice philosophy regarding professional responsibilities and pharmaceutical care.
 - d. Learn how to access computer and library resources within the practice site.
 - e. The student and preceptor should review and discuss the student's professional portfolio.

2. Student Responsibilities:

- a. Establish rapport with the personnel and health care providers within the practice site responsible for the patient care as appropriate to facilitate patient-centered pharmaceutical care.
 1. The student is expected to be assertive and self-directed in establishing a working relationship with the health care providers and identifying the most effective ways to contribute to patient care.
- b. Triage patients to in-depth monitoring and peripheral monitoring statuses according to initial assessment of a patient's drug therapy.
 1. Develop in-depth monitoring plans for patients that have disease states / drug regimens that are most likely to be associated with drug-related problems.
 2. Discuss with the instructor any drug-related issues that occur with patients that are being monitored peripherally.
- c. Independently develop a patient database, assess drug therapy, and develop a pharmacotherapy plan for assigned patients that are encountered in clinic (and inpatient setting, if applicable). This should be documented in the student's learning portfolio.
 1. The student is expected to conduct at least five (5) patient / medication histories. The instructor will observe patient interview skills.
 2. Students should review the patient database and collect data to identify, resolve, or prevent drug related problems (DRP). The student is expected to document a minimum of 10 DRPs involving prescription, herbal, or over-the-counter therapies for which they intervened on the patient's behalf. The **DRP Intervention Sheet** is provided in the APPE Manual.
 3. The student is expected to prepare a SOAP note summarizing all medication interventions (as appropriate for and allowed by the practice setting).
 4. The student is expected to explain and provide rationale for his/her database, drug therapy assessment, and pharmacotherapy.
 5. The student is expected to conduct at least five (5) patient counseling sessions in the presence of the preceptor. The **patient counseling checklist** is provided in the APPE Manual.

- d. Provide answers to drug information questions that arise in during the rotation. All drug information responses must be reviewed with the instructor before communication with other health care practitioners.
 - 1. The student is expected to document at least three (3) drug information responses. Drug information queries and responses must be supported by primary literature (when appropriate) and placed in the learning portfolio.
- e. If asked by the instructor, give a formal Journal Article Presentation.
 - 1. A copy of the presentation and faculty evaluation forms should be placed in the learning portfolio.
 - 2. The instructor may assign additional literature analysis learning experiences as part of a weekly journal club.
- f. Give at least one (1) formal Patient Presentation to an audience that will be selected by the instructor.
 - 1. A copy of the presentation and faculty evaluation forms should be placed in the learning portfolio.
 - 2. The instructor is encouraged to hold informal meetings to discuss patients on a daily basis.
- g. Document all patient care activities, projects, and presentations in the learning portfolio as outlined in the Advanced Practice Experience Manual.
 - 1. The instructor will assess entries such as SOAP notes, interventions, presentations, and projects by the end of the rotation.
- h. The preceptor may require completion of an independent self-directed project (e.g., preparation and delivery of a health consumer presentation, presentation to health professionals, paper) or additional activities as appropriate for the practice site.
- i. Perform self-assessments by: corroborating midpoint and final rotation self-assessment ratings with those of the instructor and writing a reflective self-evaluation at the end of the rotation.
- j. Demonstrate use of a core library of journals, reference books and databases that comprise your personal library.

Activities Checklist

Rotation Requirements	Minimum Expectation	Completed
Patient history	5	
Drug related problem interventions	10	
Patient counseling	5	
Formal patient presentation	1	

** The preceptor may list additional activities as a required component of this course.*

Additional Activities

Up to three (3) additional activities may be selected for each rotation. If core activities listed above are unable to be completed at the site then please select applicable replacement activities from the list provided below or document other applicable activities in the space provided.

- Participate in a MUE / DUE.
 - Complete at least two (2) Adverse Drug Reaction (ADR) reports.
 - Complete at least two (2) Occurrence Reports involving a medication error.
 - Present at least one (1) journal article and prepare a written summary.
 - Attend a Pharmacy and Therapeutics meeting and type a one page (double-spaced) reflective summary of the experience.
 - Prepare and present at least one (1) drug monograph.
 - Prepare an article for publication.
 - Create and reference a therapeutic drug protocol or pathway.
 - Prepare a case report (e.g. unique clinical finding, adverse drug event, drug interaction).
 - Participate in the development or revision of a departmental or institutional policy.
 - Create and present one (1) brochure or pamphlet for patient education (e.g. food-drug interactions).
 - Complete a project assigned by the preceptor.
 - Participate in blood pressure screening for at least 10 patients.
 - Participate in diabetes screening for at least 10 patients.
 - Participate in osteoporosis screening for at least 5 patients.
 - Administer immunizations and provide appropriate patient education.
 - Participate in a home visit with a home health provider and type a one page (double-spaced) reflective summary of the visit experience.
 - Compound at least five (5) different non-intravenous medication preparations.
 - Conduct a mock Board of Pharmacy inspection.
 - Participate in a mock JCAHO pharmacy inspection and type a one page (double-spaced) reflective summary of the experience.
 - Other:
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Textbooks / Resources

The student is expected to build a personal library of text resources. The following list outlines topics of resources to be included in the personal library; the student is expected to select a specific text or reference that covers the stated topic:

- Pharmacotherapy Book/Reference
- General Drug Information Reference
- General Medicine Book/Reference
- Physical Assessment Book/Reference
- Laboratory Interpretation Book/Reference
- Pharmacokinetics Book/Reference
- Adverse Drug Reaction Book/Reference

The student is expected to be self-directed in obtaining drug literature pertinent to patient care issues. The student is expected to have Internet access in order to utilize the College of Pharmacy library resources. The instructor may assign additional required/suggested readings based on

conference topics and patient care issues. Students are expected to check their email and have internet access on a daily basis.

Grading and Assessment

Please complete the *APPE Student Competency Evaluation*.

Traditional Score	Equivalent Rubric Score	Final Letter Grade
90-100	4.75-5.00	A
80-89	4.25-4.749	B
70-79	3.00-4.249	C
<70	2.99 or below	F

Policies

Specific policies pertaining to all Advanced Practice Experiences are found in the *University of Appalachia College of Pharmacy, Advanced Pharmacy Practice Experience Manual*. A copy of this comprehensive manual is available on our website at www.uacp.org under the Experiential Education section. Students are required to be at the rotation site a minimum of 40 hours/week. As a professional, the student is expected to stay beyond the usual work hours when patient care still needs to be completed.